Better Electric, Better Life

SASSIN INTERNATIONAL ELECTRIC SHANGHAI CO.,LTD.
No.2588 JINHAI ROAD, PUDONG, SHANGHAI, CHINA 201209
TEL: +86-21-50210890　50219970
FAX: +86-21-50217333
E-mail: sassin@sassin.com
Http: //www.sassin.com

Specifications and technical date are subject to change without notice. Please contact us for any relevant information on ordering.

SASSIN V 28.2 PRODUCT CATALOG

SASSIN

Modular DIN Rail Devices





Company Profile

As one of the leading enterprises in the low voltage electrics field in China, Sassin International Electric Shanghai Co., Ltd is committed to offering professional solutions of low voltage electric and smart electricity for different fields customers from the countries and regions around the world, to satisfy worldwide customers' requirements on utilizing energy more safely and conveniently, help customers to constantly improve efficiency of production and energy, and reducing their impact on the environment.

Sassin focuses on the global market, driving the company development with technical R&D. Sassin is committed to researching and developing different low electric products to satisfy the different requirements from customers all over the world. With the trend of intelligent electricity, Sassin has developed the smart electric devices and Smart Power Management System - SPMS to protect the safety of life and property, make the electricity management easily and remotely in any time at any place, and improve the power efficiency. In order to achieve the quick R&D, Sassin has set up the Test Center including a 10kA Short Circuit Breaking Laboratory, the Test Center has been certified by the CNAS (China National Accreditation Service for Conformity Assessment).

Quality is company's life. Sassin is always sparing no effort to promote the construction of quality management system and improve it. For this purpose, Sassin implemented the Total Quality Management System, and oriented by market and customers, to drive the employees and suppliers focusing on the continuous improvement of product quality. Sassin has been certified by the ISO9001 Quality Management System and ISO14001 Environment Management System.

Corporate Culture - Value System

Vision

Better Electric, Better Life.

Mission

Make Electric Safe, Simple, Smart.

Value

Confidence, Faith, Credit.

Catalog Classification

V 28.1 Power Distribution Electrics

Air Circuit Breakers / Moulded Case Circuit Breakers / Automatic Transfer Switches / Fuses



V 28.2 Modular DIN Rail Devices

MCB / Residual Current Devices / Surge Protective Devices / Switching Devices / Distribution Boxes



V 28.3 Industrial Control and Protection

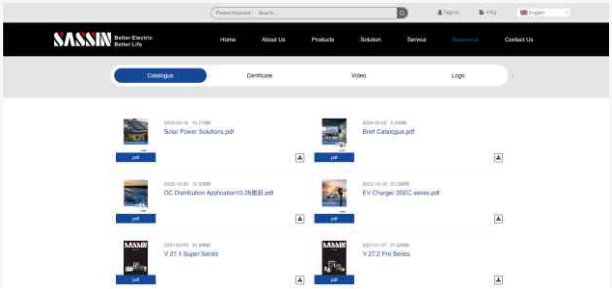
Contactors / Starters / Thermal Overload Relays / Motor Protection Circuit Breakers



Online Catalog

All catalogs can be downloaded as PDF files from SASSIN website.

www.sassin.com





Modular DIN Rail Devices

Miniature Circuit Breakers

P 1-9 3SB71-63, 16000 A & 10000 A
P 10-12 3SB71-125, high current, 10 kA
P 13-16 3SB7-63, 10000 A
P 17-23 3SB6 & 3SB6H, 6000 A
P 24-27 VB510, 6000 A
P 28-31 3SB56-63, 6000 A & 10000 A
P 32-34 3SB56-125, 6000 A & 10000 A
P 35-36 3SB1-125, high current, 6 kA
P 37-38 3SB66, 1P+N in 1 modular width
P 39-40 VBN515, 1P+N in 1 modular width

Residual Current Devices

P 41-42 3SL71, RCCB, up to 100 A
P 43-47 3SL6, RCCB, up to 100 A
P 48-51 PRC620, RCCB, up to 100 A
P 52-55 VRC520, RCCB, up to 100 A
P 56-58 3SL71N-40, RCBO, 1P+N, up to 40 A
P 59-60 VRBNC515E, RCBO, compact
P 61-65 VRB510E, RCBO, up to 80 A
P 66-70 3SLB5M, RCBO, up to 63 A
P 71-72 3SB71L-50, RCBO, integrated with earthing cable
P 73-76 3SB71LN-40, RCBO, up to 40 A
P 77-79 3SB71LB, RCD blocks

Switching Devices

P 80-82 3SB71G, switch disconnectors
P 83 3SG6, switch disconnectors
P 84 VG510, switch disconnectors

Additional Components for MCBs and RCDs

P 85-86 Additional components for series 3SB71
P 87-89 Additional components for series 3SB6
P 90 Additional components for series VB510
P 91-92 3SB71P/3SB71D/3SB71PD, pushbuttons and indicators
P 93-94 P6-E, pushbuttons and indicators
P 95-98 3SCH8, modular contactors
P 99 MS71, modular sockets
P 100 Time switches

Surge Protective Devices

P 101-103 3SU71, type 2
P 104-107 3SU1, type 2
P 108-111 3SU6, type 2
P 112 PSC61, compact, type 2

Distribution Boxes

P 113-117 3SD5/3SD6, plastic
P 118 3SD5T, metal base
P 119-120 3SHT & 3SHA, metal
P 121 VD51MS, metal
P 122 3SD8N, modular boxes
P 123-125 Accessories

Contents

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.

Technical specifications

- Standards: IEC 60898-1, IEC 60947-2
- Rated current In (A) : 0.5, 1, 1.6, 2, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63
- Rated voltage Un (V AC): 230/400
- Operational voltage (V AC): Min. 24; Max. 250/440
- Rated frequency (Hz): 50/60
- Rated insulation voltage (V AC): 500
- Number of poles (P): 1, 1P+N, 2, 3, 3P+N, 4

Tripping characteristic	IEC 60898-1	IEC 60947-2
Characteristic B (In)	3-5	4
Characteristic C (In)	5-10	8
Characteristic D (In)	10-20	12

- Thermal operating limit (In): 1.13 - 1.45
- Rated impulse withstand voltage Uimp (kV): 6
- Rated switching capacity Icn (kA): 10
- Degree of protection: IP20, with connected conductors
- Electrical life (times): 16,000
- Mechanical life (times): 35,000
- Breaking capacity:

Model	Rated voltage		Acc. to IEC 60898-1		Acc. to IEC 60947-2	
	(V)		Icn (kA)	Ics (kA)	Icu (kA)	Ics (kA)
3SB71-63	1P	230/400	16	12	15	7.5
	2-4P	400	16	12	15	7.5
3SB71-63H	1P	230/400	10	7.5	10	7.5
	2-4P	400	10	7.5	10	7.5

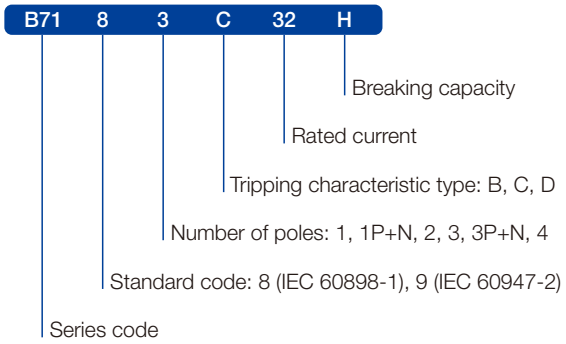
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000

References

- Additional components: page 85 ~ 86



Instruction of type code

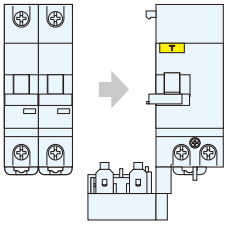


Features

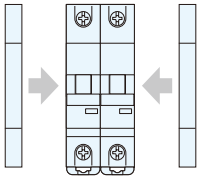
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- This MCB for household in accordance with: IEC 60898 -1, B, C and D tripping characteristics
- This MCB for industry in accordance with IEC 60947-2, instantaneous tripping characteristics with release B: 4 In, release C: 8 In, release D: 12 In
- This MCB may be extended with:
  - A wide range of RCDs
  - Full sets of accessories

Add-on devices

Add-on RCD



Auxiliaries



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Benefits

- Attractive device design
- Easily recognizable, color-coded switching position
- Indication integrated in the handle.





Well matched with RCCB 3SL71



Extended with add-on RCD block 3SB71LB



Added both on the left and right sides of the MCB.



Safety terminal: easy wiring; protection degree IP20.
Pozidrive and slot screw head.
Torque up to 2.8 N·m.



MCB's and RCCB's can be connected with PIN type busbar both at the top and bottom terminals, with easy DIN-rail extraction



MCB's and RCCB's can be connected with FORK type busbar both at the top and bottom terminals, with easy DIN-rail extraction

Selection and ordering data

IEC 60898-1 16 kA
IEC 60947-2 15 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Order code	Type code	Order code	Type code	Order code	
	1	2	B71 1B02	**13700**	B71 1C02	**13711**	B71 1D02	**13722**	12
		4	B71 1B04	**13701**	B71 1C04	**13712**	B71 1D04	**13723**	12
		6	B71 1B06	**13702**	B71 1C06	**13713**	B71 1D06	**13724**	12
		10	B71 1B10	**13703**	B71 1C10	**13714**	B71 1D10	**13725**	12
		16	B71 1B16	**13704**	B71 1C16	**13715**	B71 1D16	**13726**	12
		20	B71 1B20	**13705**	B71 1C20	**13716**	B71 1D20	**13727**	12
		25	B71 1B25	**13706**	B71 1C25	**13717**	B71 1D25	**13728**	12
		32	B71 1B32	**13707**	B71 1C32	**13718**	B71 1D32	**13729**	12
		40	B71 1B40	**13708**	B71 1C40	**13719**	B71 1D40	**13730**	12
		50	B71 1B50	**13709**	B71 1C50	**13720**	B71 1D50	**13731**	12
		63	B71 1B63	**13710**	B71 1C63	**13721**	B71 1D63	**13732**	12
	2	2	B71 2B02	**13733**	B71 2C02	**13744**	B71 2D02	**13755**	6
		4	B71 2B04	**13734**	B71 2C04	**13745**	B71 2D04	**13756**	6
		6	B71 2B06	**13735**	B71 2C06	**13746**	B71 2D06	**13757**	6
		10	B71 2B10	**13736**	B71 2C10	**13747**	B71 2D10	**13758**	6
		16	B71 2B16	**13737**	B71 2C16	**13748**	B71 2D16	**13759**	6
		20	B71 2B20	**13738**	B71 2C20	**13749**	B71 2D20	**13760**	6
		25	B71 2B25	**13739**	B71 2C25	**13750**	B71 2D25	**13761**	6
		32	B71 2B32	**13740**	B71 2C32	**13751**	B71 2D32	**13762**	6
		40	B71 2B40	**13741**	B71 2C40	**13752**	B71 2D40	**13763**	6
		50	B71 2B50	**13742**	B71 2C50	**13753**	B71 2D50	**13764**	6
		63	B71 2B63	**13743**	B71 2C63	**13754**	B71 2D63	**13765**	6

2

Selection and ordering data

IEC 60898-1 16 kA
IEC 60947-2 15 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Order code	Type code	Order code	Type code	Order code	
	3	2	B71 3B02	**13766**	B71 3C02	**13777**	B71 3D02	**13788**	4
		4	B71 3B04	**13767**	B71 3C04	**13778**	B71 3D04	**13789**	4
		6	B71 3B06	**13768**	B71 3C06	**13779**	B71 3D06	**13790**	4
		10	B71 3B10	**13769**	B71 3C10	**13780**	B71 3D10	**13791**	4
		16	B71 3B16	**13770**	B71 3C16	**13781**	B71 3D16	**13792**	4
		20	B71 3B20	**13771**	B71 3C20	**13782**	B71 3D20	**13793**	4
		25	B71 3B25	**13772**	B71 3C25	**13783**	B71 3D25	**13794**	4
		32	B71 3B32	**13773**	B71 3C32	**13784**	B71 3D32	**13795**	4
		40	B71 3B40	**13774**	B71 3C40	**13785**	B71 3D40	**13796**	4
		50	B71 3B50	**13775**	B71 3C50	**13786**	B71 3D50	**13797**	4
		63	B71 3B63	**13776**	B71 3C63	**13787**	B71 3D63	**13798**	4
	4	2	B71 4B02	**13799**	B71 4C02	**13810**	B71 4D02	**13821**	3
		4	B71 4B04	**13800**	B71 4C04	**13811**	B71 4D04	**13822**	3
		6	B71 4B06	**13801**	B71 4C06	**13812**	B71 4D06	**13823**	3
		10	B71 4B10	**13802**	B71 4C10	**13813**	B71 4D10	**13824**	3
		16	B71 4B16	**13803**	B71 4C16	**13814**	B71 4D16	**13825**	3
		20	B71 4B20	**13804**	B71 4C20	**13815**	B71 4D20	**13826**	3
		25	B71 4B25	**13805**	B71 4C25	**13816**	B71 4D25	**13827**	3
		32	B71 4B32	**13806**	B71 4C32	**13817**	B71 4D32	**13828**	3
		40	B71 4B40	**13807**	B71 4C40	**13818**	B71 4D40	**13829**	3
		50	B71 4B50	**13808**	B71 4C50	**13819**	B71 4D50	**13830**	3
		63	B71 4B63	**13809**	B71 4C63	**13820**	B71 4D63	**13831**	3

Selection and ordering data

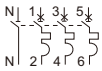
IEC 60898-1 10 kA
IEC 60947-2 10 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Order code	Type code	Order code	Type code	Order code	
	1	0.5	B71 1B0.5H	**19893**	B71 1C0.5H	**19899**	B71 1D0.5H	**19905**	12
		1	B71 1B01H	**19250**	B71 1C01H	**19270**	B71 1D01H	**19290**	12
		1.6	B71 1B1.6H	**19911**	B71 1C1.6H	**19917**	B71 1D1.6H	**19923**	12
		2	B71 1B02H	**19251**	B71 1C02H	**19271**	B71 1D02H	**19291**	12
		4	B71 1B04H	**19253**	B71 1C04H	**19273**	B71 1D04H	**19293**	12
		6	B71 1B06H	**20001**	B71 1C06H	**20046**	B71 1D06H	**20091**	12
		10	B71 1B10H	**20002**	B71 1C10H	**20047**	B71 1D10H	**20092**	12
		13	B71 1B13H	**19929**	B71 1C13H	**19935**	B71 1D13H	**19941**	12
		16	B71 1B16H	**20003**	B71 1C16H	**20048**	B71 1D16H	**20093**	12
		20	B71 1B20H	**20004**	B71 1C20H	**20049**	B71 1D20H	**20094**	12
		25	B71 1B25H	**20005**	B71 1C25H	**20050**	B71 1D25H	**20095**	12
		32	B71 1B32H	**20006**	B71 1C32H	**20051**	B71 1D32H	**20096**	12
		40	B71 1B40H	**20007**	B71 1C40H	**20052**	B71 1D40H	**20097**	12
		50	B71 1B50H	**20008**	B71 1C50H	**20053**	B71 1D50H	**20098**	12
		63	B71 1B63H	**20009**	B71 1C63H	**20054**	B71 1D63H	**20099**	12
	1P+N	0.5	B71 1NB0.5H	**19897**	B71 1NC0.5H	**19903**	B71 1ND0.5H	**19909**	6
		1	B71 1NB1H	**19947**	B71 1NC1H	**19960**	B71 1ND1H	**19973**	6
		1.6	B71 1NB1.6H	**19915**	B71 1NC1.6H	**19921**	B71 1ND1.6H	**19927**	6
		2	B71 1NB2H	**19948**	B71 1NC2H	**19961**	B71 1ND2H	**19974**	6
		4	B71 1NB4H	**19950**	B71 1NC4H	**19963**	B71 1ND4H	**19976**	6
		6	B71 1NB6H	**19951**	B71 1NC6H	**19964**	B71 1ND6H	**19977**	6
		10	B71 1NB10H	**19952**	B71 1NC10H	**19965**	B71 1ND10H	**19978**	6
		13	B71 1NB13H	**19933**	B71 1NC13H	**19939**	B71 1ND13H	**19945**	6
		16	B71 1NB16H	**19953**	B71 1NC16H	**19966**	B71 1ND16H	**19979**	6
		20	B71 1NB20H	**19954**	B71 1NC20H	**19967**	B71 1ND20H	**19980**	6
		25	B71 1NB25H	**19955**	B71 1NC25H	**19968**	B71 1ND25H	**19981**	6
		32	B71 1NB32H	**19956**	B71 1NC32H	**19969**	B71 1ND32H	**19982**	6
		40	B71 1NB40H	**19957**	B71 1NC40H	**19970**	B71 1ND40H	**19983**	6
		50	B71 1NB50H	**19958**	B71 1NC50H	**19971**	B71 1ND50H	**19984**	6
		63	B71 1NB63H	**19959**	B71 1NC63H	**19972**	B71 1ND63H	**19985**	6
	2	0.5	B71 2B0.5H	**19894**	B71 2C0.5H	**19900**	B71 2D0.5H	**19906**	6
		1	B71 2B01H	**19254**	B71 2C01H	**19274**	B71 2D01H	**19294**	6
		1.6	B71 2B1.6H	**19912**	B71 2C1.6H	**19918**	B71 2D1.6H	**19924**	6
		2	B71 2B02H	**19255**	B71 2C02H	**19275**	B71 2D02H	**19295**	6
		4	B71 2B04H	**19257**	B71 2C04H	**19277**	B71 2D04H	**19297**	6
		6	B71 2B06H	**20010**	B71 2C06H	**20055**	B71 2D06H	**20100**	6
		10	B71 2B10H	**20011**	B71 2C10H	**20056**	B71 2D10H	**20101**	6
		13	B71 2B13H	**19930**	B71 2C13H	**19936**	B71 2D13H	**19942**	6
		16	B71 2B16H	**20012**	B71 2C16H	**20057**	B71 2D16H	**20102**	6
		20	B71 2B20H	**20013**	B71 2C20H	**20058**	B71 2D20H	**20103**	6
		25	B71 2B25H	**20014**	B71 2C25H	**20059**	B71 2D25H	**20104**	6
		32	B71 2B32H	**20015**	B71 2C32H	**20060**	B71 2D32H	**20105**	6
		40	B71 2B40H	**20016**	B71 2C40H	**20061**	B71 2D40H	**20106**	6
		50	B71 2B50H	**20017**	B71 2C50H	**20062**	B71 2D50H	**20107**	6
		63	B71 2B63H	**20018**	B71 2C63H	**20063**	B71 2D63H	**20108**	6

2

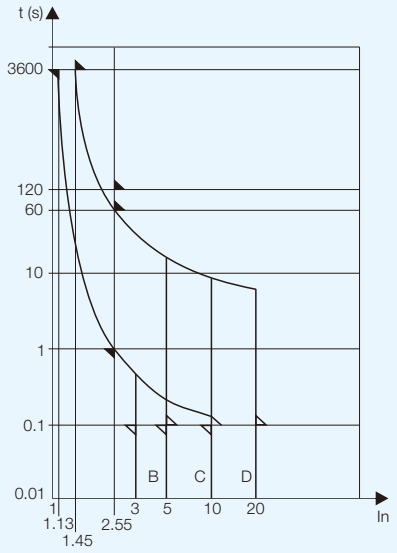
Selection and ordering data

IEC 60898-1 10 kA
IEC 60947-2 10 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Order code	Type code	Order code	Type code	Order code	
	3	0.5	B71 3B0.5H	**19895**	B71 3C0.5H	**19901**	B71 3D0.5H	**19907**	4
		1	B71 3B01H	**19258**	B71 3C01H	**19278**	B71 3D01H	**19298**	4
		1.6	B71 3B1.6H	**19913**	B71 3C1.6H	**19919**	B71 3D1.6H	**19925**	4
		2	B71 3B02H	**19259**	B71 3C02H	**19279**	B71 3D02H	**19299**	4
		4	B71 3B04H	**19261**	B71 3C04H	**19281**	B71 3D04H	**19301**	4
		6	B71 3B06H	**20019**	B71 3C06H	**20064**	B71 3D06H	**20109**	4
		10	B71 3B10H	**20020**	B71 3C10H	**20065**	B71 3D10H	**20110**	4
		13	B71 3B13H	**19931**	B71 3C13H	**19937**	B71 3D13H	**19943**	4
		16	B71 3B16H	**20021**	B71 3C16H	**20066**	B71 3D16H	**20111**	4
		20	B71 3B20H	**20022**	B71 3C20H	**20067**	B71 3D20H	**20112**	4
		25	B71 3B25H	**20023**	B71 3C25H	**20068**	B71 3D25H	**20113**	4
		32	B71 3B32H	**20024**	B71 3C32H	**20069**	B71 3D32H	**20114**	4
		40	B71 3B40H	**20025**	B71 3C40H	**20070**	B71 3D40H	**20115**	4
		50	B71 3B50H	**20026**	B71 3C50H	**20071**	B71 3D50H	**20116**	4
		63	B71 3B63H	**20027**	B71 3C63H	**20072**	B71 3D63H	**20117**	4
	3P+N	0.5	B71 3NB0.5H	**19898**	B71 3NC0.5H	**19904**	B71 3ND0.5H	**19910**	3
		1	B71 3NB01H	**19262**	B71 3NC01H	**19282**	B71 3ND01H	**19302**	3
		1.6	B71 3NB1.6H	**19916**	B71 3NC1.6H	**19922**	B71 3ND1.6H	**19928**	3
		2	B71 3NB02H	**19263**	B71 3NC02H	**19283**	B71 3ND02H	**19303**	3
		4	B71 3NB04H	**19265**	B71 3NC04H	**19285**	B71 3ND04H	**19305**	3
		6	B71 3NB06H	**20028**	B71 3NC06H	**20073**	B71 3ND06H	**20118**	3
		10	B71 3NB10H	**20029**	B71 3NC10H	**20074**	B71 3ND10H	**20119**	3
		13	B71 3NB13H	**19934**	B71 3NC13H	**19940**	B71 3ND13H	**19946**	3
		16	B71 3NB16H	**20030**	B71 3NC16H	**20075**	B71 3ND16H	**20120**	3
		20	B71 3NB20H	**20031**	B71 3NC20H	**20076**	B71 3ND20H	**20121**	3
		25	B71 3NB25H	**20032**	B71 3NC25H	**20077**	B71 3ND25H	**20122**	3
		32	B71 3NB32H	**20033**	B71 3NC32H	**20078**	B71 3ND32H	**20123**	3
		40	B71 3NB40H	**20034**	B71 3NC40H	**20079**	B71 3ND40H	**20124**	3
		50	B71 3NB50H	**20035**	B71 3NC50H	**20080**	B71 3ND50H	**20125**	3
		63	B71 3NB63H	**20036**	B71 3NC63H	**20081**	B71 3ND63H	**20126**	3
	4	0.5	B71 4B0.5H	**19896**	B71 4C0.5H	**19902**	B71 4D0.5H	**19908**	3
		1	B71 4B01H	**19266**	B71 4C01H	**19286**	B71 4D01H	**19306**	3
		1.6	B71 4B1.6H	**19914**	B71 4C1.6H	**19920**	B71 4D1.6H	**19926**	3
		2	B71 4B02H	**19267**	B71 4C02H	**19287**	B71 4D02H	**19307**	3
		4	B71 4B04H	**19269**	B71 4C04H	**19289**	B71 4D04H	**19309**	3
		6	B71 4B06H	**20037**	B71 4C06H	**20082**	B71 4D06H	**20127**	3
		10	B71 4B10H	**20038**	B71 4C10H	**20083**	B71 4D10H	**20128**	3
		13	B71 4B13H	**19932**	B71 4C13H	**19938**	B71 4D13H	**19944**	3
		16	B71 4B16H	**20039**	B71 4C16H	**20084**	B71 4D16H	**20129**	3
		20	B71 4B20H	**20040**	B71 4C20H	**20085**	B71 4D20H	**20130**	3
		25	B71 4B25H	**20041**	B71 4C25H	**20086**	B71 4D25H	**20131**	3
		32	B71 4B32H	**20042**	B71 4C32H	**20087**	B71 4D32H	**20132**	3
		40	B71 4B40H	**20043**	B71 4C40H	**20088**	B71 4D40H	**20133**	3
		50	B71 4B50H	**20044**	B71 4C50H	**20089**	B71 4D50H	**20134**	3
		63	B71 4B63H	**20045**	B71 4C63H	**20090**	B71 4D63H	**20135**	3

Tripping characteristic curves

IEC 60898-1 Standard



Magnetic release

An electromagnet with plunger ensures instantaneous tripping in case of short circuit. The IEC 60898-1 distinguishes three different types, following the current for instantaneous release: type B, C, D

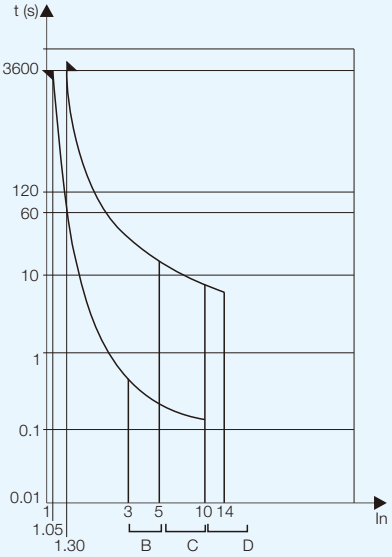
	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
B	3 In	Cold	t ≤ 0.1 s	No Tripping
C	5 In			
D	10 In			
B	5 In	Cold	t < 0.1 s	Tripping
C	10 In			
D	20 In			

Thermal release

- The release is initiated by a bimetal strip in case of overload
- The standard defines the range of release for specific overload values
- Reference ambient temperature is 30 °C

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No Tripping
b	1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
c	2.55 In	Cold	1 s < t < 60 s (In ≤ 32 A) 1 s < t < 120 s (In > 32 A)	Tripping

IEC 60947-2 Standard



Magnetic release

- An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- The standard leaves the calibration of magnetic release to manufacturer's decision.
- SASSIN MCB series 3SB71-63 offers instantaneous tripping ranges
  - release B: 4 In
  - release C: 8 In
  - release D: 12 In

Thermal release

- The release is initiated by a bimetal strip in case of overload.
- The standard defines the range of release for two specific overload values.
- Reference ambient temperature is 30 °C.

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.05 In	Cold	t ≥ 1 h (In ≤ 63 A) t ≥ 2 h (In > 63 A)	No Tripping
b	1.30 In	Immediately follwing test a	t < 1 h (In ≤ 63 A) t < 2 h (In > 63 A)	Tripping

Selectivity

Load side: 3SB71-63, Characteristic B, C	Rated current In (A)	Power supply side: RT16-00 (fuse) Is (kA)								
		20	25	36	50	63	80	100	125	160
	≤ 2	1.2	4	12	12	12	12	12	12	12
	3	0.7	1.2	3.8	5.3	6	6	6	6	6
	4	0.6	0.9	2.5	3.8	6	6	6	6	6
	6	0.5	0.8	1.9	2.5	4.5	5	6	6	6
	10		0.7	1.4	2.2	3.2	3.6	6	6	6
	16			1.2	1.8	2.6	3	5.6	6	6
	20				1.5	2.2	2.5	4.6	6	6
	25				1.3	2	2.2	4.1	5.5	6
	32					1.7	1.9	3.8	4.5	6
	40						1.7	3	4	5
	50						1.5	2.6	3.5	4.5
	63							2.4	3.3	4.5

Load side: 3SB71-63, Characteristic B, C	Rated current In (A)	Power supply side: 3SM29-125 Is (kA)								
		16	20	25	32	40	50	63	80	100
	≤ 10	0.19	0.019	0.3	0.4	0.5	0.5	0.5	0.63	0.8
	16			0.3	0.4	0.5	0.5	0.5	0.63	0.8
	20					0.5	0.5	0.5	0.63	0.8
	25						0.5	0.5	0.63	0.8
	32						0.5	0.5	0.63	0.8
	40									
	50									
	63									

Back up protection

Load side: 3SB71-63, Characteristic B, C	Rated current In (A)	Power supply side: RT16 series Is (kA)						
		40	50	63	80	100	125	160
	1~6	40	40	40	40	40	40	40
	8~10	40	40	40	40	40	40	40
	13	40	40	40	40	35	35	35
	16	40	40	40	40	30	30	30
	20	40	40	40	40	30	30	30
	25	40	40	40	40	30	30	30
	32	40	40	40	40	30	30	30
	40	40	40	40	40	30	30	30
	50	30	30	30	30	30	30	30
	63	20	20	20	20	15	15	15

Load side: 3SB71-63, Characteristic B, C	Rated current In (A)	Power supply side: 3SM29 Is (kA)					
		3SM29-125S	3SM29-125H	3SM29-125R	3SM29-250S	3SM29-250H	3SM29-250R
	1~6	15	18	18	15	15	15
	10~20	12	15	15	12	12	12
	32~40	12	15	15	12	12	12
	50~60	12	15	15	12	12	12

Temperature derating

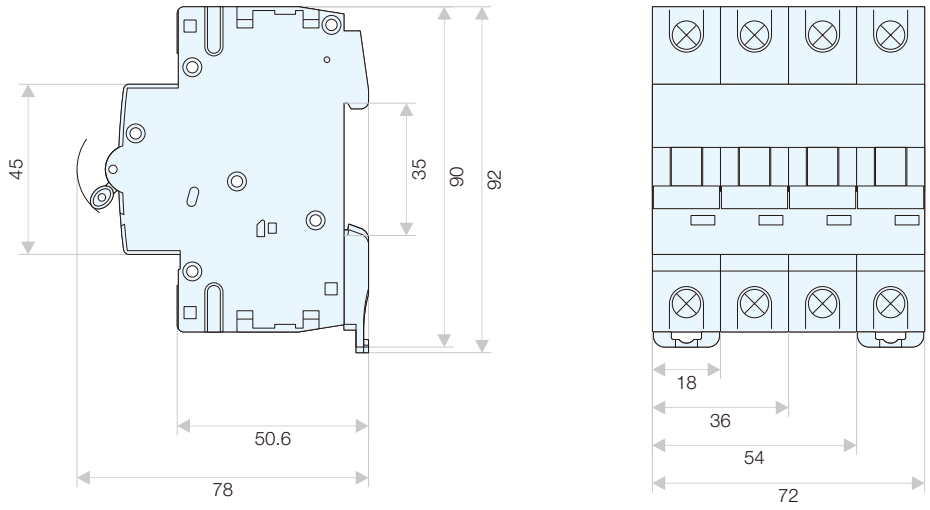
The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed.
Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.
The reference temperature is 30 °C

Ambient temperature Rated current (A)	-35 °C	-30 °C	-20 °C	-10 °C	0 °C	10 °C	20 °C	30 °C	40 °C	50 °C	60 °C
0.5	0.66	0.64	0.63	0.60	0.58	0.55	0.53	0.50	0.47	0.44	0.40
1	1.32	1.27	1.25	1.20	1.15	1.10	1.06	1.00	0.93	0.87	0.81
1.6	2.10	2.04	2.00	1.92	1.84	1.84	1.70	1.60	1.49	1.39	1.20
2	2.60	2.52	2.46	2.38	2.28	2.20	2.08	2.00	1.92	1.86	1.76
4	5.20	2.04	4.92	4.76	4.56	4.40	4.16	4.00	3.84	3.76	3.52
6	7.80	7.56	7.38	7.14	6.84	6.60	6.24	6.00	5.76	5.64	5.28
10	13.20	12.70	12.50	12.00	11.50	11.10	10.60	10.00	9.60	9.30	8.90
13	17.20	16.50	16.30	15.60	14.95	14.30	13.80	13.00	12.09	11.30	9.75
16	21.12	20.48	20.00	19.20	18.40	17.76	16.96	16.00	15.36	14.88	14.24
20	26.40	25.60	25.00	24.00	23.00	22.20	21.20	20.00	19.20	18.60	17.80
25	33.00	32.00	31.25	30.00	28.75	27.75	26.50	25.00	24.00	23.25	22.25
32	42.56	41.28	40.00	38.72	37.12	35.52	33.92	32.00	30.72	29.76	28.16
40	53.20	51.20	50.00	48.00	46.40	44.80	42.40	40.00	38.40	37.20	35.60
50	67.00	65.50	63.00	60.50	58.00	56.00	53.00	50.00	48.00	46.50	44.00
63	83.79	81.90	80.01	76.86	73.71	70.56	66.78	63.00	60.48	58.90	55.44

When several simultaneously operating circuit breakers are mounted side by side in a small enclosure, the temperature rise inside the enclosure causes a reduction in current rating. you must then assign the rating (already derated if necessary according to ambient temperature) a downrating factor of 0.8.

Outline and installation dimensions

unit in mm



2

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.

Technical specifications

- Standard: IEC 60947-2
- Rated current In (A): 80, 100, 125
- Rated voltage Un (V AC): 230/400
- Operational voltage (V AC): Min: 24; Max: 250/440
- Number of poles (P): 1, 2, 3, 4
- Rated impulse withstand voltage Uimp (kV): 6
- Trip characteristic: C, D
- Characteristic C (In): 8
- Characteristic D (In): 12
- Thermal operating limit (In): 1.05-1.3
- Degree of protection: IP20, with connected conductors
- Electrical life (times): 6,000
- Mechanical life (times): 20,000
- Breaking capacity:

Model	Rated voltage		Acc. to IEC 60947-2	
	(V)		Icu (kA)	Ics (kA)
3SB71-125	1P	230/400	10	7.5
	2-4P	400	10	7.5

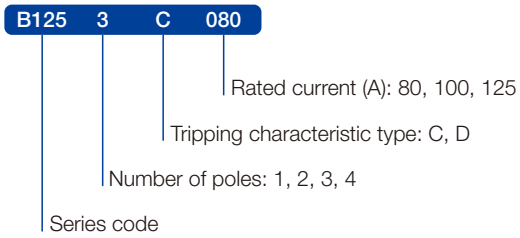
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 1-50
- Finely stranded with end sleeve (mm^2): 1-35
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000

References

- Additional components: page 85 ~ 86



Instruction of type code

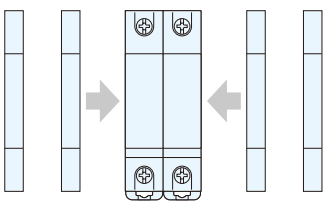


Features

- Rated current up to 125 A
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- This MCB for industry in accordance with IEC 60947-2, instantaneous tripping characteristic release B 4 In, release C 8 In, release D 12 In.
- This MCB may be extended with:
- A wide range of RCDs and RCBO
- Full sets of additional components
- Full sets of accessories

Add-on devices

Auxiliaries



Selection and ordering data

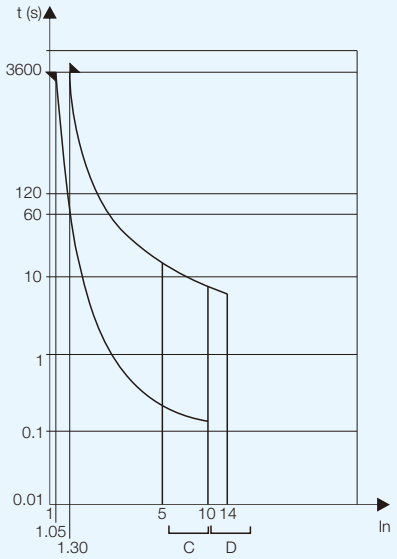
IEC 60947-2 10 kA

	Number of poles	Rated current In (A)	Characteristic C		Characteristic D		
			Type code	Order code	Type code	Order code	Pack.
	1	80	D125 1C080	**16161**	D125 1D080	**16173**	12
		100	D125 1C100	**16162**	D125 1D100	**16174**	12
		125	D125 1C125	**16163**	D125 1D125	**16175**	12
	2	80	D125 2C080	**16164**	D125 2D080	**16176**	6
		100	D125 2C100	**16165**	D125 2D100	**16177**	6
		125	D125 2C125	**16166**	D125 2D125	**16178**	6
	3	80	D125 3C080	**16167**	D125 3D080	**16179**	4
		100	D125 3C100	**16168**	D125 3D100	**16180**	4
		125	D125 3C125	**16169**	D125 3D125	**16181**	4
	4	80	D125 4C080	**16170**	D125 4D080	**16182**	3
		100	D125 4C100	**16171**	D125 4D100	**16183**	3
		125	D125 4C125	**16172**	D125 4D125	**16184**	3

2

Tripping characteristic curves

IEC 60947-2 Standard



Magnetic release

- An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- The standard leaves the calibration of magnetic release to manufacturer's decision.
- Sassin MCB series 3SB71-125 offers instantaneous tripping ranges
  - release C: 8 In
  - release D: 12 In

Thermal release

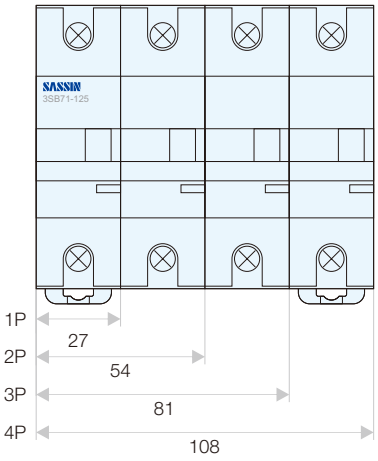
- The release is initiated by a bimetal strip in case of overload.
- The standard defines the range of release for two specific overload values.
- Reference ambient temperature is 30 °C.

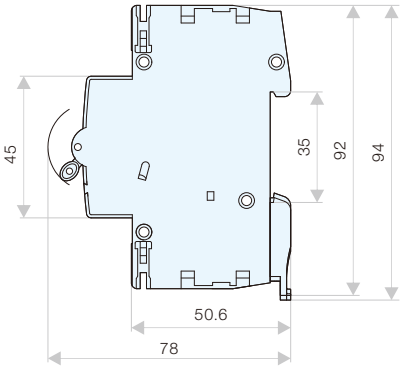
Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.05 In	Cold	t ≥ 1 h (In ≤ 63 A) t ≥ 2 h (In > 63 A)	No Tripping
b	1.30 In	Immediately follwing test a	t < 1 h (In ≤ 63 A) t < 2 h (In > 63 A)	Tripping

Outline and installation dimensions

3SB71-125 is installed on DIN rail

unit in mm





Functions

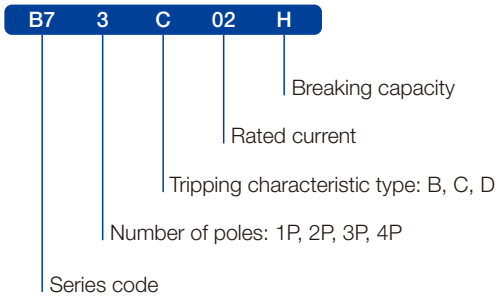
- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.



Features

- Small size,simple structure,and high reliability
- Full sets of accessories
- The handle provides a clear indication of the contact position
- This MCB for household in accordance with: IEC 60898-1, B, C and D tripping characteristics
- Both top and bottom incoming lines are acceptable

Instruction of type code



Technical specifications

			3SB7-63
Standards			IEC/EN 60898-1
Number of poles			1P, 2P, 3P, 4P
Tripping characteristics			B, C, D
Rated current In		A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63
Rated operational voltage Ue	1P	V AC	230/400
	2P, 3P, 4P	V AC	400
Minimum operating voltage		V AC	24
Rated frequency fn		Hz	50/60
Breaking capacity	Icn	kA	10
	Ics	kA	7.5
Rated insulation voltage Ui	Phase to ground	V	250
	Phase to phase	V	500
Rated impulse withstand voltage Uimp		kV	6
Endurance	Electrical	ops.	6000
	Mechnical	ops.	20000
Protection degree			IP20
Pollution degree			2
Isolating function			Yes
Mounting			DIN rail 35 mm
Mounting position			Any
Cross-section of conductor	Solid and stranded	mm^2	1-25
(Min/Max)	Finely stranded with end sleeve	mm^2	1-25
Type of busbar			Pin type, U type
Tighting torque		N·m	2.5
Ambient temperature		°C	-5 ~ +40, max 95% humidty
Altitude (max.)		meter	2000

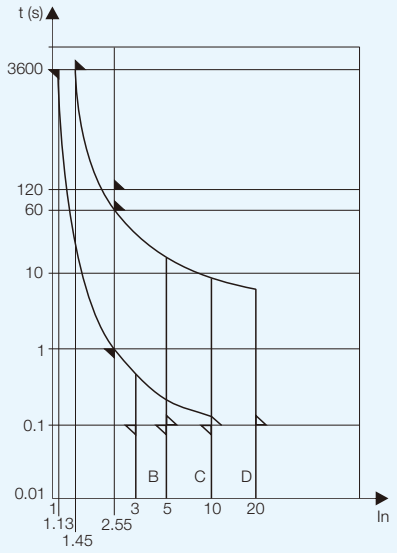
2

Selection and ordering data

	Number of poles	Rated current In (A)	Characteristic B	Characteristic C	Characteristic D	Pack.
			Type code	Type code	Type code	
	1	1	B7 1B01H	B7 1C01H	B7 1D01H	12
		2	B7 1B02H	B7 1C02H	B7 1D02H	12
		3	B7 1B03H	B7 1C03H	B7 1D03H	12
		4	B7 1B04H	B7 1C04H	B7 1D04H	12
		6	B7 1B06H	B7 1C06H	B7 1D06H	12
		10	B7 1B10H	B7 1C10H	B7 1D10H	12
		16	B7 1B16H	B7 1C16H	B7 1D16H	12
		20	B7 1B20H	B7 1C20H	B7 1D20H	12
		25	B7 1B25H	B7 1C25H	B7 1D25H	12
		32	B7 1B32H	B7 1C32H	B7 1D32H	12
		40	B7 1B40H	B7 1C40H	B7 1D40H	12
		50	B7 1B50H	B7 1C50H	B7 1D50H	12
		63	B7 1B63H	B7 1C63H	B7 1D63H	12
	2	1	B7 2B01H	B7 2C01H	B7 2D01H	6
		2	B7 2B02H	B7 2C02H	B7 2D02H	6
		3	B7 2B03H	B7 2C03H	B7 2D03H	6
		4	B7 2B04H	B7 2C04H	B7 2D04H	6
		6	B7 2B06H	B7 2C06H	B7 2D06H	6
		10	B7 2B10H	B7 2C10H	B7 2D10H	6
		16	B7 2B16H	B7 2C16H	B7 2D16H	6
		20	B7 2B20H	B7 2C20H	B7 2D20H	6
		25	B7 2B25H	B7 2C25H	B7 2D25H	6
		32	B7 2B32H	B7 2C32H	B7 2D32H	6
		40	B7 2B40H	B7 2C40H	B7 2D40H	6
		50	B7 2B50H	B7 2C50H	B7 2D50H	6
		63	B7 2B63H	B7 2C63H	B7 2D63H	6
	3	1	B7 3B01H	B7 3C01H	B7 3D01H	4
		2	B7 3B02H	B7 3C02H	B7 3D02H	4
		3	B7 3B03H	B7 3C03H	B7 3D03H	4
		4	B7 3B04H	B7 3C04H	B7 3D04H	4
		6	B7 3B06H	B7 3C06H	B7 3D06H	4
		10	B7 3B10H	B7 3C10H	B7 3D10H	4
		16	B7 3B16H	B7 3C16H	B7 3D16H	4
		20	B7 3B20H	B7 3C20H	B7 3D20H	4
		25	B7 3B25H	B7 3C25H	B7 3D25H	4
		32	B7 3B32H	B7 3C32H	B7 3D32H	4
		40	B7 3B40H	B7 3C40H	B7 3D40H	4
		50	B7 3B50H	B7 3C50H	B7 3D50H	4
		63	B7 3B63H	B7 3C63H	B7 3D63H	4
	4	1	B7 4B01H	B7 4C01H	B7 4D01H	3
		2	B7 4B02H	B7 4C02H	B7 4D02H	3
		3	B7 4B03H	B7 4C03H	B7 4D03H	3
		4	B7 4B04H	B7 4C04H	B7 4D04H	3
		6	B7 4B06H	B7 4C06H	B7 4D06H	3
		10	B7 4B10H	B7 4C10H	B7 4D10H	3
		16	B7 4B16H	B7 4C16H	B7 4D16H	3
		20	B7 4B20H	B7 4C20H	B7 4D20H	3
		25	B7 4B25H	B7 4C25H	B7 4D25H	3
		32	B7 4B32H	B7 4C32H	B7 4D32H	3
		40	B7 4B40H	B7 4C40H	B7 4D40H	3
		50	B7 4B50H	B7 4C50H	B7 4D50H	3
		63	B7 4B63H	B7 4C63H	B7 4D63H	3

Tripping characteristic curves

IEC 60898-1 Standard



Magnetic release

An electromagnet with plunger ensures instantaneous tripping in case of short circuit. The IEC 60898-1 distinguishes three different types, following the current for instantaneous release: type B, C, D

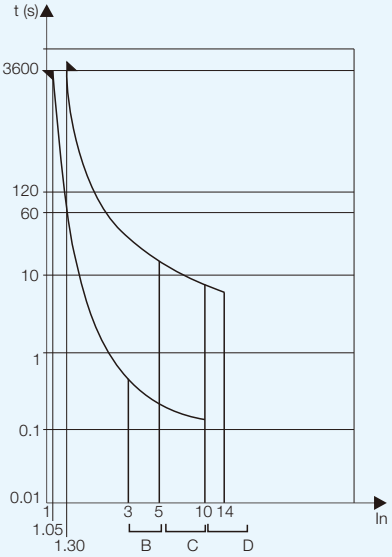
	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
B	3 In	Cold	t ≤ 0.1 s	No Tripping
C	5 In			
D	10 In			
B	5 In	Cold	t < 0.1 s	Tripping
C	10 In			
D	20 In			

Thermal release

- The release is initiated by a bimetal strip in case of overload
- The standard defines the range of release for specific overload values
- Reference ambient temperature is 30 °C

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No Tripping
b	1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
c	2.55 In	Cold	1 s < t < 60 s (In ≤ 32 A) 1 s < t < 120 s (In > 32 A)	Tripping

IEC 60947-2 Standard



Magnetic release

- An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- The standard leaves the calibration of magnetic release to manufacturer's decision.
- SASSIN MCB series 3SB71-63 offers instantaneous tripping ranges
  - release B: 4 In
  - release C: 8 In
  - release D: 12 In

Thermal release

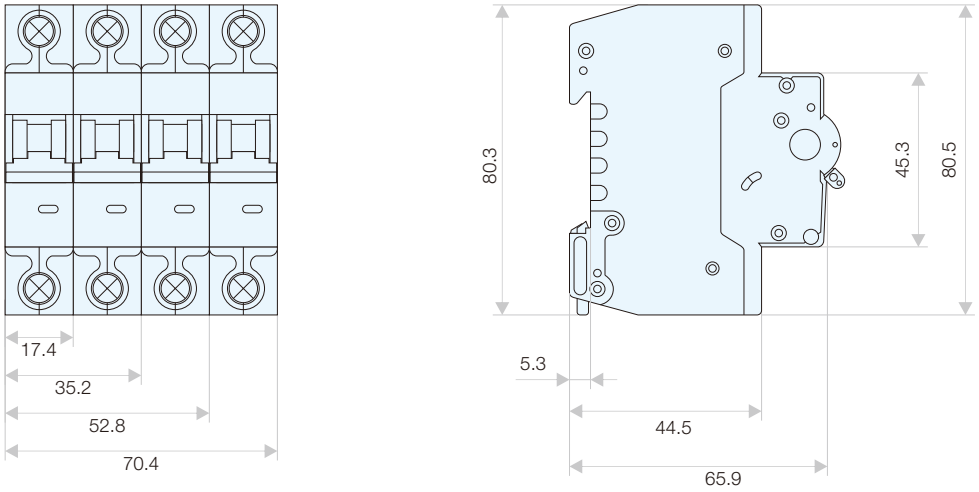
- The release is initiated by a bimetal strip in case of overload.
- The standard defines the range of release for two specific overload values.
- Reference ambient temperature is 30 °C.

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.05 In	Cold	t ≥ 1 h (In ≤ 63 A) t ≥ 2 h (In > 63 A)	No Tripping
b	1.30 In	Immediately follwing test a	t < 1 h (In ≤ 63 A) t < 2 h (In > 63 A)	Tripping

2

Outline and installation dimensions

unit in mm



Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.



Features

- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- This MCB for household in accordance with: IEC 60898-1, B, C and D tripping characteristics

Technical specifications

				3SB6	3SB6H	
Standards				IEC/EN 60898-1	IEC/EN 60898-1, IEC/EN 60947-2	
Number of poles				1P, 1P+N, 2P, 3P, 3P+N, 4P	1P, 1P+N, 2P, 3P, 3P+N, 4P	
Tripping characteristics				B, C, D	B, C, D	
Rated current In			A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63	70, 80, 100
Rated operational voltage Ue	1P		V AC	230/400	230/400	
	1P+N		V AC	230	230	
	2P, 3P, 3P+N, 4P		V AC	400	400	
Minimum operating voltage			V AC	24	24	
Rated frequency fn			Hz	50/60	50/60	
Breaking capacity	Acc. to IEC/EN 60898-1	Icn	kA	6	10	6
		Ics	kA	6	7.5	6
	Acc. to IEC/EN 60947-2	Icu	kA	6	10	10
		Ics	kA	6	7.5	7.5
Energy limiting class (B, C)				3	3	-
Rated insulation voltage Ui	Phase to ground		V	250	250	
	Phase to phase		V	500	500	
Rated impulse withstand voltage Uimp			kV	6	6	
Endurance	Electrical		ops.	10000	6000	
	Mechnical		ops.	20000	20000	
Protection degree				IP20	IP20	
Pollution degree				2	2	
Overvoltage category				II/III	II/III	
Isolating function				Yes	Yes	
Mounting				DIN Rail 35 mm	DIN Rail 35 mm	
Mounting position				Any	Any	
Cross-section of conductor (Min/Max)	Solid and stranded		mm^2	1-25	1-50	
	Finely stranded with end sleeve		mm^2	1-16	1-35	
Type of busbar				Pin type	Pin type	
Tighting torque			N·m	2.5	2.5	
Ambient temperature			°C	-5 ~ +40, max 95% humidty	-5 ~ +40, max 95% humidty	
Altitude (max.)			meter	2000	2000	

2

Selection and ordering data

IEC 60898-1 Icn=Ics=6kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Orde code	Type code	Orde code	Type code	Orde code	
	1	1	B6 1B01N	**29855**	B6 1C01N	**29907**	B6 1D01N	**29959**	12
		2	B6 1B02N	**29856**	B6 1C02N	**29908**	B6 1D02N	**29960**	12
		3	B6 1B03N	**29857**	B6 1C03N	**29909**	B6 1D03N	**29961**	12
		4	B6 1B04N	**29858**	B6 1C04N	**29910**	B6 1D04N	**29962**	12
		6	B6 1B06N	**29859**	B6 1C06N	**29911**	B6 1D06N	**29963**	12
		10	B6 1B10N	**29860**	B6 1C10N	**29912**	B6 1D10N	**29964**	12
		16	B6 1B16N	**29861**	B6 1C16N	**29913**	B6 1D16N	**29965**	12
		20	B6 1B20N	**29862**	B6 1C20N	**29914**	B6 1D20N	**29966**	12
		25	B6 1B25N	**29863**	B6 1C25N	**29915**	B6 1D25N	**29967**	12
		32	B6 1B32N	**29864**	B6 1C32N	**29916**	B6 1D32N	**29968**	12
		40	B6 1B40N	**29865**	B6 1C40N	**29917**	B6 1D40N	**29969**	12
		50	B6 1B50N	**29866**	B6 1C50N	**29918**	B6 1D50N	**29970**	12
		63	B6 1B63N	**29867**	B6 1C63N	**29919**	B6 1D63N	**29971**	12
	1+N	1	B6 1NB01N	**15392**	B6 1NC01N	**15405**	B6 1ND01N	**15418**	6
		2	B6 1NB02N	**15393**	B6 1NC02N	**15406**	B6 1ND02N	**15419**	6
		3	B6 1NB03N	**15394**	B6 1NC03N	**15407**	B6 1ND03N	**15420**	6
		4	B6 1NB04N	**15395**	B6 1NC04N	**15408**	B6 1ND04N	**15421**	6
		6	B6 1NB06N	**15396**	B6 1NC06N	**15409**	B6 1ND06N	**15422**	6
		10	B6 1NB10N	**15397**	B6 1NC10N	**15410**	B6 1ND10N	**15423**	6
		16	B6 1NB16N	**15398**	B6 1NC16N	**15411**	B6 1ND16N	**15424**	6
		20	B6 1NB20N	**15399**	B6 1NC20N	**15412**	B6 1ND20N	**15425**	6
		25	B6 1NB25N	**15400**	B6 1NC25N	**15413**	B6 1ND25N	**15426**	6
		32	B6 1NB32N	**15401**	B6 1NC32N	**15414**	B6 1ND32N	**15427**	6
		40	B6 1NB40N	**15402**	B6 1NC40N	**15415**	B6 1ND40N	**15428**	6
		50	B6 1NB50N	**15403**	B6 1NC50N	**15416**	B6 1ND50N	**15429**	6
		63	B6 1NB63N	**15404**	B6 1NC63N	**15417**	B6 1ND63N	**15430**	6
	2	1	B6 2B01N	**29868**	B6 2C01N	**29920**	B6 2D01N	**29972**	6
		2	B6 2B02N	**29869**	B6 2C02N	**29921**	B6 2D02N	**29973**	6
		3	B6 2B03N	**29870**	B6 2C03N	**29922**	B6 2D03N	**29974**	6
		4	B6 2B04N	**29871**	B6 2C04N	**29923**	B6 2D04N	**29975**	6
		6	B6 2B06N	**29872**	B6 2C06N	**29924**	B6 2D06N	**29976**	6
		10	B6 2B10N	**29873**	B6 2C10N	**29925**	B6 2D10N	**29977**	6
		16	B6 2B16N	**29874**	B6 2C16N	**29926**	B6 2D16N	**29978**	6
		20	B6 2B20N	**29875**	B6 2C20N	**29927**	B6 2D20N	**29979**	6
		25	B6 2B25N	**29876**	B6 2C25N	**29928**	B6 2D25N	**29980**	6
		32	B6 2B32N	**29877**	B6 2C32N	**29929**	B6 2D32N	**29981**	6
		40	B6 2B40N	**29878**	B6 2C40N	**29930**	B6 2D40N	**29982**	6
		50	B6 2B50N	**29879**	B6 2C50N	**29931**	B6 2D50N	**29983**	6
		63	B6 2B63N	**29880**	B6 2C63N	**29932**	B6 2D63N	**29984**	6

Selection and ordering data

IEC 60898-1 Icn=Ics=6kA

Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
		Type code	Orde code	Type code	Orde code	Type code	Orde code	
3	1	B6 3B01N	**29881**	B6 3C01N	**29933**	B6 3D01N	**29985**	4
	2	B6 3B02N	**29882**	B6 3C02N	**29934**	B6 3D02N	**29986**	4
	3	B6 3B03N	**29883**	B6 3C03N	**29935**	B6 3D03N	**29987**	4
	4	B6 3B04N	**29884**	B6 3C04N	**29936**	B6 3D04N	**29988**	4
	6	B6 3B06N	**29885**	B6 3C06N	**29937**	B6 3D06N	**29989**	4
	10	B6 3B10N	**29886**	B6 3C10N	**29938**	B6 3D10N	**29990**	4
	16	B6 3B16N	**29887**	B6 3C16N	**29939**	B6 3D16N	**29991**	4
	20	B6 3B20N	**29888**	B6 3C20N	**29940**	B6 3D20N	**29992**	4
	25	B6 3B25N	**29889**	B6 3C25N	**29941**	B6 3D25N	**29993**	4
	32	B6 3B32N	**29890**	B6 3C32N	**29942**	B6 3D32N	**29994**	4
	40	B6 3B40N	**29891**	B6 3C40N	**29943**	B6 3D40N	**29995**	4
	50	B6 3B50N	**29892**	B6 3C50N	**29944**	B6 3D50N	**29996**	4
	63	B6 3B63N	**29893**	B6 3C63N	**29945**	B6 3D63N	**29997**	4
3+N	1	B6 3NB01N	**15431**	B6 3NC01N	**15444**	B6 3ND01N	**15457**	3
	2	B6 3NB02N	**15432**	B6 3NC02N	**15445**	B6 3ND02N	**15458**	3
	3	B6 3NB03N	**15433**	B6 3NC03N	**15446**	B6 3ND03N	**15459**	3
	4	B6 3NB04N	**15434**	B6 3NC04N	**15447**	B6 3ND04N	**15460**	3
	6	B6 3NB06N	**15435**	B6 3NC06N	**15448**	B6 3ND06N	**15461**	3
	10	B6 3NB10N	**15436**	B6 3NC10N	**15449**	B6 3ND10N	**15462**	3
	16	B6 3NB16N	**15437**	B6 3NC16N	**15450**	B6 3ND16N	**15463**	3
	20	B6 3NB20N	**15438**	B6 3NC20N	**15451**	B6 3ND20N	**15464**	3
	25	B6 3NB25N	**15439**	B6 3NC25N	**15452**	B6 3ND25N	**15465**	3
	32	B6 3NB32N	**15440**	B6 3NC32N	**15453**	B6 3ND32N	**15466**	3
	40	B6 3NB40N	**15441**	B6 3NC40N	**15454**	B6 3ND40N	**15467**	3
	50	B6 3NB50N	**15442**	B6 3NC50N	**15455**	B6 3ND50N	**15468**	3
	63	B6 3NB63N	**15443**	B6 3NC63N	**15456**	B6 3ND63N	**15469**	3
4	1	B6 4B01N	**29894**	B6 4C01N	**29946**	B6 4D01N	**29998**	3
	2	B6 4B02N	**29895**	B6 4C02N	**29947**	B6 4D02N	**29999**	3
	3	B6 4B03N	**29896**	B6 4C03N	**29948**	B6 4D03N	**10001**	3
	4	B6 4B04N	**29897**	B6 4C04N	**29949**	B6 4D04N	**10002**	3
	6	B6 4B06N	**29898**	B6 4C06N	**29950**	B6 4D06N	**10003**	3
	10	B6 4B10N	**29899**	B6 4C10N	**29951**	B6 4D10N	**10004**	3
	16	B6 4B16N	**29900**	B6 4C16N	**29952**	B6 4D16N	**10005**	3
	20	B6 4B20N	**29901**	B6 4C20N	**29953**	B6 4D20N	**10006**	3
	25	B6 4B25N	**29902**	B6 4C25N	**29954**	B6 4D25N	**10007**	3
	32	B6 4B32N	**29903**	B6 4C32N	**29955**	B6 4D32N	**10008**	3
	40	B6 4B40N	**29904**	B6 4C40N	**29956**	B6 4D40N	**10009**	3
	50	B6 4B50N	**29905**	B6 4C50N	**29957**	B6 4D50N	**10010**	3
	63	B6 4B63N	**29906**	B6 4C63N	**29958**	B6 4D63N	**10011**	3

2

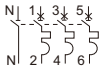
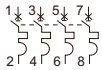
Selection and ordering data

6-63A: IEC 60898-1 Icn=10kA Ics=7.5kA
70-100A: IEC 60898-1 Icn=Ics=6kA
6-100A: IEC 60947-2 Icu=10kA Ics=7.5kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Orde code	Type code	Orde code	Type code	Orde code	
	1	1	B6 1B1H	**14035**	B6 1C1H	**13646**	B6 1D1H	**24598**	12
		2	B6 1B2H	**14036**	B6 1C2H	**13647**	B6 1D2H	**24599**	12
		3	B6 1B3H	**14037**	B6 1C3H	**13648**	B6 1D3H	**24600**	12
		4	B6 1B4H	**14038**	B6 1C4H	**13649**	B6 1D4H	**24601**	12
		6	B6 1B6H	**30505**	B6 1C6H	**30559**	B6 1D6H	**30613**	12
		10	B6 1B10H	**30506**	B6 1C10H	**30560**	B6 1D10H	**30614**	12
		16	B6 1B16H	**30507**	B6 1C16H	**30561**	B6 1D16H	**30615**	12
		20	B6 1B20H	**30508**	B6 1C20H	**30562**	B6 1D20H	**30616**	12
		25	B6 1B25H	**30509**	B6 1C25H	**30563**	B6 1D25H	**30617**	12
		32	B6 1B32H	**30510**	B6 1C32H	**30564**	B6 1D32H	**30618**	12
		40	B6 1B40H	**30511**	B6 1C40H	**30565**	B6 1D40H	**30619**	12
		50	B6 1B50H	**30512**	B6 1C50H	**30566**	B6 1D50H	**30620**	12
		63	B6 1B63H	**30513**	B6 1C63H	**30567**	B6 1D63H	**30621**	12
		70	B6 1B70H	**19390**	B6 1C70H	**19408**	B6 1D70H	**19426**	12
		80	B6 1B80H	**19391**	B6 1C80H	**19409**	B6 1D80H	**19427**	12
		100	B6 1B100H	**19392**	B6 1C100H	**19410**	B6 1D100H	**19428**	12
	1+N	1	B6 1NB1H	**14051**	B6 1NC1H	**13662**	B6 1ND1H	**25194**	6
		2	B6 1NB2H	**14052**	B6 1NC2H	**13663**	B6 1ND2H	**25195**	6
		3	B6 1NB3H	**14053**	B6 1NC3H	**13664**	B6 1ND3H	**14636**	6
		4	B6 1NB4H	**14054**	B6 1NC4H	**13665**	B6 1ND4H	**14637**	6
		6	B6 1NB6H	**30541**	B6 1NC6H	**30595**	B6 1ND6H	**30649**	6
		10	B6 1NB10H	**30542**	B6 1NC10H	**30596**	B6 1ND10H	**30650**	6
		16	B6 1NB16H	**30543**	B6 1NC16H	**30597**	B6 1ND16H	**30651**	6
		20	B6 1NB20H	**30544**	B6 1NC20H	**30598**	B6 1ND20H	**30652**	6
		25	B6 1NB25H	**30545**	B6 1NC25H	**30599**	B6 1ND25H	**30653**	6
		32	B6 1NB32H	**30546**	B6 1NC32H	**30600**	B6 1ND32H	**30654**	6
		40	B6 1NB40H	**30547**	B6 1NC40H	**30601**	B6 1ND40H	**19444**	6
		50	B6 1NB50H	**30548**	B6 1NC50H	**30602**	B6 1ND50H	**19445**	6
		63	B6 1NB63H	**30549**	B6 1NC63H	**30603**	B6 1ND63H	**19446**	6
		70	B6 1NB70H	**19402**	B6 1NC70H	**19420**	B6 1ND70H	**19438**	6
		80	B6 1NB80H	**19403**	B6 1NC80H	**19421**	B6 1ND80H	**19439**	6
		100	B6 1NB100H	**19404**	B6 1NC100H	**19422**	B6 1ND100H	**19440**	6
	2	1	B6 2B1H	**14039**	B6 2C1H	**13650**	B6 2D1H	**24602**	6
		2	B6 2B2H	**14040**	B6 2C2H	**13651**	B6 2D2H	**24603**	6
		3	B6 2B3H	**14041**	B6 2C3H	**13652**	B6 2D3H	**25178**	6
		4	B6 2B4H	**14042**	B6 2C4H	**13653**	B6 2D4H	**25179**	6
		6	B6 2B6H	**30514**	B6 2C6H	**30568**	B6 2D6H	**30622**	6
		10	B6 2B10H	**30515**	B6 2C10H	**30569**	B6 2D10H	**30623**	6
		16	B6 2B16H	**30516**	B6 2C16H	**30570**	B6 2D16H	**30624**	6
		20	B6 2B20H	**30517**	B6 2C20H	**30571**	B6 2D20H	**30625**	6
		25	B6 2B25H	**30518**	B6 2C25H	**30572**	B6 2D25H	**30626**	6
		32	B6 2B32H	**30519**	B6 2C32H	**30573**	B6 2D32H	**30627**	6
		40	B6 2B40H	**30520**	B6 2C40H	**30574**	B6 2D40H	**30628**	6
		50	B6 2B50H	**30521**	B6 2C50H	**30575**	B6 2D50H	**30629**	6
		63	B6 2B63H	**30522**	B6 2C63H	**30576**	B6 2D63H	**30630**	6
		70	B6 2B70H	**19393**	B6 2C70H	**19411**	B6 2D70H	**19429**	6
		80	B6 2B80H	**19394**	B6 2C80H	**19412**	B6 2D80H	**19430**	6
		100	B6 2B100H	**19395**	B6 2C100H	**19413**	B6 2D100H	**19431**	6

Selection and ordering data

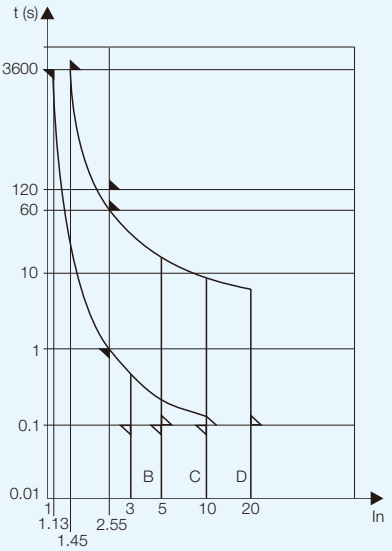
6-63A: IEC 60898-1 Icn=10kA Ics=7.5kA
70-100A: IEC 60898-1 Icn=Ics=6kA
6-100A: IEC 60947-2 Icu=10kA Ics=7.5kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D		Pack.
			Type code	Orde code	Type code	Orde code	Type code	Orde code	
	3	1	B6 3B1H	**14043**	B6 3C1H	**13654**	B6 3D1H	**25180**	4
		2	B6 3B2H	**14044**	B6 3C2H	**13655**	B6 3D2H	**25181**	4
		3	B6 3B3H	**14045**	B6 3C3H	**13656**	B6 3D3H	**25182**	4
		4	B6 3B4H	**14046**	B6 3C4H	**13657**	B6 3D4H	**25183**	4
		6	B6 3B6H	**30523**	B6 3C6H	**30577**	B6 3D6H	**30631**	4
		10	B6 3B10H	**30524**	B6 3C10H	**30578**	B6 3D10H	**30632**	4
		16	B6 3B16H	**30525**	B6 3C16H	**30579**	B6 3D16H	**30633**	4
		20	B6 3B20H	**30526**	B6 3C20H	**30580**	B6 3D20H	**30634**	4
		25	B6 3B25H	**30527**	B6 3C25H	**30581**	B6 3D25H	**30635**	4
		32	B6 3B32H	**30528**	B6 3C32H	**30582**	B6 3D32H	**30636**	4
		40	B6 3B40H	**30529**	B6 3C40H	**30583**	B6 3D40H	**30637**	4
		50	B6 3B50H	**30530**	B6 3C50H	**30584**	B6 3D50H	**30638**	4
		63	B6 3B63H	**30531**	B6 3C63H	**30585**	B6 3D63H	**30639**	4
		70	B6 3B70H	**19396**	B6 3C70H	**19414**	B6 3D70H	**19432**	4
		80	B6 3B80H	**19397**	B6 3C80H	**19415**	B6 3D80H	**19433**	4
		100	B6 3B100H	**19398**	B6 3C100H	**19416**	B6 3D100H	**19434**	4
	3+N	1	B6 3NB1H	**14055**	B6 3NC1H	**13666**	B6 3ND1H	**14638**	3
		2	B6 3NB2H	**14056**	B6 3NC2H	**13667**	B6 3ND2H	**14639**	3
		3	B6 3NB3H	**14057**	B6 3NC3H	**13668**	B6 3ND3H	**14640**	3
		4	B6 3NB4H	**14058**	B6 3NC4H	**13669**	B6 3ND4H	**14641**	3
		6	B6 3NB6H	**30550**	B6 3NC6H	**30604**	B6 3ND6H	**19447**	3
		10	B6 3NB10H	**30551**	B6 3NC10H	**30605**	B6 3ND10H	**19448**	3
		16	B6 3NB16H	**30552**	B6 3NC16H	**30606**	B6 3ND16H	**19449**	3
		20	B6 3NB20H	**30553**	B6 3NC20H	**30607**	B6 3ND20H	**19450**	3
		25	B6 3NB25H	**30554**	B6 3NC25H	**30608**	B6 3ND25H	**19451**	3
		32	B6 3NB32H	**30555**	B6 3NC32H	**30609**	B6 3ND32H	**19452**	3
		40	B6 3NB40H	**30556**	B6 3NC40H	**30610**	B6 3ND40H	**19453**	3
		50	B6 3NB50H	**30557**	B6 3NC50H	**30611**	B6 3ND50H	**19454**	3
		63	B6 3NB63H	**30558**	B6 3NC63H	**30612**	B6 3ND63H	**19455**	3
		70	B6 3NB70H	**19405**	B6 3NC70H	**19423**	B6 3ND70H	**19441**	3
		80	B6 3NB80H	**19406**	B6 3NC80H	**19424**	B6 3ND80H	**19442**	3
		100	B6 3NB100H	**19407**	B6 3NC100H	**19425**	B6 3ND100H	**19443**	3
	4	1	B6 4B1H	**14047**	B6 4C1H	**13658**	B6 4D1H	**25190**	3
		2	B6 4B2H	**14048**	B6 4C2H	**13659**	B6 4D2H	**25191**	3
		3	B6 4B3H	**14049**	B6 4C3H	**13660**	B6 4D3H	**25192**	3
		4	B6 4B4H	**14050**	B6 4C4H	**13661**	B6 4D4H	**25193**	3
		6	B6 4B6H	**30532**	B6 4C6H	**30586**	B6 4D6H	**30640**	3
		10	B6 4B10H	**30533**	B6 4C10H	**30587**	B6 4D10H	**30641**	3
		16	B6 4B16H	**30534**	B6 4C16H	**30588**	B6 4D16H	**30642**	3
		20	B6 4B20H	**30535**	B6 4C20H	**30589**	B6 4D20H	**30643**	3
		25	B6 4B25H	**30536**	B6 4C25H	**30590**	B6 4D25H	**30644**	3
		32	B6 4B32H	**30537**	B6 4C32H	**30591**	B6 4D32H	**30645**	3
		40	B6 4B40H	**30538**	B6 4C40H	**30592**	B6 4D40H	**30646**	3
		50	B6 4B50H	**30539**	B6 4C50H	**30593**	B6 4D50H	**30647**	3
		63	B6 4B63H	**30540**	B6 4C63H	**30594**	B6 4D63H	**30648**	3
		70	B6 4B70H	**19399**	B6 4C70H	**19417**	B6 4D70H	**19435**	3
		80	B6 4B80H	**19400**	B6 4C80H	**19418**	B6 4D80H	**19436**	3
		100	B6 4B100H	**19401**	B6 4C100H	**19419**	B6 4D100H	**19437**	3

2

Tripping characteristic curves

IEC 60898-1 Standard



Magnetic release

An electromagnet with plunger ensures instantaneous tripping in case of any short circuit. The IEC 60898-1 distinguishes three different types, following the current for instantaneous release: type B, C, D

	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
B	3 In	Cold	t ≤ 0.1 s	No Tripping
C	5 In			
D	10 In			
B	5 In	Cold	t < 0.1 s	Tripping
C	10 In			
D	20 In			

Thermal release

- The release is initiated by a bimetal strip in case of overload
- The standard defines the range of release for specific overload values
- Reference ambient temperature is 30 °C

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No Tripping
b	1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
c	2.55 In	Cold	1 s < t < 60 s (In ≤ 32 A) 1 s < t < 120 s (In > 32 A)	Tripping

Temperature derating

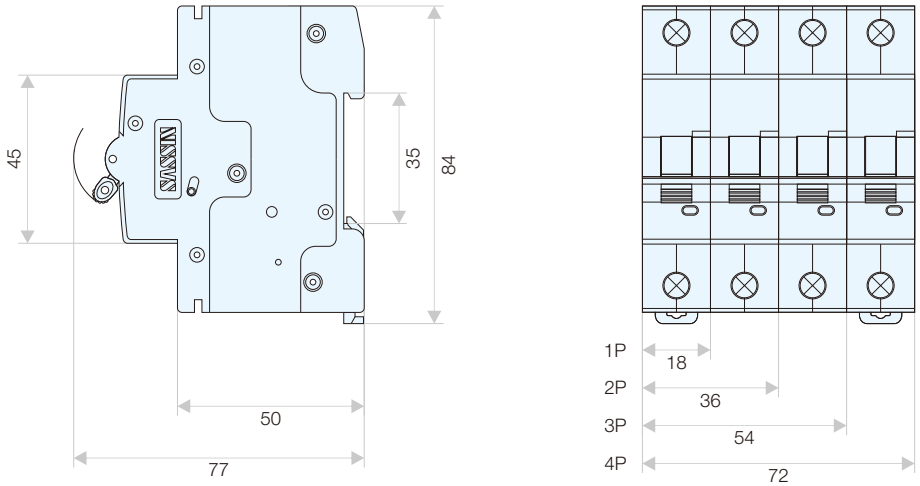
The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.
The reference temperature is 30 ºC

Rated current In	Temperature compensation coefficient under various operational temperature								
	-10	0	10	20	30	40	50	55	60
(A)	ºC	ºC	ºC	ºC	ºC	ºC	ºC	ºC	ºC
1~6	1.20	1.14	1.09	1.05	1.00	0.96	0.80	0.75	0.70
10~32	1.18	1.12	1.08	1.04	1.00	0.96	0.92	0.88	0.84
40~63	1.16	1.12	1.07	1.03	1.00	0.97	0.87	0.83	0.80
70~100	1.15	1.11	1.07	1.03	1.00	0.95	0.86	0.80	0.75

When several simultaneously operating circuit breakers are mounted side by side in a small enclosure, the temperature rise inside the enclosure causes a reduction in current rating. Then you must then assign the rating (already derated if necessary according to ambient temperature) a downrating factor of 0.8.

Outline and installation dimensions

unit in mm



Miniature Circuit Breakers
Series VB510

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.



Features

- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Clear indication of the contact position
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- Suitable for household or similar applications in accordance with: IEC 60898-1 & IEC 60947-2, tripping characteristics B, C and D.

Technical specifications

				VB510	VB510H
Standards				IEC 60898-1	IEC 60947-2
Number of poles				1P, 1P+N, 2P, 3P, 3P+N, 4P	1P, 1P+N, 2P, 3P, 3P+N, 4P
Rated current In			A	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63	70, 80, 100
Rated operational voltage Ue	1P		V AC	230/400	230/400
	2P - 4P		V AC	400	400
Operational voltage			V AC	Min. : 24; Max. : 250/440	Min. : 24; Max. : 250/440
Rated frequency fn			Hz	50/60	50/60
Breaking capacity	Acc. to IEC/EN 60898-1	Icn	kA	6	-
		Ics	kA	6	-
	Acc. to IEC/EN 60947-2	Icu	kA	-	6
		Ics	kA	-	6
Tripping characteristics	Characteristic B		In	3-5	3-5
	Characteristic C		In	5-10	5-10
	Characteristic D		In	10-20	10-20
Thermal operating limit			In	1.13 - 1.45	1.05-1.3
Rated insulation voltage Ui	Phase to ground		V	250	250
	Phase to phase		V	500	500
Degree of protection				IP20, with connected conductors	IP20, with connected conductors
Endurance	Electrical		ops.	10,000	6,000
	Mechnical		ops.	20,000	20,000
Fire resistance according to IEC 60695				960 °C	960 °C
Mounting position				Any	Any
Cross-section of conductor (Min/Max)	Solid and stranded		mm^2	1-35	1-50
	Finely stranded with end sleeve		mm^2	1-16	1-35
Type of busbar				Pin type	Pin type
Tighting torque			N·m	2.5	2.5
Ambient temperature			°C	-5 ~ +40, max. 95 % humidity	-5 ~ +40, max. 95 % humidity
Altitude (max.)			meter	2000	2000

Selection and ordering data

IEC 60898-1 Icn=Ics=6kA

Number of poles	Rated current In (A)	Characteristic B Type code	Characteristic C Type code	Characteristic D Type code
1P	1	VB511-B1	VB511-C1	VB511-D1
	2	VB511-B2	VB511-C2	VB511-D2
	3	VB511-B3	VB511-C3	VB511-D3
	4	VB511-B4	VB511-C4	VB511-D4
	5	VB511-B5	VB511-C5	VB511-D5
	6	VB511-B6	VB511-C6	VB511-D6
	10	VB511-B10	VB511-C10	VB511-D10
	16	VB511-B16	VB511-C16	VB511-D16
	20	VB511-B20	VB511-C20	VB511-D20
	25	VB511-B25	VB511-C25	VB511-D25
	32	VB511-B32	VB511-C32	VB511-D32
	40	VB511-B40	VB511-C40	VB511-D40
	50	VB511-B50	VB511-C50	VB511-D50
	63	VB511-B63	VB511-C63	VB511-D63
1P+N	1	VB515-B1	VB515-C1	VB515-D1
	2	VB515-B2	VB515-C2	VB515-D2
	3	VB515-B3	VB515-C3	VB515-D3
	4	VB515-B4	VB515-C4	VB515-D4
	5	VB515-B5	VB515-C5	VB515-D5
	6	VB515-B6	VB515-C6	VB515-D6
	10	VB515-B10	VB515-C10	VB515-D10
	16	VB515-B16	VB515-C16	VB515-D16
	20	VB515-B20	VB515-C20	VB515-D20
	25	VB515-B25	VB515-C25	VB515-D25
	32	VB515-B32	VB515-C32	VB515-D32
	40	VB515-B40	VB515-C40	VB515-D40
	50	VB515-B50	VB515-C50	VB515-D50
	63	VB515-B63	VB515-C63	VB515-D63
2P	1	VB512-B1	VB512-C1	VB512-D1
	2	VB512-B2	VB512-C2	VB512-D2
	3	VB512-B3	VB512-C3	VB512-D3
	4	VB512-B4	VB512-C4	VB512-D4
	5	VB512-B5	VB512-C5	VB512-D5
	6	VB512-B6	VB512-C6	VB512-D6
	10	VB512-B10	VB512-C10	VB512-D10
	16	VB512-B16	VB512-C16	VB512-D16
	20	VB512-B20	VB512-C20	VB512-D20
	25	VB512-B25	VB512-C25	VB512-D25
	32	VB512-B32	VB512-C32	VB512-D32
	40	VB512-B40	VB512-C40	VB512-D40
	50	VB512-B50	VB512-C50	VB512-D50
	63	VB512-B63	VB512-C63	VB512-D63

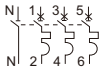
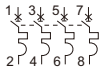




2

Selection and ordering data

IEC 60898-1 Icn=Ics=6kA

	Number of poles	Rated current In (A)	Characteristic B Type code	Characteristic C Type code	Characteristic D Type code
	3P	1	VB513-B1	VB513-C1	VB513-D1
		2	VB513-B2	VB513-C2	VB513-D2
		3	VB513-B3	VB513-C3	VB513-D3
		4	VB513-B4	VB513-C4	VB513-D4
		5	VB513-B5	VB513-C5	VB513-D5
		6	VB513-B6	VB513-C6	VB513-D6
		10	VB513-B10	VB513-C10	VB513-D10
		16	VB513-B16	VB513-C16	VB513-D16
		20	VB513-B20	VB513-C20	VB513-D20
		25	VB513-B25	VB513-C25	VB513-D25
		32	VB513-B32	VB513-C32	VB513-D32
		40	VB513-B40	VB513-C40	VB513-D40
		50	VB513-B50	VB513-C50	VB513-D50
		63	VB513-B63	VB513-C63	VB513-D63
	3P+N	1	VB516-B1	VB516-C1	VB516-D1
		2	VB516-B2	VB516-C2	VB516-D2
		3	VB516-B3	VB516-C3	VB516-D3
		4	VB516-B4	VB516-C4	VB516-D4
		5	VB516-B5	VB516-C5	VB516-D5
		6	VB516-B6	VB516-C6	VB516-D6
		10	VB516-B10	VB516-C10	VB516-D10
		16	VB516-B16	VB516-C16	VB516-D16
		20	VB516-B20	VB516-C20	VB516-D20
		25	VB516-B25	VB516-C25	VB516-D25
		32	VB516-B32	VB516-C32	VB516-D32
		40	VB516-B40	VB516-C40	VB516-D40
		50	VB516-B50	VB516-C50	VB516-D50
		63	VB516-B63	VB516-C63	VB516-D63
	4P	1	VB514-B1	VB514-C1	VB514-D1
		2	VB514-B2	VB514-C2	VB514-D2
		3	VB514-B3	VB514-C3	VB514-D3
		4	VB514-B4	VB514-C4	VB514-D4
		5	VB514-B5	VB514-C5	VB514-D5
		6	VB514-B6	VB514-C6	VB514-D6
		10	VB514-B10	VB514-C10	VB514-D10
		16	VB514-B16	VB514-C16	VB514-D16
		20	VB514-B20	VB514-C20	VB514-D20
		25	VB514-B25	VB514-C25	VB514-D25
		32	VB514-B32	VB514-C32	VB514-D32
		40	VB514-B40	VB514-C40	VB514-D40
		50	VB514-B50	VB514-C50	VB514-D50
		63	VB514-B63	VB514-C63	VB514-D63

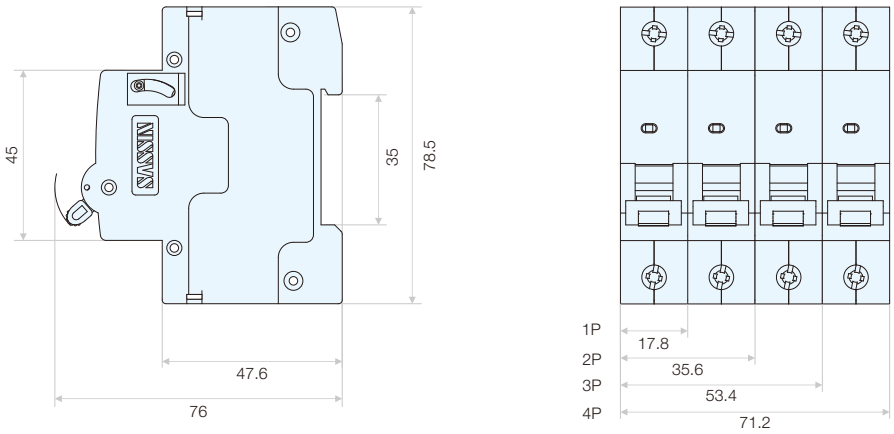
Selection and ordering data

IEC 60947-2 Icu=Ics=6kA

Number of poles	Rated current In (A)	Characteristic B Type code	Characteristic C Type code	Characteristic D Type code
1P	70	VB511H-B70	VB511H-C70	VB511H-D70
	80	VB511H-B80	VB511H-C80	VB511H-D80
	100	VB511H-B100	VB511H-C100	VB511H-D100
1P+N	70	VB515H-B70	VB515H-C70	VB515H-D70
	80	VB515H-B80	VB515H-C80	VB515H-D80
	100	VB515H-B100	VB515H-C100	VB515H-D100
2P	70	VB512H-B70	VB512H-C70	VB512H-D70
	80	VB512H-B80	VB512H-C80	VB512H-D80
	100	VB512H-B100	VB512H-C100	VB512H-D100
3P	70	VB513H-B70	VB513H-C70	VB513H-D70
	80	VB513H-B80	VB513H-C80	VB513H-D80
	100	VB513H-B100	VB513H-C100	VB513H-D100
3P+N	70	VB516H-B70	VB516H-C70	VB516H-D70
	80	VB516H-B80	VB516H-C80	VB516H-D80
	100	VB516H-B100	VB516H-C100	VB516H-D100
4P	70	VB514H-B70	VB514H-C70	VB514H-D70
	80	VB514H-B80	VB514H-C80	VB514H-D80
	100	VB514H-B100	VB514H-C100	VB514H-D100

Outline and installation dimensions

unit in mm



Miniature Circuit Breakers
Series 3SB56-63

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.



Technical specifications

- Standards: IEC 60898-1
- Rated current In (A) : 1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63
- Rated voltage Un (V AC): 1P: 230/400; 2-4P: 400
- Operational voltage (V AC): Min. 24; Max. 250/440
- Rated frequency (Hz): 50/60
- Rated insulation voltage (V AC):
  - Phase to ground: 250
  - Phase to phase: 500
- Number of poles (P): 1, 1P+N, 2, 3, 3P+N, 4
- Tripping characteristic:
  - Characteristic B (In): 3-5
  - Characteristic C (In): 5-10
  - Characteristic D (In): 10-20
- Thermal operating limit (In): 1.13 - 1.45
- Degree of protection: IP20, with connected conductors
- Electrical endurance (Cycles): 10,000
- Mechanical endurance (Cycles): 20,000
- Breaking capacity: 10 kA
- Fire resistance according to IEC 60695: 960 °C
- Busbar connection: Pin type
- Mounting position: Any
- Conductor cross-sections
  - Solid and stranded (mm^2): 1-35
  - Finely stranded with end sleeve (mm^2): 1-16
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Altitude (meters): Max 2,000

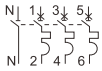
Features

- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Clear indication of the contact position
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- Suitable for household or similar applications in accordance with: IEC 60898-1, tripping characteristics B, C and D.

Selection and ordering data

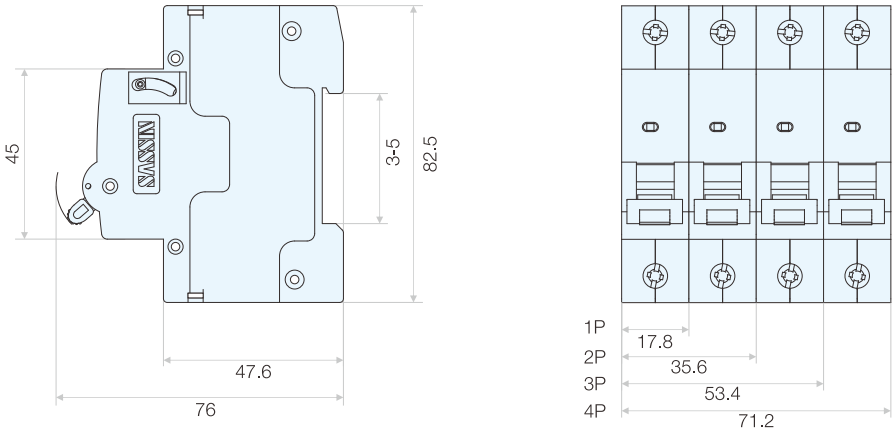
Number of poles	Rated current In (A)	Characteristic B Type code	Characteristic C Type code	Characteristic D Type code
1P	1	B561-B1	B561-C1	B561-D1
	2	B561-B2	B561-C2	B561-D2
	3	B561-B3	B561-C3	B561-D3
	4	B561-B4	B561-C4	B561-D4
	5	B561-B5	B561-C5	B561-D5
	6	B561-B6	B561-C6	B561-D6
	10	B561-B10	B561-C10	B561-D10
	16	B561-B16	B561-C16	B561-D16
	20	B561-B20	B561-C20	B561-D20
	25	B561-B25	B561-C25	B561-D25
	32	B561-B32	B561-C32	B561-D32
	40	B561-B40	B561-C40	B561-D40
	50	B561-B50	B561-C50	B561-D50
	63	B561-B63	B561-C63	B561-D63
1P+N	1	B565-B1	B565-C1	B565-D1
	2	B565-B2	B565-C2	B565-D2
	3	B565-B3	B565-C3	B565-D3
	4	B565-B4	B565-C4	B565-D4
	5	B565-B5	B565-C5	B565-D5
	6	B565-B6	B565-C6	B565-D6
	10	B565-B10	B565-C10	B565-D10
	16	B565-B16	B565-C16	B565-D16
	20	B565-B20	B565-C20	B565-D20
	25	B565-B25	B565-C25	B565-D25
	32	B565-B32	B565-C32	B565-D32
	40	B565-B40	B565-C40	B565-D40
	50	B565-B50	B565-C50	B565-D50
	63	B565-B63	B565-C63	B565-D63
2P	1	B562-B1	B562-C1	B562-D1
	2	B562-B2	B562-C2	B562-D2
	3	B562-B3	B562-C3	B562-D3
	4	B562-B4	B562-C4	B562-D4
	5	B562-B5	B562-C5	B562-D5
	6	B562-B6	B562-C6	B562-D6
	10	B562-B10	B562-C10	B562-D10
	16	B562-B16	B562-C16	B562-D16
	20	B562-B20	B562-C20	B562-D20
	25	B562-B25	B562-C25	B562-D25
	32	B562-B32	B562-C32	B562-D32
	40	B562-B40	B562-C40	B562-D40
	50	B562-B50	B562-C50	B562-D50
	63	B562-B63	B562-C63	B562-D63

Selection and ordering data

Number of poles	Rated current In (A)	Characteristic B	Characteristic C	Characteristic D
		Type code	Type code	Type code
3P	1	B563-B1	B563-C1	B563-D1
	2	B563-B2	B563-C2	B563-D2
	3	B563-B3	B563-C3	B563-D3
	4	B563-B4	B563-C4	B563-D4
	5	B563-B5	B563-C5	B563-D5
	6	B563-B6	B563-C6	B563-D6
	10	B563-B10	B563-C10	B563-D10
	16	B563-B16	B563-C16	B563-D16
	20	B563-B20	B563-C20	B563-D20
	25	B563-B25	B563-C25	B563-D25
	32	B563-B32	B563-C32	B563-D32
	40	B563-B40	B563-C40	B563-D40
	50	B563-B50	B563-C50	B563-D50
	63	B563-B63	B563-C63	B563-D63
3P+N	1	B566-B1	B566-C1	B566-D1
	2	B566-B2	B566-C2	B566-D2
	3	B566-B3	B566-C3	B566-D3
	4	B566-B4	B566-C4	B566-D4
	5	B566-B5	B566-C5	B566-D5
	6	B566-B6	B566-C6	B566-D6
	10	B566-B10	B566-C10	B566-D10
	16	B566-B16	B566-C16	B566-D16
	20	B566-B20	B566-C20	B566-D20
	25	B566-B25	B566-C25	B566-D25
	32	B566-B32	B566-C32	B566-D32
	40	B566-B40	B566-C40	B566-D40
	50	B566-B50	B566-C50	B566-D50
	63	B566-B63	B566-C63	B566-D63
4P	1	B564-B1	B564-C1	B564-D1
	2	B564-B2	B564-C2	B564-D2
	3	B564-B3	B564-C3	B564-D3
	4	B564-B4	B564-C4	B564-D4
	5	B564-B5	B564-C5	B564-D5
	6	B564-B6	B564-C6	B564-D6
	10	B564-B10	B564-C10	B564-D10
	16	B564-B16	B564-C16	B564-D16
	20	B564-B20	B564-C20	B564-D20
	25	B564-B25	B564-C25	B564-D25
	32	B564-B32	B564-C32	B564-D32
	40	B564-B40	B564-C40	B564-D40
	50	B564-B50	B564-C50	B564-D50
	63	B564-B63	B564-C63	B564-D63

Outline and installation dimensions

unit in mm



2

Functions

- Overload protection
- Short circuit protection
- Isolation
- Controlling
- Used in residential building, non-residential building, industry, energy and infrastructure.

Technical specifications

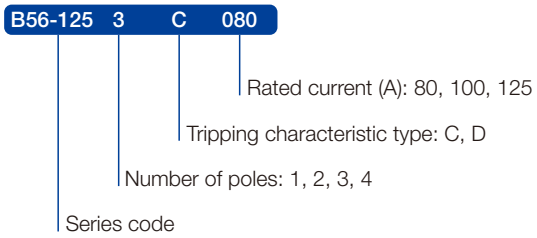
- Standard: IEC 60947-2
- Rated current In (A): 80, 100, 125
- Rated voltage Un (V AC): 230/400
- Operational voltage (V AC): Min: 24; Max: 250/440
- Number of poles (P): 1, 2, 3, 4
- Rated impulse withstand voltage Uimp (kV): 6
- Trip characteristic: C, D
  - Characteristic C (In): 8
  - Characteristic D (In): 12
- Thermal operating limit (In): 1.05-1.3
- Degree of protection: IP20, with connected conductors
- Electrical life (times): 10000
- Mechanical life (times): 20,000
- Breaking capacity:

Model	Rated voltage		Acc. to IEC 60947-2	
	(V)		Icu (kA)	Ics (kA)
3SB56-125	1P	230/400	10	7.5
	2-4P	400	10	7.5

- Mounting position: Any
- Conductor cross-sections
  - Solid and stranded (mm^2): 1-50
  - Finely stranded with end sleeve (mm^2): 1-35
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000



Instruction of type code



Features

- Rated current up to 125 A
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- This MCB for industry in accordance with IEC 60947-2, instantaneous tripping characteristic release B 4 In, release C 8 In, release D 12 In.

Selection and ordering data

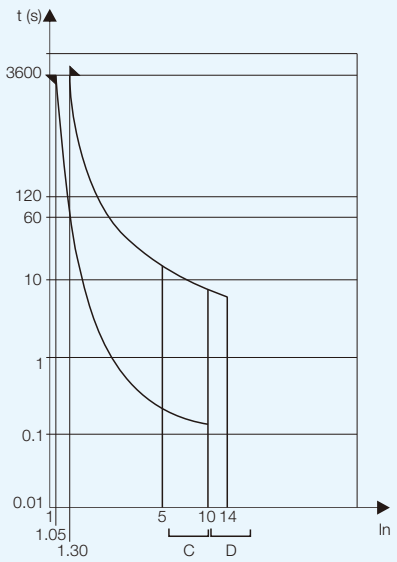
IEC 60947-2 10 kA

Number of poles	Rated current In (A)	Characteristic C Type code	Characteristic D Type code
1	80	B56-125 1C080	B56-125 1D080
	100	B56-125 1C100	B56-125 1D100
	125	B56-125 1C125	B56-125 1D125
2	80	B56-125 2C080	B56-125 2D080
	100	B56-125 2C100	B56-125 2D100
	125	B56-125 2C125	B56-125 2D125
3	80	B56-125 3C080	B56-125 3D080
	100	B56-125 3C100	B56-125 3D100
	125	B56-125 3C125	B56-125 3D125
4	80	B56-125 4C080	B56-125 4D080
	100	B56-125 4C100	B56-125 4D100
	125	B56-125 4C125	B56-125 4D125

2

Tripping characteristic curves

IEC 60947-2 Standard



Magnetic release

- An electromagnet with plunger ensures instantaneous tripping in case of short circuit.
- The standard leaves the calibration of magnetic release to manufacturer's decision.
- Sassin MCB series 3SB71-125 offers instantaneous tripping ranges
  - release C: 8 In
  - release D: 12 In

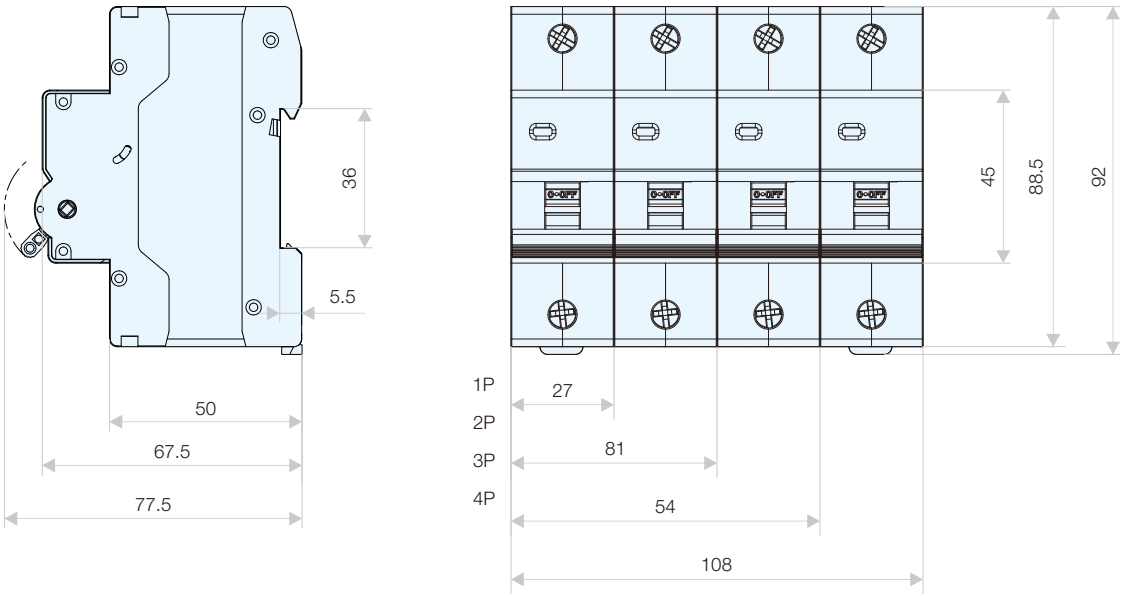
Thermal release

- The release is initiated by a bimetal strip in case of overload.
- The standard defines the range of release for two specific overload values.
- Reference ambient temperature is 30 °C.

Test current	Initial condition	Limits of tripping or non-tripping time	Result to be obtained
1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No tripping
1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
2.55 In	Cold	1s < t < 60 s (In ≤ 32 A) 1s < t < 120 s (In > 32 A)	Tripping

Outline and installation dimensions

unit in mm



Functions

- Overload protection
- Short circuit protection
- Isolation
- Used in residential building, non-residential building, energy sources, industry and infrastructure.



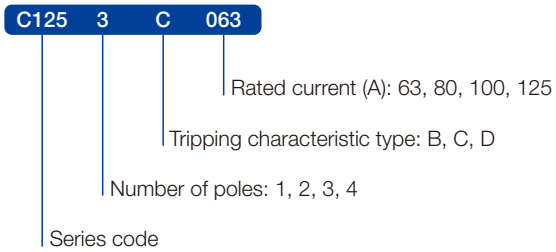
Technical specifications

- Standard: IEC 60947-2
- Rated current In (A): 63, 80, 100, 125
- Rated voltage Un (V AC): 230/400
- Operational voltage (V AC):
  - Min.: 24
  - Max.: 250/440
- Rated insulation voltage (V AC): 500
- Number of poles: 1, 2, 3, 4
- Tripping characteristics: B, C, D
  - release B (In): 4
  - release C (In): 8
  - release D (In): 12
- Thermal operating limit (In): 1.05 - 1.30
- Electrical life (times): 6,000
- Mechanical life (times): 20,000
- Breaking capacity:

Model	Rated voltage		Acc. to IEC 60947-2	
			Icn	Ics
	(V)		(kA)	(kA)
3SB1-125	1P	230/400	6	6
	2-4P	400	6	6

- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections
  - Solid and stranded (mm^2): 1-50
  - Finely stranded with end sleeve (mm^2): 1-35
  - Terminal tightening torque (N·m): 3.5
- Ambient temperature (°C): -5 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000
- Connection capacity (mm^2): 1-35

Instruction of type code

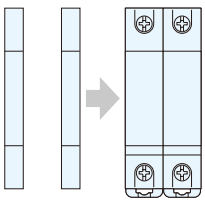


Features

- Rated current up to 125 A
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Adequate printing of all data on the front provides long-term identification
- This MCB for industry in accordance with: IEC 60947-2 instantaneous tripping release ranges B: 4 In, release C: 8 In , release D: 12 In
- This MCB may be extended with:
  - Full sets of additional components
  - Full sets of accessories

Add-on devices

Auxiliaries



2

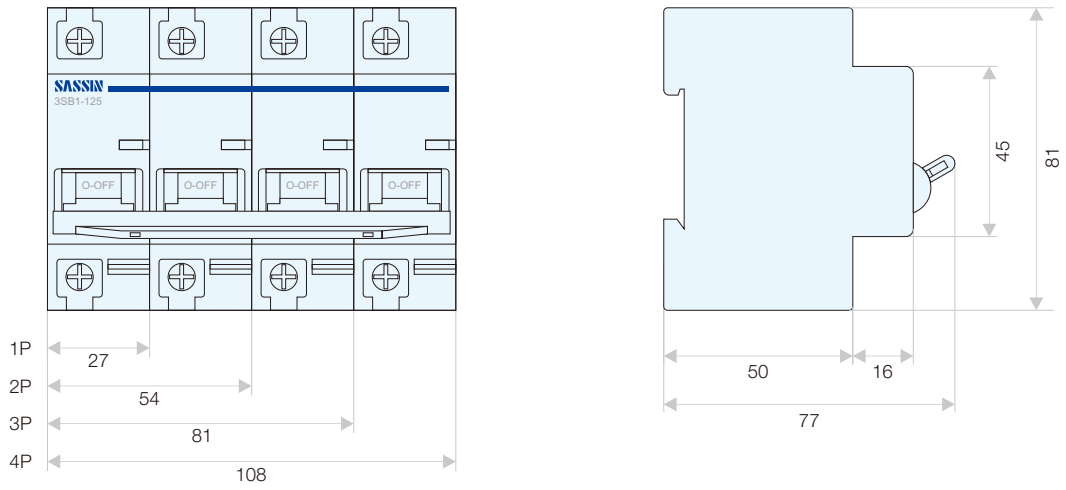
Selection and ordering data

IEC 60947-2 6 kA

	Number of poles	Rated current In (A)	Curve B		Curve C		Curve D	
			Type code	Order code	Type code	Order code	Type code	Order code
	1	63	C125 1B063	**21140**	C125 1C063	**21152**	C125 1D063	**21164**
		80	C125 1B080	**21141**	C125 1C080	**21153**	C125 1D080	**21165**
		100	C125 1B100	**21142**	C125 1C100	**21154**	C125 1D100	**21166**
		125	C125 1B125	**23577**	C125 1C125	**23581**	C125 1D125	**23585**
	2	63	C125 2B063	**21143**	C125 2C063	**21155**	C125 2D063	**21167**
		80	C125 2B080	**21144**	C125 2C080	**21156**	C125 2D080	**21168**
		100	C125 2B100	**21145**	C125 2C100	**21157**	C125 2D100	**21169**
		125	C125 2B125	**23578**	C125 2C125	**23582**	C125 2D125	**23586**
	3	63	C125 3B063	**21146**	C125 3C063	**21158**	C125 3D063	**21170**
		80	C125 3B080	**21147**	C125 3C080	**21159**	C125 3D080	**21171**
		100	C125 3B100	**21148**	C125 3C100	**21160**	C125 3D100	**21172**
		125	C125 3B125	**23579**	C125 3C125	**23583**	C125 3D125	**23587**
	4	63	C125 4B063	**21149**	C125 4C063	**21161**	C125 4D063	**21173**
		80	C125 4B080	**21150**	C125 4C080	**21162**	C125 4D080	**21174**
		100	C125 4B100	**21151**	C125 4C100	**21163**	C125 4D100	**21175**
		125	C125 4B125	**23580**	C125 4C125	**23584**	C125 4D125	**23588**

Outline and installation dimensions

unit in mm



Functions

- Overload protection
- Short circuit protection
- Isolation both for phase and neutral line
- Controlling
- Used for the protection of plants with switched neutral
- Used in residential building

Technical specifications

- Standard: IEC 60898-1
- Rated current In (A): 3, 6, 10, 16, 20, 25, 32, 40
- Rated voltage Un (V AC): 230
- Rated frequency (Hz): 50/60
- Operational voltage Min / Max (V AC): 24 / 250
- Number of pole: 1P+N (1 modular width)
- Rated impulse withstand voltage Uimp (kV): 6
- Tripping characteristic: B, C
- Characteristic B (In): 3-5
- Characteristic C (In): 5-10
- Thermal operating limit : 1.13-1.45 In
- Rated switching capacity Icn (kA): 6
- Degree of protection: IP20, with connected conductors
- Electrical life(times): 10,000
- Mechanical life (times): 20,000
- Breaking capacity:

Model	Rated voltage		Acc. to IEC 60898-1	
			Icu	Ics
	(V)		(kA)	(kA)
3SB66	1P+N	230	6	6

- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-16
- Finely stranded with end sleeve (mm^2): 0.75-16
- Terminal tightening torque (N·m): 2.0
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max. 2,000
- Connection capacity (mm^2): 1-16

References

- Additional components: page 85 ~ 86

Selection and ordering data

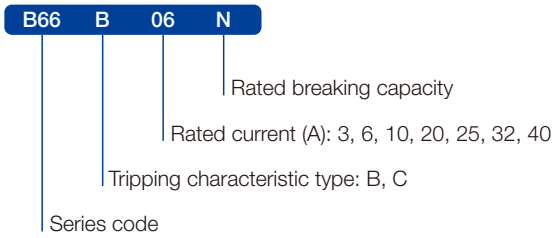
IEC 60898-1 6 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C		Pack.
			Type code	Order code	Type code	Order code	
	1P+N	3	B66 B03N	**0**	B66 C03N	**0**	12
		6	B66 B06N	**21284**	B66 C06N	**21291**	12
		10	B66 B10N	**21285**	B66 C10N	**21292**	12
		16	B66 B16N	**21286**	B66 C16N	**21293**	12
		20	B66 B20N	**21287**	B66 C20N	**21294**	12
		25	B66 B25N	**21288**	B66 C25N	**21295**	12
		32	B66 B32N	**21289**	B66 C32N	**21296**	12
		40	B66 B40N	**21290**	B66 C40N	**21297**	12





Instruction of type code



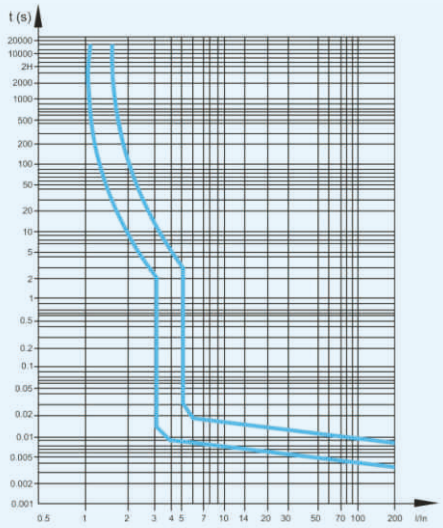
Features

- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON/OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Energy limiting class: 3
- The emission of ionized gases is limited to the severest restrictions: 45 mm grid distance
- This MCB for household in accordance with: IEC 60898-1, B, C tripping characteristics
- Full sets of accessories

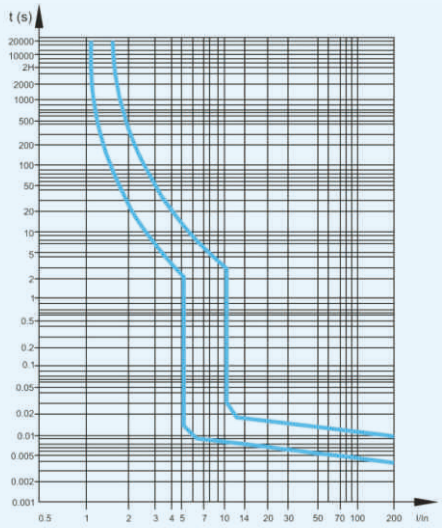
2

Tripping characteristic curves

Characteristic B



Characteristic C



Magnetic release

An electromagnet with plunger ensures instantaneous tripping in case of short circuit. The IEC 60898-1 distinguishes three different types, following the current for instantaneous release: type B, C

	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
B	3 In	Cold	t ≤ 0.1 s	No Tripping
C	5 In			
B	5 In	Cold	t < 0.1 s	Tripping
C	10 In			

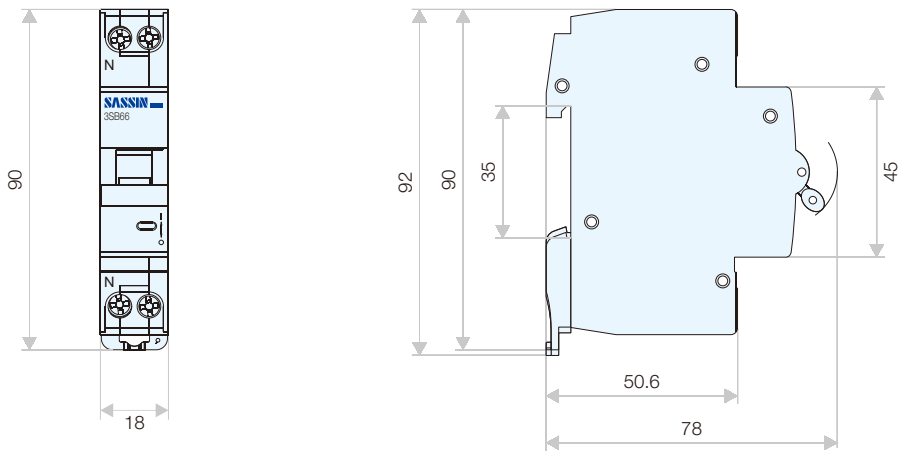
Thermal release

- The release is initiated by a bimetal strip in case of overload
- The standard defines the range of release for specific overload values
- Reference ambient temperature is 30 °C

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No Tripping
b	1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
c	2.55 In	Cold	1 s < t < 60 s (In ≤ 32 A) 1 s < t < 120 s (In > 32 A)	Tripping

Outline and installation dimensions

unit in mm



Functions

- Overload protection
- Short circuit protection
- Isolation both for phase and neutral line
- Controlling
- Used for the protection of plants with switched neutral
- Used in residential buildings



Technical specifications

- Standard: IEC 60898-1
- Rated current In (A): 3, 6, 10, 16, 20, 25, 32, 40
- Rated voltage Un (V AC): 230
- Rated frequency (Hz): 50/60
- Operational voltage Min/Max (V AC): 24/250
- Number of pole: 1P+N (1 modular width)
- Rated impulse withstand voltage Uimp (kV): 6
- Tripping characteristic: B, C
- Characteristic B (In): 3-5
- Characteristic C (In): 5-10
- Thermal operating limit: 1.13-1.45 In
- Rated switching capacity Icn (kA): 6
- Degree of protection: IP40, housing; IP20, terminals
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Mounting position: No significant vibration and shock
- Connection capacity (mm^2): 1-10
- Terminal tightening torque (N·m): 2.0
- Ambient temperature (°C): +20, max. 95 % humidity;
  +40, max. 50 % humidity
- Storage temperature (°C): -30 ~ +70
- Altitude (meters): Max 2,000

Features

- 1P+N with switched neutral line in 1 module of 18 mm width, up to 40 A, rated breaking capacity 6 kA
- Current-limiting contact system and magnetic blow-out arc extinguishing device, avoiding products and equipment to bear large short-circuit current, improving the arc extinguishing ability of the product, and ensuring the breaking capacity
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON/OFF)
- This MCB for household in accordance with: IEC 60898-1, B, C tripping characteristics
- Full sets of accessories

Selection and ordering data

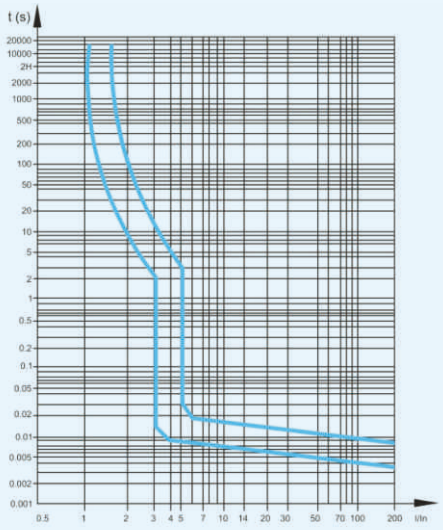
IEC 60898-1 6 kA

	Number of poles	Rated current In (A)	Characteristic B		Characteristic C	
			Type code	Order code	Type code	Order code
	1P+N	3	VBN515-B3	-	VBN515-C3	-
		6	VBN515-B6	**38623**	VBN515-C6	**38630**
		10	VBN515-B10	**38624**	VBN515-C10	**38631**
		16	VBN515-B16	**38625**	VBN515-C16	**38632**
		20	VBN515-B20	**38626**	VBN515-C20	**38633**
		25	VBN515-B25	**38627**	VBN515-C25	**38634**
		32	VBN515-B32	**38628**	VBN515-C32	**38635**
		40	VBN515-B40	**38629**	VBN515-C40	**38636**

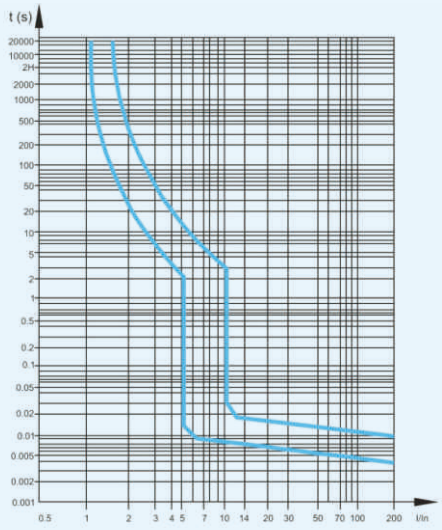
2

Tripping characteristic curves

Characteristic B



Characteristic C



Magnetic release

An electromagnet with plunger ensures instantaneous tripping in case of short circuit. The IEC 60898-1 distinguishes three different types, following the current for instantaneous release: type B, C

	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
B	3 In	Cold	t ≤ 0.1 s	No Tripping
C	5 In			
B	5 In	Cold	t < 0.1 s	Tripping
C	10 In			

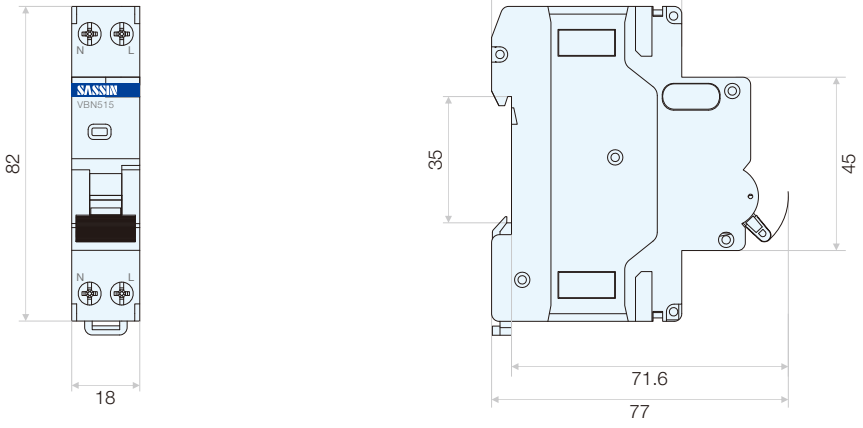
Thermal release

- The release is initiated by a bimetal strip in case of overload
- The standard defines the range of release for specific overload values
- Reference ambient temperature is 30 °C

Test	Test current	Inital condition	Limits of tripping or non-tripping time	Result to be obtained
a	1.13 In	Cold	t ≤ 1 h (In ≤ 63 A)	No Tripping
b	1.45 In	Immediately follwing test a	t < 1 h (In ≤ 63 A)	Tripping
c	2.55 In	Cold	1 s < t < 60 s (In ≤ 32 A) 1 s < t < 120 s (In > 32 A)	Tripping

Outline and installation dimensions

unit in mm



Functions

- Switching and isolation function
- Controlling
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building , non-residential building, energy sources, industry and infrastructure.
- Combination with auxiliary elements: auxiliary contact, signal contact, shunt trip, undervoltage release



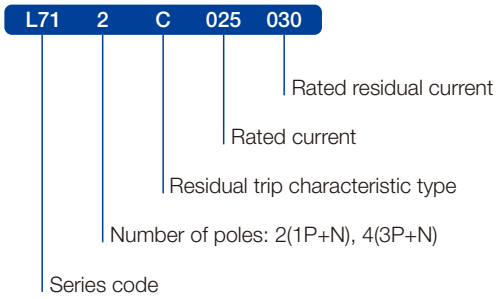
Technical specifications

- Standard: IEC 61008-1
- Type (wave form of the earth leakage sensed): AC, A
- Trip time type: instantaneous, selectivity S
- Number of poles: 1P+N, 3P+N
- Rated current In (A): 16, 25, 40, 63, 80, 100
- Rated voltage Ue (V AC): 230/400
- Rated insulation voltage Ui (V AC): 500
- Rated impulse withstand voltage Uimp (kV): 4
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 10 (2P 16 A), 30, 100, 300
  Rated conditional short-circuit current:
- Inc = IΔc = 6000 A SCPD fuse 100A Gg
- Making and breaking capacity Im (A): 1000
- Rated residual breaking capacity IΔm (A): 1000
- Degree of protection: IP20, with connected conductors
- Terminal tightening torque (N·m): 3
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity

References

- Additional components: page 85 ~ 86

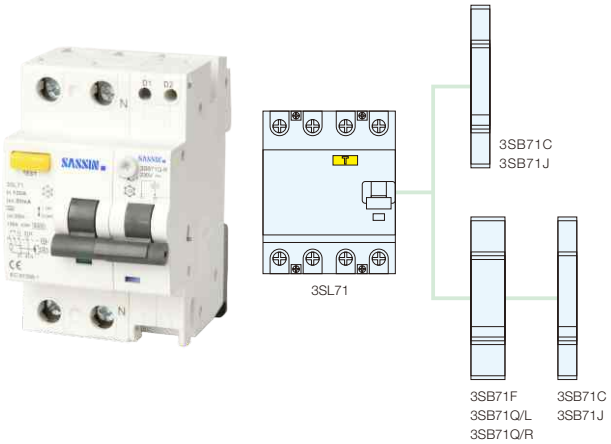
Instruction of type code



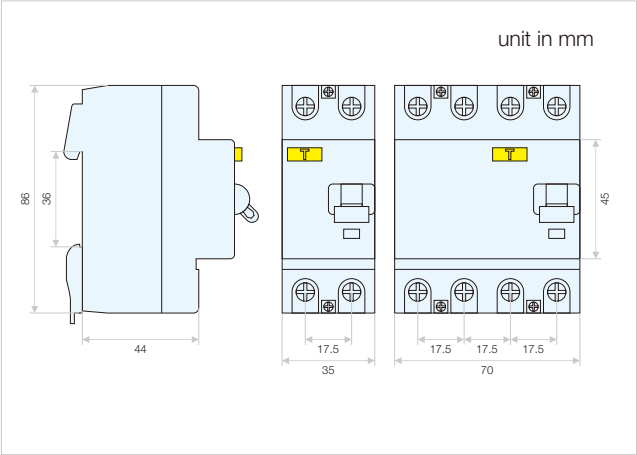
Features

- Electromagnetic type, voltage independent.
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification

Combination of auxiliary elements with 3SL71



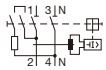
Outline and installation dimensions



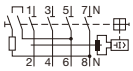
Selection and ordering data

Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type AC		Type A		Type S+AC		Type S+A	
			Type code	Order code	Type code	Order code	Type code	Order code	Type code	Order code
1P+N	10	16	L71 2C016/010	**36067**	L71 2A016/010	**36104**	-	-	-	-
	30	16	L71 2C016/030	**36068**	L71 2A016/030	**36105**	-	-	-	-
		25	L71 2C025/030	**36069**	L71 2A025/030	**36106**	-	-	-	-
		40	L71 2C040/030	**36070**	L71 2A040/030	**36107**	-	-	-	-
		63	L71 2C063/030	**36071**	L71 2A063/030	**36108**	-	-	-	-
		80	L71 2C080/030	**36072**	L71 2A080/030	**36109**	-	-	-	-
		100	L71 2C100/030	**36073**	L71 2A100/030	**36110**	-	-	-	-
	100	16	L71 2C016/100	**36074**	L71 2A016/100	**36111**	L71 2SC016/100	**36141**	L71 2SA016/100	**36165**
		25	L71 2C025/100	**36075**	L71 2A025/100	**36112**	L71 2SC025/100	**36142**	L71 2SA025/100	**36166**
		40	L71 2C040/100	**36076**	L71 2A040/100	**36113**	L71 2SC040/100	**36143**	L71 2SA040/100	**36167**
		63	L71 2C063/100	**36077**	L71 2A063/100	**36114**	L71 2SC063/100	**36144**	L71 2SA063/100	**36168**
		80	L71 2C080/100	**36078**	L71 2A080/100	**36115**	L71 2SC080/100	**36145**	L71 2SA080/100	**36169**
		100	L71 2C100/100	**36079**	L71 2A100/100	**36116**	L71 2SC100/100	**36146**	L71 2SA100/100	**36170**
	300	16	L71 2C016/300	**36080**	L71 2A016/300	**36117**	L71 2SC016/300	**36147**	L71 2SA016/300	**36171**
		25	L71 2C025/300	**36081**	L71 2A025/300	**36118**	L71 2SC025/300	**36148**	L71 2SA025/300	**36172**
		40	L71 2C040/300	**36082**	L71 2A040/300	**36119**	L71 2SC040/300	**36149**	L71 2SA040/300	**36173**
		63	L71 2C063/300	**36083**	L71 2A063/300	**36120**	L71 2SC063/300	**36150**	L71 2SA063/300	**36174**
		80	L71 2C080/300	**36084**	L71 2A080/300	**36121**	L71 2SC080/300	**36151**	L71 2SA080/300	**36175**
		100	L71 2C100/300	**36085**	L71 2A100/300	**36122**	L71 2SC100/300	**36152**	L71 2SA100/300	**36176**
3P+N	30	16	L71 4C016/030	**36086**	L71 4A016/030	**36123**	-	-	-	-
		25	L71 4C025/030	**36087**	L71 4A025/030	**36124**	-	-	-	-
		40	L71 4C040/030	**36088**	L71 4A040/030	**36125**	-	-	-	-
		63	L71 4C063/030	**36089**	L71 4A063/030	**36126**	-	-	-	-
		80	L71 4C080/030	**36090**	L71 4A080/030	**36127**	-	-	-	-
		100	L71 4C100/030	**36091**	L71 4A100/030	**36128**	-	-	-	-
	100	16	L71 4C016/100	**36092**	L71 4A016/100	**36129**	L71 4SC016/100	**36153**	L71 4SA016/100	**36177**
		25	L71 4C025/100	**36093**	L71 4A025/100	**36130**	L71 4SC025/100	**36154**	L71 4SA025/100	**36178**
		40	L71 4C040/100	**36094**	L71 4A040/100	**36131**	L71 4SC040/100	**36155**	L71 4SA040/100	**36179**
		63	L71 4C063/100	**36095**	L71 4A063/100	**36132**	L71 4SC063/100	**36156**	L71 4SA063/100	**36180**
		80	L71 4C080/100	**36096**	L71 4A080/100	**36133**	L71 4SC080/100	**36157**	L71 4SA080/100	**36181**
		100	L71 4C100/100	**36097**	L71 4A100/100	**36134**	L71 4SC100/100	**36158**	L71 4SA100/100	**36182**
	300	16	L71 4C016/300	**36098**	L71 4A016/300	**36135**	L71 4SC016/300	**36159**	L71 4SA016/300	**36183**
		25	L71 4C025/300	**36099**	L71 4A025/300	**36136**	L71 4SC025/300	**36160**	L71 4SA025/300	**36184**
		40	L71 4C040/300	**36100**	L71 4A040/300	**36137**	L71 4SC040/300	**36161**	L71 4SA040/300	**36185**
		63	L71 4C063/300	**36101**	L71 4A063/300	**36138**	L71 4SC063/300	**36162**	L71 4SA063/300	**36186**
		80	L71 4C080/300	**36102**	L71 4A080/300	**36139**	L71 4SC080/300	**36163**	L71 4SA080/300	**36187**
		100	L71 4C100/300	**36103**	L71 4A100/300	**36140**	L71 4SC100/300	**36164**	L71 4SA100/300	**36188**









Functions

- Switching and isolation function
- Controlling
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building, non-residential building, energy sources, industry and infrastructure.
- Anti false wiring design to ensure safe wiring



Technical specifications

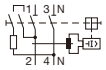
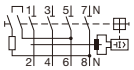
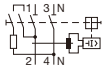
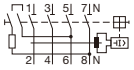
- Standard: IEC 61008-1 (AC type / A type), IEC 62423 (B type)
- Type (wave form of the earth leakage sensed): AC, A, B
- Tripping time type: instantaneous, selectivity S
- Number of poles (P): 1P+N, 3P+N
- Rated current In (A): 10, 16, 25, 40, 63, 80, 100
- Rated voltage Ue (V AC): 1P+N: 230; 3P+N: 380
- Rated insulation voltage Ui (V AC): 500
- Rated impulse withstand voltage Uimp (kV): 4
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 10, 30, 100, 300
- Rated conditional short-circuit current:
  Inc = IΔc = 6000 A SCPD fuse 100 A Gg
- Making and breaking capacity for 3SL6-63 Im (A): 630
- Making and breaking capacity for 3SL6-100 Im (A): 1000
- Rated residual breaking capacity IΔm (A): 1000
- Degree of protection: IP20, with connected conductors
- Conductor cross-section
  - Solid and stranded (mm^2): 1-35
  - Finely stranded with end sleeve (mm^2): 1-25
- Electrical endurance (Cycles): 10,000
- Mechanical endurance (Cycles): 20,000
- Fire resistance according to IEC 60695: 960 °C
- Mounting position: Any
- Busbar connection: Pin type
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity

Features

- Electromagnetic type, voltage independent.
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Adequate printing of all data on the front provides long-term identification

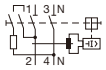
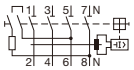
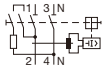
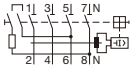
Selection and ordering data

AC type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous					
	1P+N 230 V AC	10	10	L6 2C10/010L	L6 2C10/010
			16	L6 2C16/010L	L6 2C16/010
		30	25	L6 2C25/030L	L6 2C25/030
			40	L6 2C40/030L	L6 2C40/030
			63	L6 2C63/030L	L6 2C63/030
			80	L6 2C80/030L	L6 2C80/030
			100	L6 2C100/030L	L6 2C100/030
		100	25	L6 2C25/100L	L6 2C25/100
			40	L6 2C40/100L	L6 2C40/100
			63	L6 2C63/100L	L6 2C63/100
			80	L6 2C80/100L	L6 2C80/100
			100	L6 2C100/100L	L6 2C100/100
		300	25	L6 2C25/300L	L6 2C25/300
			40	L6 2C40/300L	L6 2C40/300
			63	L6 2C63/300L	L6 2C63/300
			80	L6 2C80/300L	L6 2C80/300
			100	L6 2C100/300L	L6 2C100/300
	3P+N 380 V AC	10	10	L6 4C10/010L	L6 4C10/010
			16	L6 4C16/010L	L6 4C16/010
		30	25	L6 4C25/030L	L6 4C25/030
			40	L6 4C40/030L	L6 4C40/030
			63	L6 4C63/030L	L6 4C63/030
			80	L6 4C80/030L	L6 4C80/030
			100	L6 4C100/030L	L6 4C100/030
		100	25	L6 4C25/100L	L6 4C25/100
			40	L6 4C40/100L	L6 4C40/100
			63	L6 4C63/100L	L6 4C63/100
			80	L6 4C80/100L	L6 4C80/100
			100	L6 4C100/100L	L6 4C100/100
		300	25	L6 4C25/300L	L6 4C25/300
			40	L6 4C40/300L	L6 4C40/300
			63	L6 4C63/300L	L6 4C63/300
			80	L6 4C80/300L	L6 4C80/300
			100	L6 4C100/300L	L6 4C100/300
S type, selective S					
	1P+N 230 V AC	100	25	L6 2SC25/100L	L6 2SC25/100
			40	L6 2SC40/100L	L6 2SC40/100
			63	L6 2SC63/100L	L6 2SC63/100
			80	L6 2SC80/100L	L6 2SC80/100
			100	L6 2SC100/100L	L6 2SC100/100
		300	25	L6 2SC25/300L	L6 2SC25/300
			40	L6 2SC40/300L	L6 2SC40/300
			63	L6 2SC63/300L	L6 2SC63/300
			80	L6 2SC80/300L	L6 2SC80/300
			100	L6 2SC100/300L	L6 2SC100/300
	3P+N 380 V AC	100	25	L6 4SC25/100L	L6 4SC25/100
			40	L6 4SC40/100L	L6 4SC40/100
			63	L6 4SC63/100L	L6 4SC63/100
			80	L6 4SC80/100L	L6 4SC80/100
			100	L6 4SC100/100L	L6 4SC100/100
		300	25	L6 4SC25/300L	L6 4SC25/300
			40	L6 4SC40/300L	L6 4SC40/300
			63	L6 4SC63/300L	L6 4SC63/300
			80	L6 4SC80/300L	L6 4SC80/300
			100	L6 4SC100/300L	L6 4SC100/300

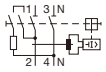
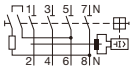
Selection and ordering data

A type

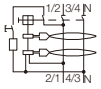
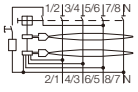
	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous					
	1P+N 230 V AC	10	10	L6 2A10/010L	L6 2A10/010
			16	L6 2A16/010L	L6 2A16/010
		30	25	L6 2A25/030L	L6 2A25/030
			40	L6 2A40/030L	L6 2A40/030
			63	L6 2A63/030L	L6 2A63/030
			80	L6 2A80/030L	L6 2A80/030
			100	L6 2A100/030L	L6 2A100/030
		100	25	L6 2A25/100L	L6 2A25/100
			40	L6 2A40/100L	L6 2A40/100
			63	L6 2A63/100L	L6 2A63/100
			80	L6 2A80/100L	L6 2A80/100
			100	L6 2A100/100L	L6 2A100/100
		300	25	L6 2A25/300L	L6 2A25/300
			40	L6 2A40/300L	L6 2A40/300
			63	L6 2A63/300L	L6 2A63/300
			80	L6 2A80/300L	L6 2A80/300
			100	L6 2A100/300L	L6 2A100/300
	3P+N 380 V AC	10	10	L6 4A10/010L	L6 4A10/010
			16	L6 4A16/010L	L6 4A16/010
		30	25	L6 4A25/030L	L6 4A25/030
			40	L6 4A40/030L	L6 4A40/030
			63	L6 4A63/030L	L6 4A63/030
			80	L6 4A80/030L	L6 4A80/030
			100	L6 4A100/030L	L6 4A100/030
		100	25	L6 4A25/100L	L6 4A25/100
			40	L6 4A40/100L	L6 4A40/100
			63	L6 4A63/100L	L6 4A63/100
			80	L6 4A80/100L	L6 4A80/100
			100	L6 4A100/100L	L6 4A100/100
		300	25	L6 4A25/300L	L6 4A25/300
			40	L6 4A40/300L	L6 4A40/300
			63	L6 4A63/300L	L6 4A63/300
			80	L6 4A80/300L	L6 4A80/300
			100	L6 4A100/300L	L6 4A100/300
AD type, anti-disturbance					
	1P+N 230 V AC	30	25	L6AD 2A25/30L	L6AD 2A25/30
			40	L6AD 2A40/30L	L6AD 2A40/30
			63	L6AD 2A63/30L	L6AD 2A63/30
			80	L6AD 2A80/30L	L6AD 2A80/30
			100	L6AD 2A100/30L	L6AD 2A100/30
					
	3P+N 380 V AC	30	25	L6AD 4A25/30L	L6AD 4A25/30
			40	L6AD 4A40/30L	L6AD 4A40/30
			63	L6AD 4A63/30L	L6AD 4A63/30
			80	L6AD 4A80/30L	L6AD 4A80/30
			100	L6AD 4A100/30L	L6AD 4A100/30
					

Selection and ordering data

A type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
S type, selective [S]					
	1P+N 230 V AC	100	25	L6 2SA25/100L	L6 2SA25/100
			40	L6 2SA40/100L	L6 2SA40/100
			63	L6 2SA63/100L	L6 2SA63/100
			80	L6 2SA80/100L	L6 2SA80/100
			100	L6 2SA100/100L	L6 2SA100/100
		300	25	L6 2SA25/300L	L6 2SA25/300
			40	L6 2SA40/300L	L6 2SA40/300
			63	L6 2SA63/300L	L6 2SA63/300
			80	L6 2SA80/300L	L6 2SA80/300
			100	L6 2SA100/300L	L6 2SA100/300
	3P+N 380 V AC	100	25	L6 4SA25/100L	L6 4SA25/100
			40	L6 4SA40/100L	L6 4SA40/100
			63	L6 4SA63/100L	L6 4SA63/100
			80	L6 4SA80/100L	L6 4SA80/100
			100	L6 4SA100/100L	L6 4SA100/100
		300	25	L6 4SA25/300L	L6 4SA25/300
			40	L6 4SA40/300L	L6 4SA40/300
			63	L6 4SA63/300L	L6 4SA63/300
			80	L6 4SA80/300L	L6 4SA80/300
			100	L6 4SA100/300L	L6 4SA100/300

B type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous					
	1P+N 230 V AC	30	16	L6 2B16/010L	L6 2B16/010
			25	L6 2B25/030L	L6 2B25/030
			40	L6 2B40/030L	L6 2B40/030
			63	L6 2B63/030L	L6 2B63/030
			80	L6 2B80/030L	L6 2B80/030
			100	L6 2B100/030L	L6 2B100/030
		100	16	L6 2B16/100L	L6 2B16/100
			25	L6 2B25/100L	L6 2B25/100
			40	L6 2B40/100L	L6 2B40/100
			63	L6 2B63/100L	L6 2B63/100
			80	L6 2B80/100L	L6 2B80/100
			100	L6 2B100/100L	L6 2B100/100
		300	16	L6 2B16/300L	L6 2B16/300
			25	L6 2B25/300L	L6 2B25/300
			40	L6 2B40/300L	L6 2B40/300
			63	L6 2B63/300L	L6 2B63/300
			80	L6 2B80/300L	L6 2B80/300
			100	L6 2B100/300L	L6 2B100/300
	3P+N 380 V AC	30	25	L6 4B25/030L	L6 4B25/030
			40	L6 4B40/030L	L6 4B40/030
			63	L6 4B63/030L	L6 4B63/030
			80	L6 4B80/030L	L6 4B80/030
			100	L6 4B100/030L	L6 4B100/030
		100	25	L6 4B25/100L	L6 4B25/100
			40	L6 4B40/100L	L6 4B40/100
			63	L6 4B63/100L	L6 4B63/100
			80	L6 4B80/100L	L6 4B80/100
			100	L6 4B100/100L	L6 4B100/100
		300	25	L6 4B25/300L	L6 4B25/300
			40	L6 4B40/300L	L6 4B40/300
			63	L6 4B63/300L	L6 4B63/300
			80	L6 4B80/300L	L6 4B80/300
			100	L6 4B100/300L	L6 4B100/300

Types

Both RCCBs and RCBOs are further divided into types depending on the operating function:

Type AC
For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

Type A
For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

Type B
Type B RCDs are not only sensitive to alternating and pulsating earth fault currents with DC components at a frequency of 50/60 Hz (type A), but they are also sensitive to:

- Alternating currents up to a frequency of 1000 Hz;
- Alternating and/or pulsating currents with DC components overlapping with a direct current;
- Earth fault currents generated by a rectifier with two or more phases;
- Direct earth fault currents without residual ripple

...independently of the polarity or whether the earth fault current appears suddenly or increases gradually.

According to their trip time, RCDs can be classed as two types:

General type
Instantaneous trip without time-delay, used for general purpose.

Selective type S
Type S, trip with time-delay, used for selectivity and limit the power out only to part of the system affected by a current leakage fault.

AD range (high immunity)
Leakage currents due to actual faults and temporary residual currents caused by disturbances on the mains cannot be distinguished. The reaction to both is the same, it means the RCDs normally present in the system are tripped to break the circuit, even in the event of disturbance occurs, but not a true earth fault.
Disturbances of this kind are most often caused by:

- Operation over-voltages caused by inserting or removing loads (opening or closing protection of control devices, starting and stopping motors, switching fluorescent lighting systems on and off, etc.)
- Over-voltages of atmospheric origin, caused by direct or indirect discharges on the electrical line.

Under these circumstances, such RCD tripping is unwanted, it is neither necessary nor desirable to disconnect the load from the supply. On the contrary, the sudden and unjustified interruption of the power supply may result in very serious problems.
In order to avoid this disturbance, the use of AD range high immunity (anti-disturbance) RCDs is recommended. This device was designed to trip with a slight time delay, but this does not compromise the safety limits set by the standards in force.

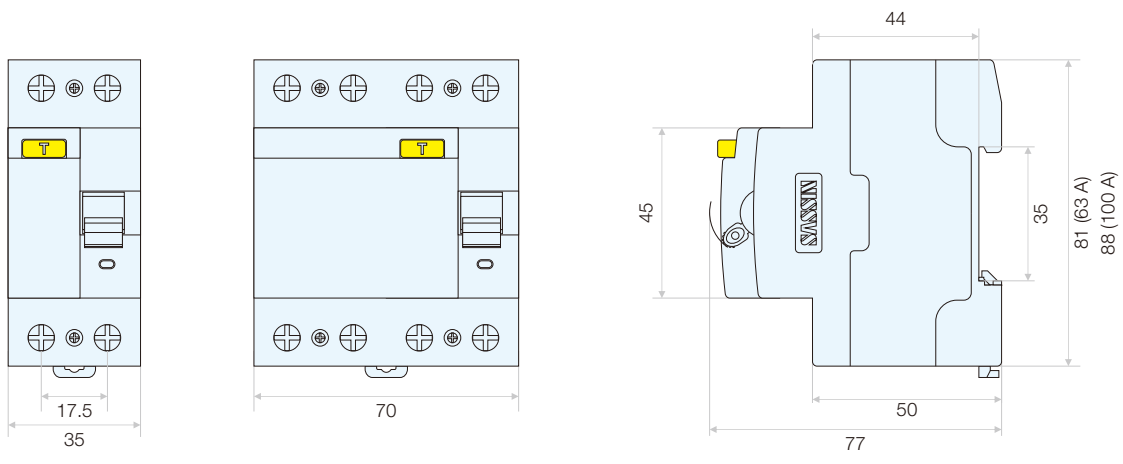
For this range of devices, the limit values for the break times are defined. In accordance with the general type, the AD range high immunity RCDs are instantaneous versions.

Tripping sensitivity data

- RCD with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.
- RCD with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.
- RCD with a rated residual current of 100 mA co-ordinated with the earth system according to the formula IΔn < 50/R, to provide protection against indirect contacts.

Outline and installation dimensions

unit in mm



Residual Current Circuit Breakers
Series PRC620

Functions

- Switching and isolation function
- Controlling
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building, non-residential building, energy sources, industry and infrastructure.
- Anti false wiring design to ensure safe wiring

Technical specifications

- Standard: IEC 61008-1 (AC type / A type)
- Type (wave form of the earth leakage sensed): AC, A
- Tripping time type: instantaneous, selectivity S
- Number of poles: 1P+N, 3P+N
- Rated current In (A): 10, 16, 25, 40, 63, 80, 100
- Rated voltage Ue (V AC): 1P+N: 230; 3P+N: 380
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 30, 100, 300
- Rated conditional short-circuit current:
  Inc = IΔc = 10000 A SCPD fuse 100 A Gg
- Making and breaking capacity for PRC620 Im (A): 630
- Making and breaking capacity for PRC620 Im (A): 1000
- Rated residual breaking capacity IΔm (A): 1000
- Degree of protection: IP20, with connected conductors
- Conductor cross-section
  - Solid and stranded (mm^2): 1-35
  - Finely stranded with end sleeve (mm^2): 1-35
- Electrical endurance (Cycles): 10,000
- Mechanical endurance (Cycles): 20,000
- Fire resistance according to IEC 60695: 960 °C
- Mounting position: Any
- Busbar connection: Pin type
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity



Features

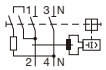
- Electromagnetic type, voltage independent.
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Adequate printing of all data on the front provides long-term identification

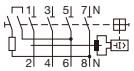
Selection and ordering data

AC type

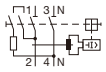
Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous				
1P+N 230 V AC	30	16	PRC62 2C16/030L	PRC62 2C10/030
		25	PRC62 2C25/030L	PRC62 2C16/030
		40	PRC62 2C40/030L	PRC62 2C25/030
		63	PRC62 2C63/030L	PRC62 2C40/030
		80	PRC62 2C80/030L	PRC62 2C63/030
		100	PRC62 2C100/030L	PRC62 2C80/030
	100	16	PRC62 2C16/100L	PRC62 2C16/100
		25	PRC62 2C25/100L	PRC62 2C25/100
		40	PRC62 2C40/100L	PRC62 2C40/100
		63	PRC62 2C63/100L	PRC62 2C63/100
		80	PRC62 2C80/100L	PRC62 2C80/100
		100	PRC62 2C100/100L	PRC62 2C100/100
	300	16	PRC62 2C16/300L	PRC62 2C16/300
		25	PRC62 2C25/300L	PRC62 2C25/300
		40	PRC62 2C40/300L	PRC62 2C40/300
		63	PRC62 2C63/300L	PRC62 2C63/300
		80	PRC62 2C80/300L	PRC62 2C80/300
		100	PRC62 4C100/300L	PRC62 4C100/300
3P+N 380 V AC	30	16	PRC62 4C16/010L	PRC62 4C16/030
		25	PRC62 4C25/030L	PRC62 4C25/030
		40	PRC62 4C40/030L	PRC62 4C40/030
		63	PRC62 4C63/030L	PRC62 4C63/030
		80	PRC62 4C80/030L	PRC62 4C80/030
		100	PRC62 4C100/030L	PRC62 4C100/030
	100	16	PRC62 4C16/100L	PRC62 4C16/100
		25	PRC62 4C25/100L	PRC62 4C25/100
		40	PRC62 4C40/100L	PRC62 4C40/100
		63	PRC62 4C63/100L	PRC62 4C63/100
		80	PRC62 4C80/100L	PRC62 4C80/100
		100	PRC62 4C100/100L	PRC62 4C100/100
	300	16	PRC62 4C16/300L	PRC62 4C16/300
		25	PRC62 4C25/300L	PRC62 4C25/300
		40	PRC62 4C40/300L	PRC62 4C40/300
		63	PRC62 4C63/300L	PRC62 4C63/300
		80	PRC62 4C80/300L	PRC62 4C80/300
		100	PRC62 4C100/300L	PRC62 4C100/300
S type, selective S				
1P+N 230 V AC	100	16	PRC62 2SC16/100L	PRC62 2SC16/100
		25	PRC62 2SC25/100L	PRC62 2SC25/100
		40	PRC62 2SC40/100L	PRC62 2SC40/100
		63	PRC62 2SC63/100L	PRC62 2SC63/100
		80	PRC62 2SC80/100L	PRC62 2SC80/100
		100	PRC62 2SC100/100L	PRC62 2SC100/100
	300	16	PRC62 2SC16/300L	PRC62 2SC16/300
		25	PRC62 2SC25/300L	PRC62 2SC25/300
		40	PRC62 2SC40/300L	PRC62 2SC40/300
		63	PRC62 2SC63/300L	PRC62 2SC63/300
		80	PRC62 4SC80/300L	PRC62 4SC80/300
		100	PRC62 4SC100/300L	PRC62 4SC100/300
3P+N 380 V AC	100	16	PRC62 4SC16/100L	PRC62 4SC16/100
		25	PRC62 4SC25/100L	PRC62 4SC25/100
		40	PRC62 4SC40/100L	PRC62 4SC40/100
		63	PRC62 4SC63/100L	PRC62 4SC63/100
		80	PRC62 4SC80/100L	PRC62 4SC80/100
		100	PRC62 4SC100/100L	PRC62 4SC100/300
	300	16	PRC62 4SC16/300L	PRC62 4SC16/300
		25	PRC62 4SC25/300L	PRC62 4SC25/300
		40	PRC62 4SC40/300L	PRC62 4SC40/300
		63	PRC62 4SC63/300L	PRC62 4SC63/300
		80	PRC62 4SC80/300L	PRC62 4SC80/300
		100	PRC62 4SC100/300L	PRC62 4SC100/300

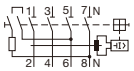












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Selection and ordering data

AC type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous					
	1P+N 230 V AC	30	16	PRC62 2A16/030L	PRC62 2A16/030
			25	PRC62 2A25/030L	PRC62 2A25/030
			40	PRC62 2A40/030L	PRC62 2A40/030
			63	PRC62 2A63/030L	PRC62 2A63/030
			80	PRC62 2A80/030L	PRC62 2A80/030
			100	PRC62 2A100/030L	PRC62 2A100/030
		100	16	PRC62 2A16/100L	PRC62 2A16/100
			25	PRC62 2A25/100L	PRC62 2A25/100
			40	PRC62 2A40/100L	PRC62 2A40/100
			63	PRC62 2A63/100L	PRC62 2A63/100
			80	PRC62 2A80/100L	PRC62 2A80/100
			100	PRC62 2A100/100L	PRC62 2A100/100
		300	16	PRC62 2A16/300L	PRC62 2A16/300
			25	PRC62 2A25/300L	PRC62 2A25/300
			40	PRC62 2A40/300L	PRC62 2A40/300
			63	PRC62 2A63/300L	PRC62 2A63/300
			80	PRC62 2A80/300L	PRC62 2A80/300
			100	PRC62 2A100/300L	PRC62 4A100/300
	3P+N 380 V AC	30	16	PRC62 4A16/030L	PRC62 4A16/030
			25	PRC62 4A25/030L	PRC62 4A25/030
			40	PRC62 4A40/030L	PRC62 4A40/030
			63	PRC62 4A63/030L	PRC62 4A63/030
			80	PRC62 4A80/030L	PRC62 4A80/030
			100	PRC62 4A100/030L	PRC62 4A100/030
		100	16	PRC62 4A16100L	PRC62 4A16/100
			25	PRC62 4A25/100L	PRC62 4A25/100
			40	PRC62 4A40/100L	PRC62 4A40/100
			63	PRC62 4A63/100L	PRC62 4A63/100
			80	PRC62 4A80/100L	PRC62 4A80/100
			100	PRC62 4A100/300L	PRC62 4A100/100
		300	16	PRC62 4A16/300L	PRC62 4A16/300
			25	PRC62 4A25/300L	PRC62 4A25/300
			40	PRC62 4A40/300L	PRC62 4A40/300
			63	PRC62 4A63/300L	PRC62 4A63/300
			80	PRC62 4A80/300L	PRC62 4A80/300
			100	PRC62 4A100/300L	PRC62 4A100/300
S type, selective S					
	1P+N 230 V AC	100	16	PRC62 2SA16/100L	PRC62 2SA16/100
			25	PRC62 2SA25/100L	PRC62 2SA25/100
			40	PRC62 2SA40/100L	PRC62 2SA40/100
			63	PRC62 2SA63/100L	PRC62 2SA63/100
			80	PRC62 2SA80/100L	PRC62 2SA80/100
			100	PRC62 2SA100/300L	PRC62 2SA100/100
		300	16	PRC62 2SA16/300L	PRC62 2SA16/300
			25	PRC62 2SA25/300L	PRC62 2SA25/300
			40	PRC62 2SA40/300L	PRC62 2SA40/300
			63	PRC62 2SA63/300L	PRC62 2SA63/300
			80	PRC62 2SA80/300L	PRC62 2SA80/300
			100	PRC62 2SA100/300L	PRC62 2SA100/300
	3P+N 380 V AC	100	16	PRC62 4SA16/100L	PRC62 4SA16/100
			25	PRC62 4SA25/100L	PRC62 4SA25/100
			40	PRC62 4SA40/100L	PRC62 4SA40/100
			63	PRC62 4SA63/300L	PRC62 4SA63/100
			80	PRC62 4SA80/300L	PRC62 4SA80/100
			100	PRC62 4SA100/300L	PRC62 4SA100/100
		300	16	PRC62 4SA16/300L	PRC62 4SA16/300
			25	PRC62 4SA25/300L	PRC62 4SA25/300
			40	PRC62 4SA40/300L	PRC62 4SA40/300
			63	PRC62 4SA63/300L	PRC62 4SA63/300
			80	PRC62 4SA80/300L	PRC62 4SA80/300
			100	PRC62 4SA100/300L	PRC62 4SA100/300

Types

Both RCCBs and RCBOs are further divided into types depending on the operating function:

Type AC
For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

Type A
For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

According to their trip time, RCDs can be classed as two types:

General type
Instantaneous trip without time-delay, used for general purpose.

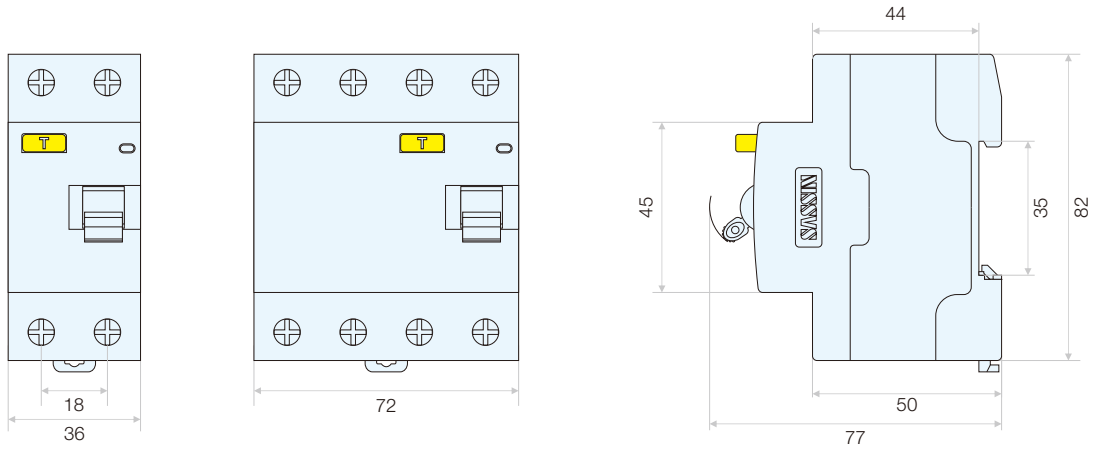
Selective type S
Type S, trip with time-delay, used for selectivity and limit the power out only to part of the system affected by a current leakage fault.

Tripping sensitivity data

- RCD with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.
- RCD with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.
- RCD with a rated residual current of 100 mA co-ordinated with the earth system according to the formula IΔn < 50/R, to provide protection against indirect contacts.

Outline and installation dimensions

unit in mm



Residual Current Circuit Breakers
Series VRC520

Functions



- Switching and isolation function
- Controlling
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building, non-residential building, energy sources, industry and infrastructure.
- Anti false wiring design to ensure safe wiring

Technical specifications

- Standard: IEC 61008-1 (AC type / A type)
- Type (wave form of the earth leakage sensed): AC, A
- Trip time type: instantaneous, selectivity S
- Number of poles (P): 1P+N, 3P+N
- Rated current In (A): 16, 25, 40, 63
- Rated voltage Ue (V AC): 1P+N: 230; 3P+N: 380
- Rated insulation voltage Ui (V AC): 500
- Rated impulse withstand voltage Uimp (kV): 4
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 10, 30, 100, 300
- Rated conditional short-circuit current:
  Inc = IΔc = 6000 A SCPD fuse 100 A Gg
- Making and breaking capacity for VRC5-63 Im (A): 630
- Rated residual breaking capacity IΔm (A): 1000
- Degree of protection: IP20, with connected conductors
- Conductor cross-section
  - Solid and stranded (mm^2): 1-35
  - Finely stranded with end sleeve (mm^2): 1-25
- Electrical endurance (Cycles): 10,000
- Mechanical endurance (Cycles): 20,000
- Fire resistance according to IEC 60695: 960 °C
- Mounting position: Any
- Busbar connection: Pin type
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity

Features

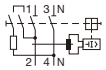
- Electromagnetic type and electronic type, voltage independent
- The handle being sealable or equipped with padlock bracket avoids dangerous operation changes (ON / OFF)
- Adequate printing of all data on the front provides long-term identification

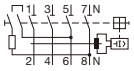
Selection and ordering data

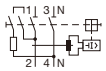
AC type

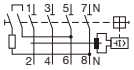
Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous				
1P+N 230 V AC	10	16	VRC52 2C16/010L	VRC52 2C16/010
		25	VRC52 2C25/010L	VRC52 2C25/010
		40	VRC52 2C40/010L	VRC52 2C40/010
		63	VRC52 2C63/010L	VRC52 2C63/010
	30	16	VRC52 2C16/030L	VRC52 2C16/030
		25	VRC52 2C25/030L	VRC52 2C25/030
		40	VRC52 2C40/030L	VRC52 2C40/030
		63	VRC52 2C63/030L	VRC52 2C63/030
	100	16	VRC52 2C16/100L	VRC52 2C16/100
		25	VRC52 2C25/100L	VRC52 2C25/100
		40	VRC52 2C40/100L	VRC52 2C40/100
		63	VRC52 2C63/100L	VRC52 2C63/100
	300	16	VRC52 2C16/300L	VRC52 2C16/300
		25	VRC52 2C25/300L	VRC52 2C25/300
		40	VRC52 2C40/300L	VRC52 2C40/300
		63	VRC52 2C63/300L	VRC52 2C63/300
3P+N 380 V AC	10	16	VRC52 4C16/010L	VRC52 4C16/010
		25	VRC52 4C25/010L	VRC52 4C25/010
		40	VRC52 4C40/010L	VRC52 4C40/010
		63	VRC52 4C63/010L	VRC52 4C63/010
	30	16	VRC52 4C16/030L	VRC52 4C16/030
		25	VRC52 4C25/030L	VRC52 4C25/030
		40	VRC52 4C40/030L	VRC52 4C40/030
		63	VRC52 4C63/030L	VRC52 4C63/030
	100	16	VRC52 4C16/100L	VRC52 4C16/100
		25	VRC52 4C25/100L	VRC52 4C25/100
		40	VRC52 4C40/100L	VRC52 4C40/100
		63	VRC52 4C63/100L	VRC52 4C63/100
	300	16	VRC52 4C16/300L	VRC52 4C16/300
		25	VRC52 4C25/300L	VRC52 4C25/300
		40	VRC52 4C40/300L	VRC52 4C40/300
		63	VRC52 4C63/300L	VRC52 4C63/300
S type, selective S				
1P+N 230 V AC	100	16	VRC52 2CS16/100L	VRC52 2CS16/100
		25	VRC52 2CS25/100L	VRC52 2CS25/100
		40	VRC52 2CS40/100L	VRC52 2CS40/100
		63	VRC52 2CS63/100L	VRC52 2CS63/100
	300	16	VRC52 2CS16/300L	VRC52 2CS16/300
		25	VRC52 2CS25/300L	VRC52 2CS25/300
		40	VRC52 2CS40/300L	VRC52 2CS40/300
		63	VRC52 2CS63/300L	VRC52 2CS63/300
3P+N 380 V AC	100	16	VRC52 4CS16/100L	VRC52 4CS16/100
		25	VRC52 4CS25/100L	VRC52 4CS25/100
		40	VRC52 4CS40/100L	VRC52 4CS40/100
		63	VRC52 4CS63/100L	VRC52 4CS63/100
	300	16	VRC52 4CS16/300L	VRC52 4CS16/300
		25	VRC52 4CS25/300L	VRC52 4CS25/300
		40	VRC52 4CS40/300L	VRC52 4CS40/300
		63	VRC52 4CS63/300L	VRC52 4CS63/300









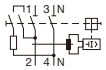


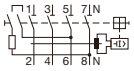
Selection and ordering data

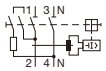
A type

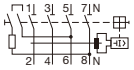
Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Left neutral Type code	Right neutral Type code
General type, instantaneous				
1P+N 230 V AC	10	16	VRC52 2A16/010L	VRC52 2A16/010
		25	VRC52 2A25/010L	VRC52 2A25/010
		40	VRC52 2A40/010L	VRC52 2A40/010
		63	VRC52 2A63/010L	VRC52 2A63/010
	30	16	VRC52 2A16/030L	VRC52 2A16/030
		25	VRC52 2A25/030L	VRC52 2A25/030
		40	VRC52 2A40/030L	VRC52 2A40/030
		63	VRC52 2A63/030L	VRC52 2A63/030
	100	16	VRC52 2A16/100L	VRC52 2A16/100
		25	VRC52 2A25/100L	VRC52 2A25/100
		40	VRC52 2A40/100L	VRC52 2A40/100
		63	VRC52 2A63/100L	VRC52 2A63/100
	300	16	VRC52 2A16/300L	VRC52 2A16/300
		25	VRC52 2A25/300L	VRC52 2A25/300
		40	VRC52 2A40/300L	VRC52 2A40/300
		63	VRC52 2A63/300L	VRC52 2A63/300
3P+N 380 V AC	10	16	VRC52 4A16/010L	VRC52 4A16/010
		25	VRC52 4A25/010L	VRC52 4A25/010
		40	VRC52 4A40/010L	VRC52 4A40/010
		63	VRC52 4A63/010L	VRC52 4A63/010
	30	16	VRC52 4A16/030L	VRC52 4A16/030
		25	VRC52 4A25/030L	VRC52 4A25/030
		40	VRC52 4A40/030L	VRC52 4A40/030
		63	VRC52 4A63/030L	VRC52 4A63/030
	100	16	VRC52 4A16/100L	VRC52 4A16/100
		25	VRC52 4A25/100L	VRC52 4A25/100
		40	VRC52 4A40/100L	VRC52 4A40/100
		63	VRC52 4A63/100L	VRC52 4A63/100
	300	16	VRC52 4A16/300L	VRC52 4A16/300
		25	VRC52 4A25/300L	VRC52 4A25/300
		40	VRC52 4A40/300L	VRC52 4A40/300
		63	VRC52 4A63/300L	VRC52 4A63/300
S type, selective				
1P+N 230 V AC	100	16	VRC52 2AS16/100L	VRC52 2AS16/100
		25	VRC52 2AS25/100L	VRC52 2AS25/100
		40	VRC52 2AS40/100L	VRC52 2AS40/100
		63	VRC52 2AS63/100L	VRC52 2AS63/100
	300	16	VRC52 2AS16/300L	VRC52 2AS16/300
		25	VRC52 2AS25/300L	VRC52 2AS25/300
		40	VRC52 2AS40/300L	VRC52 2AS40/300
		63	VRC52 2AS63/300L	VRC52 2AS63/300
3P+N 380 V AC	100	16	VRC52 4AS16/100L	VRC52 4AS16/100
		25	VRC52 4AS25/100L	VRC52 4AS25/100
		40	VRC52 4AS40/100L	VRC52 4AS40/100
		63	VRC52 4AS63/100L	VRC52 4AS63/100
	300	16	VRC52 4AS16/300L	VRC52 4AS16/300
		25	VRC52 4AS25/300L	VRC52 4AS25/300
		40	VRC52 4AS40/300L	VRC52 4AS40/300
		63	VRC52 4AS63/300L	VRC52 4AS63/300











Types

Both RCCBs and RCBOs are further divided into types depending on the operating function:

Type AC
For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

Type A
For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

According to their trip time, RCDs can be classed as two types:

General type
Instantaneous trip without time-delay, used for general purpose.

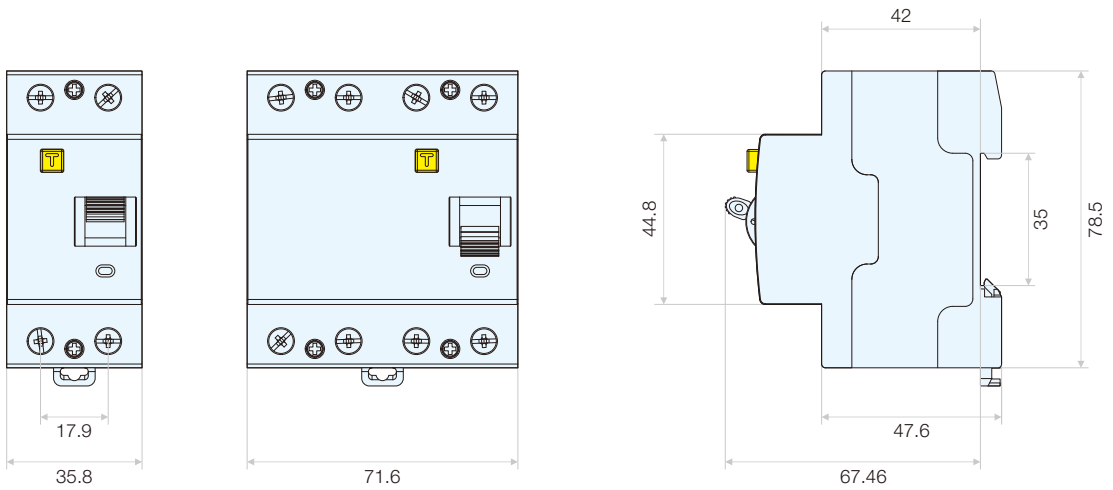
Selective type S
Type S, trip with time-delay, used for selectivity and limit the power out only to part of the system affected by a current leakage fault.

Tripping sensitivity data

- RCD with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.
- RCD with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.
- RCD with a rated residual current of 100 mA co-ordinated with the earth system according to the formula IΔn < 50/R, to provide protection against indirect contacts.

Outline and installation dimensions

unit in mm



Residual Current Circuit Breakers with Overcurrent Protection
Series 3SL71N-40

Functions

- Switching and isolation function
- Protection against overload and short-circuit currents
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building



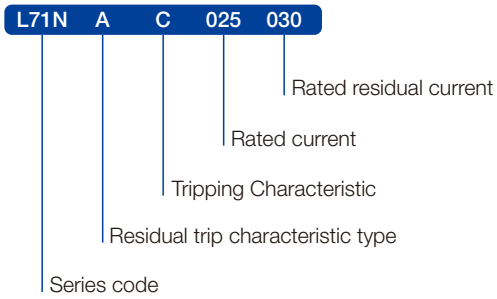
Technical specifications

- Standard: IEC 61009-1
- Type (wave form of the earth leakage sensed): AC, A
- Number of pole: 1P+N
- Rated current In (A): 6, 10, 16, 20, 25, 32, 40
- Rated voltage Ue (V AC): 230
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 30, 100, 300
- Rated breaking capacity acc. to IEC 61009-1 ultimate Icn (kA): 6
- Rated residual breaking capacity IΔm (kA): 6
- Rated impulse withstand voltage (1.2/50) Uimp (kV): 4
- Dielectric test voltage at ind. freq. for 1 min. (kV): 2.5
- Surge current resistance (wave 8/20) (A): 3000
- Tripping characteristic: B, C
  - Characteristic B (In): 3-5
  - Characteristic C (In): 5-10
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections
  - Solid and stranded (mm^2): 0.75-35
  - Finely stranded with end sleeve (mm^2): 0.75-25
- Terminals
  - Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000

References

- Additional components: page 85 ~ 86

Instruction of type code

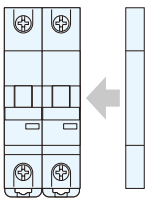


Features

- The combination of an RCCB and a miniature circuit breaker in a compact design for personnel, fire and line protection.
- Electromagnetic type, voltage independent.
- The MCB part protects lines against overload and short circuits and is available in characteristics B and C.
- The handle provides a clear indication of the contact position.
- The earth reference cable ensures protection against earth leakage in case of loss of supply neutral.

Add-on devices

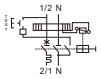
Auxiliaries



Selection and ordering data

Type AC

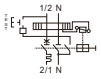




Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C	
			Type code	Order code	Type code	Order code
1P+N	30	6	L71NC B06/030	**20276**	L71NC C06/030	**20283**
		10	L71NC B10/030	**20277**	L71NC C10/030	**20284**
		16	L71NC B16/030	**20278**	L71NC C16/030	**20285**
		20	L71NC B20/030	**20279**	L71NC C20/030	**20286**
		25	L71NC B25/030	**20280**	L71NC C25/030	**20287**
		32	L71NC B32/030	**20281**	L71NC C32/030	**20288**
		40	L71NC B40/030	**20282**	L71NC C40/030	**20289**
	100	6	L71NC B06/100	**20304**	L71NC C06/100	**20311**
		10	L71NC B10/100	**20305**	L71NC C10/100	**20312**
		16	L71NC B16/100	**20306**	L71NC C16/100	**20313**
		20	L71NC B20/100	**20307**	L71NC C20/100	**20314**
		25	L71NC B25/100	**20308**	L71NC C25/100	**20315**
		32	L71NC B32/100	**20309**	L71NC C32/100	**20316**
		40	L71NC B40/100	**20310**	L71NC C40/100	**20317**
	300	6	L71NC B06/300	**20332**	L71NC C06/300	**20339**
		10	L71NC B10/300	**20333**	L71NC C10/300	**20340**
		16	L71NC B16/300	**20334**	L71NC C16/300	**20341**
		20	L71NC B20/300	**20335**	L71NC C20/300	**20342**
		25	L71NC B25/300	**20336**	L71NC C25/300	**20343**
		32	L71NC B32/300	**20337**	L71NC C32/300	**20344**
		40	L71NC B40/300	**20338**	L71NC C40/300	**20345**

Type A



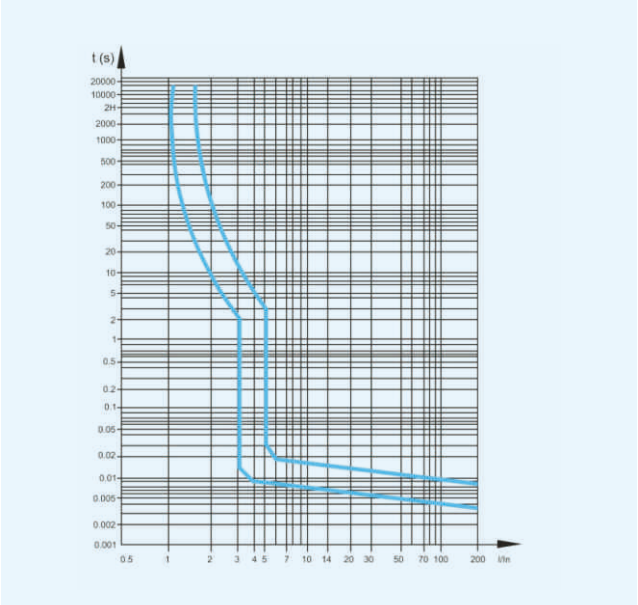


Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C	
			Type code	Order code	Type code	Order code
1P+N	30	6	L71NA B06/030	**20290**	L71NA C06/030	**20297**
		10	L71NA B10/030	**20291**	L71NA C10/030	**20298**
		16	L71NA B16/030	**20292**	L71NA C16/030	**20299**
		20	L71NA B20/030	**20293**	L71NA C20/030	**20300**
		25	L71NA B25/030	**20294**	L71NA C25/030	**20301**
		32	L71NA B32/030	**20295**	L71NA C32/030	**20302**
		40	L71NA B40/030	**20296**	L71NA C40/030	**20303**
	100	6	L71NA B06/100	**20318**	L71NA C06/100	**20325**
		10	L71NA B10/100	**20319**	L71NA C10/100	**20326**
		16	L71NA B16/100	**20320**	L71NA C16/100	**20327**
		20	L71NA B20/100	**20321**	L71NA C20/100	**20328**
		25	L71NA B25/100	**20322**	L71NA C25/100	**20329**
		32	L71NA B32/100	**20323**	L71NA C32/100	**20330**
		40	L71NA B40/100	**20324**	L71NA C40/100	**20331**
	300	6	L71NA B06/300	**20346**	L71NA C06/300	**20353**
		10	L71NA B10/300	**20347**	L71NA C10/300	**20354**
		16	L71NA B16/300	**20348**	L71NA C16/300	**20355**
		20	L71NA B20/300	**20349**	L71NA C20/300	**20356**
		25	L71NA B25/300	**20350**	L71NA C25/300	**20357**
		32	L71NA B32/300	**20351**	L71NA C32/300	**20358**
		40	L71NA B40/300	**20352**	L71NA C40/300	**20359**

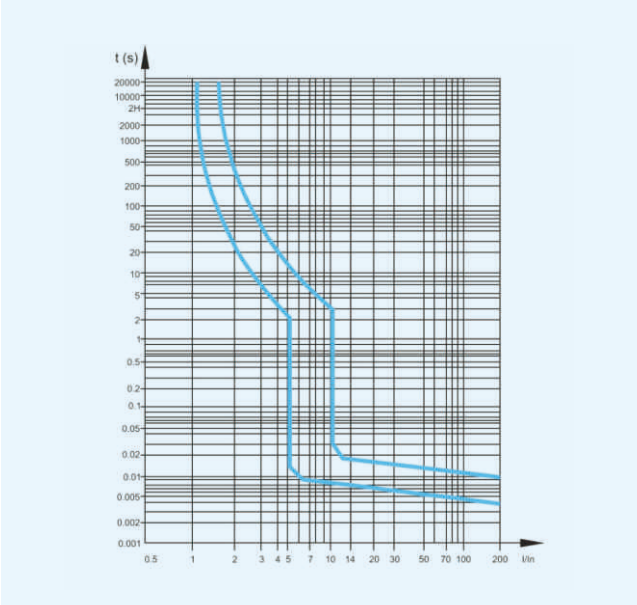
2

Tripping characteristic curves

Characteristic B

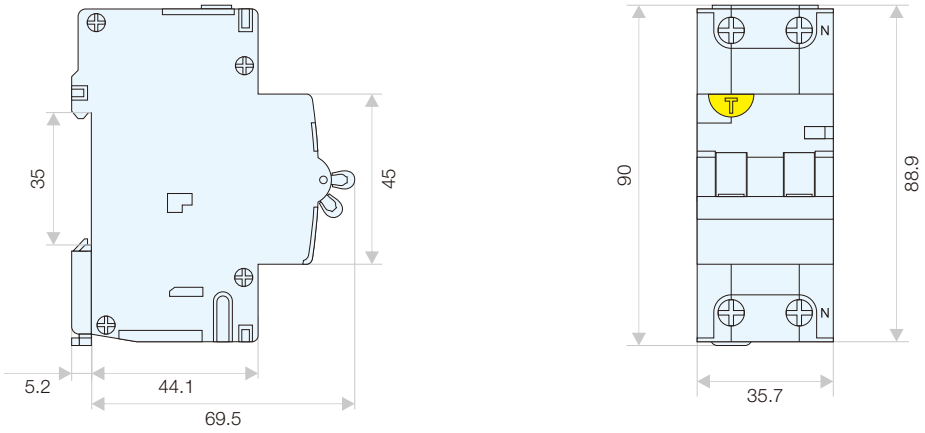


Characteristic C



Outline and installation dimensions

unit in mm



Functions

The VRBNC515E electronic RCBO is designed to fullfill the requirements of circuit protection by providing the technology residual current protection combined with over-current circuit protection in a compact design.

- Equipment control and protection against short-circuits and overloads
- Isolation of electrical circuits
- Protecting people from direct and indirect contact
- Protecting installations from insulation faults to prevent electrically ignited fires



Technical specifications

- Standards: IEC 61009-1
- Number of poles: 1P+N
- Neutral can be switched off: yes

Electrical features

- Residual current-detection principle: Electronic (voltage dependent)
- Rated operational voltage Ue (V AC): 230
- Rated current In (A): 6, 10, 16, 20, 25, 32, 40, 45
- Rated residual operating current IΔn (mA): 30, 100, 300
- Type (wave form of residual current): AC, A
- Rated insulation voltage Ui (V): 500
- Rated impulse withstand voltage Uimp (kV): 4
- Rated ultimated breaking capacity (kA): 6
- Rated service breaking capacity (kA): 6
- Instantaneous tripping characteristic: B, C
- Thermal-magnetic release characteristic:
  - B: 3 In ≤ In ≤ 5 In;
  - C: 5 In ≤ In ≤ 10 In

Mechanical features

- Endurance
  - Electrical life (times): 10000
  - Mechanical life (times): 20000
- Protection degree: Housing IP40; terminals IP20
- Pollution degree: 3
- Ambient temperature (°C): -25 ... +45
- Storage temperature (°C): -40 ... +70
- Environmental conditions (°C/RH): 28 cycles with +20 °C/95% and +40 °C/50%

Installation and connection

- Overvoltage category: III
- Connection capacity (mm^2): 1 ... 10
- Supply from: Top terminals
- Terminal tightening torque (N·m): 2.5
- Altitude (meters): Max. 2000

Applications

- Ideal for installations that require the added benefit of RCBOs with switched neutral line.
- The compact design makes it suited for new builds as well as the retrofit market, to enhance the protection level in electrical circuits by additional personal safety.
- In new buildings, the 50 % space saving compared to the 2 modular width version allows implementation of more compact and cheaper distribution boards.
- Especially in projects where many circuits have to be equipped with individual residual current protection, smaller distribution boards can be installed, which saves significant costs.
- In old buildings, it is very easy to replace the existing 1-pole MCBs with a compact RCBO in only 1 modular width, this means no additional space is required in the distribution board.

Features

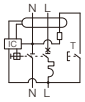
- Thanks to the built in switched neutral line on the left, a faulty or damaged circuit can be fully isolate by disconnecting live and neutral conductors, and testing of outgoing circuits is easier as an electrician does not have to disconnect terminals before testing.
- Compact size only 18 mm in width saves 50 % space compared to the version 2 modular width RCBOs.
- Rated current is up to 45 A with high breaking capacity 6 kA.
- Real contact position indicator for easier identification, independently on the toggle position.
- Cage terminals with fail safe feature to avoid improper installation.
- Additional components are available, such as: auxiliary contact, fault signal contact, under-voltage release and shunt release.

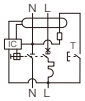
2

Selection and ordering data

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C	
				Type code	Order code	Type code	Order code
AC type	1P+N 230 V AC	30	6	VRBNC515E-B6-AC-0.03	**39139**	VRBNC515E-C6-AC-0.03	**19571**
			10	VRBNC515E-B10-AC-0.03	**39140**	VRBNC515E-C10-AC-0.03	**19572**
			16	VRBNC515E-B16-AC-0.03	**39141**	VRBNC515E-C16-AC-0.03	**19573**
			20	VRBNC515E-B20-AC-0.03	**39142**	VRBNC515E-C20-AC-0.03	**19574**
			25	VRBNC515E-B25-AC-0.03	**39143**	VRBNC515E-C25-AC-0.03	**19575**
			32	VRBNC515E-B32-AC-0.03	**39144**	VRBNC515E-C32-AC-0.03	**19576**
			40	VRBNC515E-B40-AC-0.03	**39145**	VRBNC515E-C40-AC-0.03	**19577**
			45	VRBNC515E-B45-AC-0.03	**39146**	VRBNC515E-C45-AC-0.03	**19578**
		100	6	VRBNC515E-B6-AC-0.1	**39147**	VRBNC515E-C6-AC-0.1	**19579**
			10	VRBNC515E-B10-AC-0.1	**39148**	VRBNC515E-C10-AC-0.1	**19580**
			16	VRBNC515E-B16-AC-0.1	**39149**	VRBNC515E-C16-AC-0.1	**19581**
			20	VRBNC515E-B20-AC-0.1	**39150**	VRBNC515E-C20-AC-0.1	**19582**
			25	VRBNC515E-B25-AC-0.1	**39151**	VRBNC515E-C25-AC-0.1	**19583**
			32	VRBNC515E-B32-AC-0.1	**39152**	VRBNC515E-C32-AC-0.1	**19584**
			40	VRBNC515E-B40-AC-0.1	**39153**	VRBNC515E-C40-AC-0.1	**19585**
			45	VRBNC515E-B45-AC-0.1	**39154**	VRBNC515E-C45-AC-0.1	**19586**
		300	6	VRBNC515E-B6-AC-0.3	**39155**	VRBNC515E-C6-AC-0.3	**19587**
			10	VRBNC515E-B10-AC-0.3	**39156**	VRBNC515E-C10-AC-0.3	**19588**
			16	VRBNC515E-B16-AC-0.3	**39157**	VRBNC515E-C16-AC-0.3	**19589**
			20	VRBNC515E-B20-AC-0.3	**39158**	VRBNC515E-C20-AC-0.3	**19590**
			25	VRBNC515E-B25-AC-0.3	**39159**	VRBNC515E-C25-AC-0.3	**19591**
			32	VRBNC515E-B32-AC-0.3	**39160**	VRBNC515E-C32-AC-0.3	**19592**
			40	VRBNC515E-B40-AC-0.3	**39161**	VRBNC515E-C40-AC-0.3	**19593**
			45	VRBNC515E-B45-AC-0.3	**39162**	VRBNC515E-C45-AC-0.3	**19594**
A type	1P+N 230 V AC	30	6	VRBNC515E-B6-A-0.03	**39163**	VRBNC515E-C6-A-0.03	**19595**
			10	VRBNC515E-B10-A-0.03	**39164**	VRBNC515E-C10-A-0.03	**19596**
			16	VRBNC515E-B16-A-0.03	**39165**	VRBNC515E-C16-A-0.03	**19597**
			20	VRBNC515E-B20-A-0.03	**39166**	VRBNC515E-C20-A-0.03	**19598**
			25	VRBNC515E-B25-A-0.03	**39167**	VRBNC515E-C25-A-0.03	**19599**
			32	VRBNC515E-B32-A-0.03	**39168**	VRBNC515E-C32-A-0.03	**19600**
			40	VRBNC515E-B40-A-0.03	**39169**	VRBNC515E-C40-A-0.03	**19601**
			45	VRBNC515E-B45-A-0.03	**39170**	VRBNC515E-C45-A-0.03	**19602**
		100	6	VRBNC515E-B6-A-0.1	**39171**	VRBNC515E-C6-A-0.1	**19603**
			10	VRBNC515E-B10-A-0.1	**39172**	VRBNC515E-C10-A-0.1	**19604**
			16	VRBNC515E-B16-A-0.1	**39173**	VRBNC515E-C16-A-0.1	**19605**
			20	VRBNC515E-B20-A-0.1	**39174**	VRBNC515E-C20-A-0.1	**19606**
			25	VRBNC515E-B25-A-0.1	**19559**	VRBNC515E-C25-A-0.1	**19607**
			32	VRBNC515E-B32-A-0.1	**19560**	VRBNC515E-C32-A-0.1	**19608**
			40	VRBNC515E-B40-A-0.1	**19561**	VRBNC515E-C40-A-0.1	**19609**
			45	VRBNC515E-B45-A-0.1	**19562**	VRBNC515E-C45-A-0.1	**19610**
		300	6	VRBNC515E-B6-A-0.3	**19563**	VRBNC515E-C6-A-0.3	**19611**
			10	VRBNC515E-B10-A-0.3	**19564**	VRBNC515E-C10-A-0.3	**19612**
			16	VRBNC515E-B16-A-0.3	**19565**	VRBNC515E-C16-A-0.3	**19613**
			20	VRBNC515E-B20-A-0.3	**19566**	VRBNC515E-C20-A-0.3	**19614**
			25	VRBNC515E-B25-A-0.3	**19567**	VRBNC515E-C25-A-0.3	**19615**
			32	VRBNC515E-B32-A-0.3	**19568**	VRBNC515E-C32-A-0.3	**19616**
			40	VRBNC515E-B40-A-0.3	**19569**	VRBNC515E-C40-A-0.3	**19617**
			45	VRBNC515E-B45-A-0.3	**19570**	VRBNC515E-C45-A-0.3	**19618**

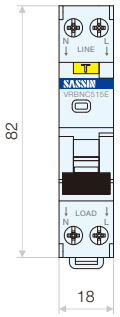


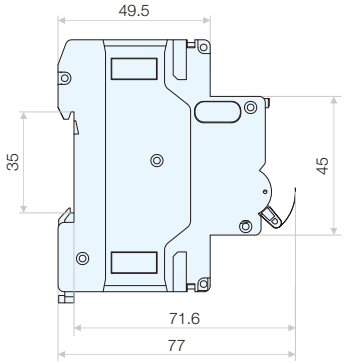




Outline and installation dimensions

unit in mm





Residual Current Circuit Breakers with Overcurrent Protection
Series VRB510E

The VRB510E electronic RCBO is designed to fullfill the requirements of circuit protection by providing the technology residual current protection combined with over-current circuit protection.



- Equipment control and protection against short-circuits and overloads
- Isolation of electrical circuits
- Protecting people from direct and indirect contact
- Protecting installations from insulation faults to prevent electrically ignited fires

Features

- Rated current up to 80 A.
- Breaking capacity 6 kA.
- Overload protection is available for both live line and neutral line.
- Adjustable rated residual current make it suitable for different protection requirements.
- Real contact position indicator for easier indentification, independently on the toggle position.
- Cage terminals with fail safe feature to avoid improper installation.
- Additional components are available, such as: auxiliary contact, fault signal contact, under-voltage release and shunt release.

Technical specifications

			VRB515E	VRB516E
Standards			IEC 61009-1	
Number of poles			1P+N	3P+N
Electrical features				
Residual current-detection principle			Electronic (voltage dependent)	
Rated operational voltage Ue		V AC	230	400
Rated current In		A	6, 10, 16, 20, 25, 32, 40, 50, 63, 80	
Rated residual operating current IΔn		mA	30, 100, 300	
Adjustable rated residual current			-	yes
Type (wave form of residual current)			AC, A	
Rated insulation voltage Ui		V	500	
Rated impulse withstand voltage Uimp		kV	4	
Rated ultimated breaking capacity		kA	6	6
Rated service breaking capacity		kA	6	6
Instantaneous tripping characteristic			B, C, D	
Thermal-magnetic release characteristic			B: 3 In ≤ In ≤ 5 In C: 5 In ≤ In ≤ 10 In D: 10 In ≤ In ≤ 20 In	
Mechanical features				
Endurance	Electrical	cycles	10000	
	Mechanical	cycles	20000	
Protection degree	Housing		IP40	
	Terminals		IP20	
Pollution degree			3	
Ambient temperature		°C	-25 ... +45	
Storage temperature		°C	-40 ... +70	
Environmental conditions		°C/RH	28 cycles with +20 °C/95% and +40 °C/50%	
Altitude		Meter	≤ 2000	
Installation and connection				
Overvoltage category			III	
Connection capacity		mm^2	1 ... 35	
Supply from			Top terminals	
Tightening torque		N·m	2.5	
Dimensions (W × H × D)		mm	35.2 × 82 × 72.6	72 × 99 × 72.6
Weight		g	210.5	462.5

Selection and ordering data

Icn = 6 kA
Characteristic B
General type, instantaneous

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type AC		Type A	
				Type code	Order code	Type code	Order code
	1P+N 230 V AC	30	6	VRB515E-B6-AC-0.03-N	**19619**	VRB515E-B6-A-0.03-N	**39188**
			10	VRB515E-B10-AC-0.03-N	**19620**	VRB515E-B10-A-0.03-N	**39189**
			16	VRB515E-B16-AC-0.03-N	**19621**	VRB515E-B16-A-0.03-N	**39190**
			20	VRB515E-B20-AC-0.03-N	**19622**	VRB515E-B20-A-0.03-N	**39191**
			25	VRB515E-B25-AC-0.03-N	**19623**	VRB515E-B25-A-0.03-N	**39192**
			32	VRB515E-B32-AC-0.03-N	**19624**	VRB515E-B32-A-0.03-N	**39193**
			40	VRB515E-B40-AC-0.03-N	**19625**	VRB515E-B40-A-0.03-N	**39194**
			50	VRB515E-B50-AC-0.03-N	**19626**	VRB515E-B50-A-0.03-N	**37201**
			63	VRB515E-B63-AC-0.03-N	**19627**	VRB515E-B63-A-0.03-N	**37202**
			80	VRB515E-B80-AC-0.03-N	**19628**	VRB515E-B80-A-0.03-N	**37203**
		100	6	VRB515E-B6-AC-0.1-N	**19629**	VRB515E-B6-A-0.1-N	**37204**
			10	VRB515E-B10-AC-0.1-N	**19630**	VRB515E-B10-A-0.1-N	**37205**
			16	VRB515E-B16-AC-0.1-N	**19631**	VRB515E-B16-A-0.1-N	**37206**
			20	VRB515E-B20-AC-0.1-N	**19632**	VRB515E-B20-A-0.1-N	**37207**
			25	VRB515E-B25-AC-0.1-N	**19633**	VRB515E-B25-A-0.1-N	**37208**
			32	VRB515E-B32-AC-0.1-N	**19634**	VRB515E-B32-A-0.1-N	**37209**
			40	VRB515E-B40-AC-0.1-N	**19635**	VRB515E-B40-A-0.1-N	**37210**
			50	VRB515E-B50-AC-0.1-N	**19636**	VRB515E-B50-A-0.1-N	**37211**
			63	VRB515E-B63-AC-0.1-N	**19637**	VRB515E-B63-A-0.1-N	**37212**
			80	VRB515E-B80-AC-0.1-N	**19638**	VRB515E-B80-A-0.1-N	**37213**
		300	6	VRB515E-B6-AC-0.3-N	**19639**	VRB515E-B6-A-0.3-N	**37214**
			10	VRB515E-B10-AC-0.3-N	**19640**	VRB515E-B10-A-0.3-N	**37215**
			16	VRB515E-B16-AC-0.3-N	**19641**	VRB515E-B16-A-0.3-N	**37216**
			20	VRB515E-B20-AC-0.3-N	**19642**	VRB515E-B20-A-0.3-N	**37217**
			25	VRB515E-B25-AC-0.3-N	**19643**	VRB515E-B25-A-0.3-N	**37218**
			32	VRB515E-B32-AC-0.3-N	**19644**	VRB515E-B32-A-0.3-N	**37219**
			40	VRB515E-B40-AC-0.3-N	**19645**	VRB515E-B40-A-0.3-N	**37220**
			50	VRB515E-B50-AC-0.3-N	**19646**	VRB515E-B50-A-0.3-N	**37221**
			63	VRB515E-B63-AC-0.3-N	**19647**	VRB515E-B63-A-0.3-N	**37222**
			80	VRB515E-B80-AC-0.3-N	**19648**	VRB515E-B80-A-0.3-N	**37223**
	3P+N 400 V AC	30	6	VRB516E-B6-AC-0.03-N	**19649**	VRB516E-B6-A-0.03-N	**37224**
			10	VRB516E-B10-AC-0.03-N	**19650**	VRB516E-B10-A-0.03-N	**37225**
			16	VRB516E-B16-AC-0.03-N	**19651**	VRB516E-B16-A-0.03-N	**37226**
			20	VRB516E-B20-AC-0.03-N	**19652**	VRB516E-B20-A-0.03-N	**37227**
			25	VRB516E-B25-AC-0.03-N	**19653**	VRB516E-B25-A-0.03-N	**37228**
			32	VRB516E-B32-AC-0.03-N	**19654**	VRB516E-B32-A-0.03-N	**37229**
			40	VRB516E-B40-AC-0.03-N	**19655**	VRB516E-B40-A-0.03-N	**37230**
			50	VRB516E-B50-AC-0.03-N	**19656**	VRB516E-B50-A-0.03-N	**37231**
			63	VRB516E-B63-AC-0.03-N	**19657**	VRB516E-B63-A-0.03-N	**37232**
			80	VRB516E-B80-AC-0.03-N	**19658**	VRB516E-B80-A-0.03-N	**37233**
		100	6	VRB516E-B6-AC-0.1-N	**19659**	VRB516E-B6-A-0.1-N	**37234**
			10	VRB516E-B10-AC-0.1-N	**19660**	VRB516E-B10-A-0.1-N	**37235**
			16	VRB516E-B16-AC-0.1-N	**19661**	VRB516E-B16-A-0.1-N	**37236**
			20	VRB516E-B20-AC-0.1-N	**19662**	VRB516E-B20-A-0.1-N	**37237**
			25	VRB516E-B25-AC-0.1-N	**19663**	VRB516E-B25-A-0.1-N	**37238**
			32	VRB516E-B32-AC-0.1-N	**19664**	VRB516E-B32-A-0.1-N	**37239**
			40	VRB516E-B40-AC-0.1-N	**19665**	VRB516E-B40-A-0.1-N	**37240**
			50	VRB516E-B50-AC-0.1-N	**39175**	VRB516E-B50-A-0.1-N	**37241**
			63	VRB516E-B63-AC-0.1-N	**39176**	VRB516E-B63-A-0.1-N	**37242**
			80	VRB516E-B80-AC-0.1-N	**39177**	VRB516E-B80-A-0.1-N	**37243**
		300	6	VRB516E-B6-AC-0.3-N	**39178**	VRB516E-B6-A-0.3-N	**37244**
			10	VRB516E-B10-AC-0.3-N	**39179**	VRB516E-B10-A-0.3-N	**37245**
			16	VRB516E-B16-AC-0.3-N	**39180**	VRB516E-B16-A-0.3-N	**37246**
			20	VRB516E-B20-AC-0.3-N	**39181**	VRB516E-B20-A-0.3-N	**37247**
			25	VRB516E-B25-AC-0.3-N	**39182**	VRB516E-B25-A-0.3-N	**37248**
			32	VRB516E-B32-AC-0.3-N	**39183**	VRB516E-B32-A-0.3-N	**37249**
			40	VRB516E-B40-AC-0.3-N	**39184**	VRB516E-B40-A-0.3-N	**37250**
			50	VRB516E-B50-AC-0.3-N	**39185**	VRB516E-B50-A-0.3-N	**37251**
			63	VRB516E-B63-AC-0.3-N	**39186**	VRB516E-B63-A-0.3-N	**37252**
			80	VRB516E-B80-AC-0.3-N	**39187**	VRB516E-B80-A-0.3-N	**37253**
		50-100-300	6	VRB516E-B6-AC-0.05-0.1-0.3-N	**36495**	VRB516E-B6-A-0.05-0.1-0.3-N	**15764**
			10	VRB516E-B10-AC-0.05-0.1-0.3-N	**36496**	VRB516E-B10-A-0.05-0.1-0.3-N	**15765**
			16	VRB516E-B16-AC-0.05-0.1-0.3-N	**36497**	VRB516E-B16-A-0.05-0.1-0.3-N	**15766**
			20	VRB516E-B20-AC-0.05-0.1-0.3-N	**36498**	VRB516E-B20-A-0.05-0.1-0.3-N	**15767**
			25	VRB516E-B25-AC-0.05-0.1-0.3-N	**15758**	VRB516E-B25-A-0.05-0.1-0.3-N	**15768**
			32	VRB516E-B32-AC-0.05-0.1-0.3-N	**15759**	VRB516E-B32-A-0.05-0.1-0.3-N	**15769**
			40	VRB516E-B40-AC-0.05-0.1-0.3-N	**15760**	VRB516E-B40-A-0.05-0.1-0.3-N	**15770**
			50	VRB516E-B50-AC-0.05-0.1-0.3-N	**15761**	VRB516E-B50-A-0.05-0.1-0.3-N	**15771**
			63	VRB516E-B63-AC-0.05-0.1-0.3-N	**15762**	VRB516E-B63-A-0.05-0.1-0.3-N	**15772**
			80	VRB516E-B80-AC-0.05-0.1-0.3-N	**15763**	VRB516E-B80-A-0.05-0.1-0.3-N	**15773**

Selection and ordering data

Icn = 6 kA
Characteristic C
General type, instantaneous

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type AC		Type A	
				Type code	Order code	Type code	Order code
	1P+N 230 V AC	30	6	VRB515E-C6-AC-0.03-N	**37254**	VRB515E-C6-A-0.03-N	**14163**
			10	VRB515E-C10-AC-0.03-N	**37255**	VRB515E-C10-A-0.03-N	**14164**
			16	VRB515E-C16-AC-0.03-N	**37256**	VRB515E-C16-A-0.03-N	**14165**
			20	VRB515E-C20-AC-0.03-N	**37257**	VRB515E-C20-A-0.03-N	**14166**
			25	VRB515E-C25-AC-0.03-N	**37258**	VRB515E-C25-A-0.03-N	**14167**
			32	VRB515E-C32-AC-0.03-N	**37259**	VRB515E-C32-A-0.03-N	**14168**
			40	VRB515E-C40-AC-0.03-N	**37260**	VRB515E-C40-A-0.03-N	**14169**
			50	VRB515E-C50-AC-0.03-N	**37261**	VRB515E-C50-A-0.03-N	**14170**
			63	VRB515E-C63-AC-0.03-N	**37262**	VRB515E-C63-A-0.03-N	**14171**
			80	VRB515E-C80-AC-0.03-N	**37263**	VRB515E-C80-A-0.03-N	**14172**
		100	6	VRB515E-C6-AC-0.1-N	**37264**	VRB515E-C6-A-0.1-N	**14173**
			10	VRB515E-C10-AC-0.1-N	**37192**	VRB515E-C10-A-0.1-N	**14174**
			16	VRB515E-C16-AC-0.1-N	**37193**	VRB515E-C16-A-0.1-N	**14175**
			20	VRB515E-C20-AC-0.1-N	**37194**	VRB515E-C20-A-0.1-N	**14176**
			25	VRB515E-C25-AC-0.1-N	**37195**	VRB515E-C25-A-0.1-N	**14177**
			32	VRB515E-C32-AC-0.1-N	**37196**	VRB515E-C32-A-0.1-N	**14178**
			40	VRB515E-C40-AC-0.1-N	**37197**	VRB515E-C40-A-0.1-N	**14179**
			50	VRB515E-C50-AC-0.1-N	**37198**	VRB515E-C50-A-0.1-N	**14180**
			63	VRB515E-C63-AC-0.1-N	**37199**	VRB515E-C63-A-0.1-N	**14181**
			80	VRB515E-C80-AC-0.1-N	**37200**	VRB515E-C80-A-0.1-N	**14182**
		300	6	VRB515E-C6-AC-0.3-N	**37265**	VRB515E-C6-A-0.3-N	**14183**
			10	VRB515E-C10-AC-0.3-N	**37266**	VRB515E-C10-A-0.3-N	**14184**
			16	VRB515E-C16-AC-0.3-N	**37267**	VRB515E-C16-A-0.3-N	**14185**
			20	VRB515E-C20-AC-0.3-N	**37268**	VRB515E-C20-A-0.3-N	**14186**
			25	VRB515E-C25-AC-0.3-N	**37269**	VRB515E-C25-A-0.3-N	**14187**
			32	VRB515E-C32-AC-0.3-N	**37270**	VRB515E-C32-A-0.3-N	**14188**
			40	VRB515E-C40-AC-0.3-N	**37271**	VRB515E-C40-A-0.3-N	**14189**
			50	VRB515E-C50-AC-0.3-N	**37272**	VRB515E-C50-A-0.3-N	**14190**
			63	VRB515E-C63-AC-0.3-N	**37273**	VRB515E-C63-A-0.3-N	**14191**
			80	VRB515E-C80-AC-0.3-N	**37185**	VRB515E-C80-A-0.3-N	**14192**
	3P+N 400 V AC	30	6	VRB516E-C6-AC-0.03-N	**37186**	VRB516E-C6-A-0.03-N	**14193**
			10	VRB516E-C10-AC-0.03-N	**37187**	VRB516E-C10-A-0.03-N	**14194**
			16	VRB516E-C16-AC-0.03-N	**37188**	VRB516E-C16-A-0.03-N	**14195**
			20	VRB516E-C20-AC-0.03-N	**37189**	VRB516E-C20-A-0.03-N	**14196**
			25	VRB516E-C25-AC-0.03-N	**37190**	VRB516E-C25-A-0.03-N	**14197**
			32	VRB516E-C32-AC-0.03-N	**37191**	VRB516E-C32-A-0.03-N	**14198**
			40	VRB516E-C40-AC-0.03-N	**14139**	VRB516E-C40-A-0.03-N	**14199**
			50	VRB516E-C50-AC-0.03-N	**14140**	VRB516E-C50-A-0.03-N	**14200**
			63	VRB516E-C63-AC-0.03-N	**14141**	VRB516E-C63-A-0.03-N	**14201**
			80	VRB516E-C80-AC-0.03-N	**14142**	VRB516E-C80-A-0.03-N	**14202**
		100	6	VRB516E-C6-AC-0.1-N	**14143**	VRB516E-C6-A-0.1-N	**14203**
			10	VRB516E-C10-AC-0.1-N	**14144**	VRB516E-C10-A-0.1-N	**14204**
			16	VRB516E-C16-AC-0.1-N	**14145**	VRB516E-C16-A-0.1-N	**14205**
			20	VRB516E-C20-AC-0.1-N	**14146**	VRB516E-C20-A-0.1-N	**14206**
			25	VRB516E-C25-AC-0.1-N	**14147**	VRB516E-C25-A-0.1-N	**14207**
			32	VRB516E-C32-AC-0.1-N	**14148**	VRB516E-C32-A-0.1-N	**14208**
			40	VRB516E-C40-AC-0.1-N	**14149**	VRB516E-C40-A-0.1-N	**14209**
			50	VRB516E-C50-AC-0.1-N	**14150**	VRB516E-C50-A-0.1-N	**14210**
			63	VRB516E-C63-AC-0.1-N	**14151**	VRB516E-C63-A-0.1-N	**19245**
			80	VRB516E-C80-AC-0.1-N	**14152**	VRB516E-C80-A-0.1-N	**19246**
		300	6	VRB516E-C6-AC-0.3-N	**14153**	VRB516E-C6-A-0.3-N	**19247**
			10	VRB516E-C10-AC-0.3-N	**14154**	VRB516E-C10-A-0.3-N	**19248**
			16	VRB516E-C16-AC-0.3-N	**14155**	VRB516E-C16-A-0.3-N	**19249**
			20	VRB516E-C20-AC-0.3-N	**14156**	VRB516E-C20-A-0.3-N	**19489**
			25	VRB516E-C25-AC-0.3-N	**14157**	VRB516E-C25-A-0.3-N	**38335**
			32	VRB516E-C32-AC-0.3-N	**14158**	VRB516E-C32-A-0.3-N	**38336**
			40	VRB516E-C40-AC-0.3-N	**14159**	VRB516E-C40-A-0.3-N	**38337**
			50	VRB516E-C50-AC-0.3-N	**14160**	VRB516E-C50-A-0.3-N	**38338**
			63	VRB516E-C63-AC-0.3-N	**14161**	VRB516E-C63-A-0.3-N	**38339**
			80	VRB516E-C80-AC-0.3-N	**14162**	VRB516E-C80-A-0.3-N	**38340**
		50-100-300	6	VRB516E-C6-AC-0.05-0.1-0.3-N	**35256**	VRB516E-C6-A-0.05-0.1-0.3-N	**35266**
			10	VRB516E-C10-AC-0.05-0.1-0.3-N	**35257**	VRB516E-C10-A-0.05-0.1-0.3-N	**35267**
			16	VRB516E-C16-AC-0.05-0.1-0.3-N	**35258**	VRB516E-C16-A-0.05-0.1-0.3-N	**35268**
			20	VRB516E-C20-AC-0.05-0.1-0.3-N	**35259**	VRB516E-C20-A-0.05-0.1-0.3-N	**35269**
			25	VRB516E-C25-AC-0.05-0.1-0.3-N	**35260**	VRB516E-C25-A-0.05-0.1-0.3-N	**35270**
			32	VRB516E-C32-AC-0.05-0.1-0.3-N	**35261**	VRB516E-C32-A-0.05-0.1-0.3-N	**35271**
			40	VRB516E-C40-AC-0.05-0.1-0.3-N	**35262**	VRB516E-C40-A-0.05-0.1-0.3-N	**35272**
			50	VRB516E-C50-AC-0.05-0.1-0.3-N	**35263**	VRB516E-C50-A-0.05-0.1-0.3-N	**35273**
			63	VRB516E-C63-AC-0.05-0.1-0.3-N	**35264**	VRB516E-C63-A-0.05-0.1-0.3-N	**35274**
			80	VRB516E-C80-AC-0.05-0.1-0.3-N	**35265**	VRB516E-C80-A-0.05-0.1-0.3-N	**35275**

Selection and ordering data

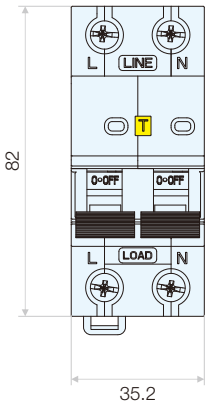
Icn = 6 kA
Characteristic D
General type, instantaneous

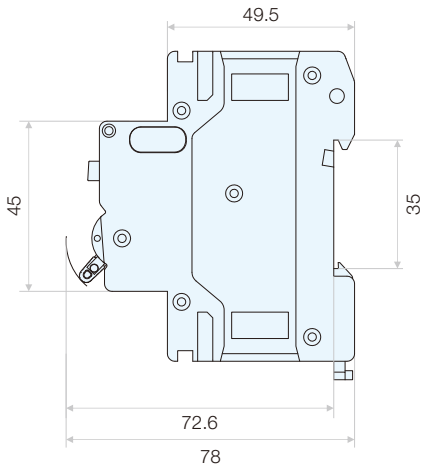
	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type AC		Type A	
				Type code	Order code	Type code	Order code
	1P+N 230 V AC	30	6	VRB515E-D6-AC-0.03-N	**38341**	VRB515E-D6-A-0.03-N	**38401**
			10	VRB515E-D10-AC-0.03-N	**38342**	VRB515E-D10-A-0.03-N	**38402**
			16	VRB515E-D16-AC-0.03-N	**38343**	VRB515E-D16-A-0.03-N	**38403**
			20	VRB515E-D20-AC-0.03-N	**38344**	VRB515E-D20-A-0.03-N	**38404**
			25	VRB515E-D25-AC-0.03-N	**38345**	VRB515E-D25-A-0.03-N	**38405**
			32	VRB515E-D32-AC-0.03-N	**38346**	VRB515E-D32-A-0.03-N	**38406**
			40	VRB515E-D40-AC-0.03-N	**38347**	VRB515E-D40-A-0.03-N	**38407**
			50	VRB515E-D50-AC-0.03-N	**38348**	VRB515E-D50-A-0.03-N	**38408**
			63	VRB515E-D63-AC-0.03-N	**38349**	VRB515E-D63-A-0.03-N	**38409**
			80	VRB515E-D80-AC-0.03-N	**38350**	VRB515E-D80-A-0.03-N	**38410**
		100	6	VRB515E-D6-AC-0.1-N	**38351**	VRB515E-D6-A-0.1-N	**38411**
			10	VRB515E-D10-AC-0.1-N	**38352**	VRB515E-D10-A-0.1-N	**38412**
			16	VRB515E-D16-AC-0.1-N	**38353**	VRB515E-D16-A-0.1-N	**38413**
			20	VRB515E-D20-AC-0.1-N	**38354**	VRB515E-D20-A-0.1-N	**38414**
			25	VRB515E-D25-AC-0.1-N	**38355**	VRB515E-D25-A-0.1-N	**38415**
			32	VRB515E-D32-AC-0.1-N	**38356**	VRB515E-D32-A-0.1-N	**38416**
			40	VRB515E-D40-AC-0.1-N	**38357**	VRB515E-D40-A-0.1-N	**38417**
			50	VRB515E-D50-AC-0.1-N	**38358**	VRB515E-D50-A-0.1-N	**38418**
			63	VRB515E-D63-AC-0.1-N	**38359**	VRB515E-D63-A-0.1-N	**38419**
			80	VRB515E-D80-AC-0.1-N	**38360**	VRB515E-D80-A-0.1-N	**38420**
		300	6	VRB515E-D6-AC-0.3-N	**38361**	VRB515E-D6-A-0.3-N	**38421**
			10	VRB515E-D10-AC-0.3-N	**38362**	VRB515E-D10-A-0.3-N	**38422**
			16	VRB515E-D16-AC-0.3-N	**38363**	VRB515E-D16-A-0.3-N	**38423**
			20	VRB515E-D20-AC-0.3-N	**38364**	VRB515E-D20-A-0.3-N	**38424**
			25	VRB515E-D25-AC-0.3-N	**38365**	VRB515E-D25-A-0.3-N	**38425**
			32	VRB515E-D32-AC-0.3-N	**38366**	VRB515E-D32-A-0.3-N	**38426**
			40	VRB515E-D40-AC-0.3-N	**38367**	VRB515E-D40-A-0.3-N	**38427**
			50	VRB515E-D50-AC-0.3-N	**38368**	VRB515E-D50-A-0.3-N	**38428**
			63	VRB515E-D63-AC-0.3-N	**38369**	VRB515E-D63-A-0.3-N	**38429**
			80	VRB515E-D80-AC-0.3-N	**38370**	VRB515E-D80-A-0.3-N	**38430**
	3P+N 400 V AC	30	6	VRB516E-D6-AC-0.03-N	**38371**	VRB516E-D6-A-0.03-N	**38431**
			10	VRB516E-D10-AC-0.03-N	**38372**	VRB516E-D10-A-0.03-N	**38432**
			16	VRB516E-D16-AC-0.03-N	**38373**	VRB516E-D16-A-0.03-N	**38433**
			20	VRB516E-D20-AC-0.03-N	**38374**	VRB516E-D20-A-0.03-N	**38434**
			25	VRB516E-D25-AC-0.03-N	**38375**	VRB516E-D25-A-0.03-N	**38435**
			32	VRB516E-D32-AC-0.03-N	**38376**	VRB516E-D32-A-0.03-N	**38436**
			40	VRB516E-D40-AC-0.03-N	**38377**	VRB516E-D40-A-0.03-N	**38437**
			50	VRB516E-D50-AC-0.03-N	**38378**	VRB516E-D50-A-0.03-N	**38438**
			63	VRB516E-D63-AC-0.03-N	**38379**	VRB516E-D63-A-0.03-N	**38439**
			80	VRB516E-D80-AC-0.03-N	**38380**	VRB516E-D80-A-0.03-N	**38440**
		100	6	VRB516E-D6-AC-0.1-N	**38381**	VRB516E-D6-A-0.1-N	**38441**
			10	VRB516E-D10-AC-0.1-N	**38382**	VRB516E-D10-A-0.1-N	**38442**
			16	VRB516E-D16-AC-0.1-N	**38383**	VRB516E-D16-A-0.1-N	**38443**
			20	VRB516E-D20-AC-0.1-N	**38384**	VRB516E-D20-A-0.1-N	**38444**
			25	VRB516E-D25-AC-0.1-N	**38385**	VRB516E-D25-A-0.1-N	**38445**
			32	VRB516E-D32-AC-0.1-N	**38386**	VRB516E-D32-A-0.1-N	**38446**
			40	VRB516E-D40-AC-0.1-N	**38387**	VRB516E-D40-A-0.1-N	**38447**
			50	VRB516E-D50-AC-0.1-N	**38388**	VRB516E-D50-A-0.1-N	**38448**
			63	VRB516E-D63-AC-0.1-N	**38389**	VRB516E-D63-A-0.1-N	**34719**
			80	VRB516E-D80-AC-0.1-N	**38390**	VRB516E-D80-A-0.1-N	**34720**
		300	6	VRB516E-D6-AC-0.3-N	**38391**	VRB516E-D6-A-0.3-N	**34721**
			10	VRB516E-D10-AC-0.3-N	**38392**	VRB516E-D10-A-0.3-N	**34722**
			16	VRB516E-D16-AC-0.3-N	**38393**	VRB516E-D16-A-0.3-N	**34723**
			20	VRB516E-D20-AC-0.3-N	**38394**	VRB516E-D20-A-0.3-N	**34724**
			25	VRB516E-D25-AC-0.3-N	**38395**	VRB516E-D25-A-0.3-N	**34725**
			32	VRB516E-D32-AC-0.3-N	**38396**	VRB516E-D32-A-0.3-N	**34726**
			40	VRB516E-D40-AC-0.3-N	**38397**	VRB516E-D40-A-0.3-N	**38333**
			50	VRB516E-D50-AC-0.3-N	**38398**	VRB516E-D50-A-0.3-N	**38334**
			63	VRB516E-D63-AC-0.3-N	**38399**	VRB516E-D63-A-0.3-N	**36493**
			80	VRB516E-D80-AC-0.3-N	**38400**	VRB516E-D80-A-0.3-N	**36494**
		50-100-300	6	VRB516E-D6-AC-0.05-0.1-0.3-N	**15774**	VRB516E-D6-A-0.05-0.1-0.3-N	**15784**
			10	VRB516E-D10-AC-0.05-0.1-0.3-N	**15775**	VRB516E-D10-A-0.05-0.1-0.3-N	**15785**
			16	VRB516E-D16-AC-0.05-0.1-0.3-N	**15776**	VRB516E-D16-A-0.05-0.1-0.3-N	**15786**
			20	VRB516E-D20-AC-0.05-0.1-0.3-N	**15777**	VRB516E-D20-A-0.05-0.1-0.3-N	**15787**
			25	VRB516E-D25-AC-0.05-0.1-0.3-N	**15778**	VRB516E-D25-A-0.05-0.1-0.3-N	**15788**
			32	VRB516E-D32-AC-0.05-0.1-0.3-N	**15779**	VRB516E-D32-A-0.05-0.1-0.3-N	**15789**
			40	VRB516E-D40-AC-0.05-0.1-0.3-N	**15780**	VRB516E-D40-A-0.05-0.1-0.3-N	**15790**
			50	VRB516E-D50-AC-0.05-0.1-0.3-N	**15781**	VRB516E-D50-A-0.05-0.1-0.3-N	**15791**
			63	VRB516E-D63-AC-0.05-0.1-0.3-N	**15782**	VRB516E-D63-A-0.05-0.1-0.3-N	**15792**
			80	VRB516E-D80-AC-0.05-0.1-0.3-N	**15783**	VRB516E-D80-A-0.05-0.1-0.3-N	**15793**

Outline and installation dimensions

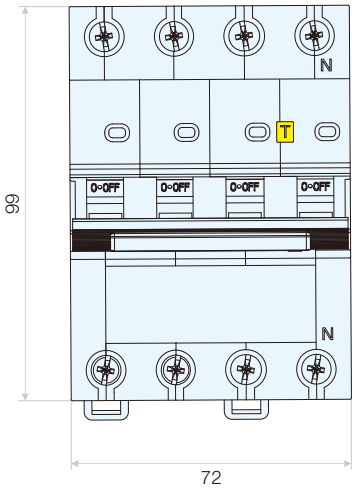
unit in mm

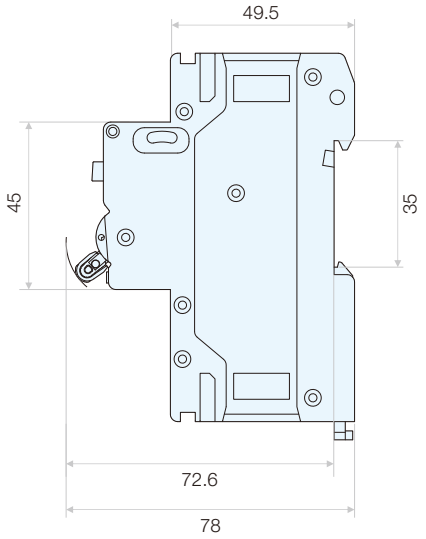
VRB515E





VRB516E





Residual Current Circuit Breakers with Overcurrent Protection
Series 3SLB5M

Functions

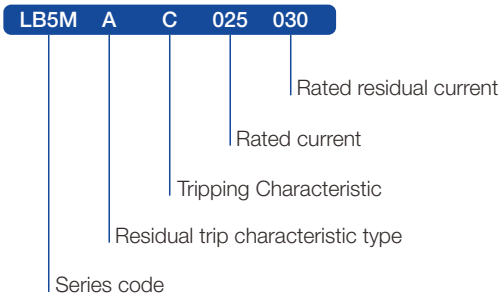
- Switching and isolation function
- Protection against overload and short-circuit currents
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building

Technical specifications

- Standard: IEC 61009-1
- Type (wave form of the earth leakage sensed): AC, A, B
- Number of pole: 1P+N, 3P+N
- Rated current In (A): 6, 10, 16, 20, 25, 32, 40, 50, 63
- Rated voltage Ue (V AC): 230
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 10, 30, 100, 300
- Rated breaking capacity acc. to IEC 61009-1 ultimate Icn (kA): 6, 10
- Rated residual breaking capacity IΔm (kA): 6, 10
- Rated impulse withstand voltage (1.2/50) Uimp (kV): 6
- Dielectric test voltage at ind. freq. for 1 min. (kV): 2.5
- Surge current resistance (wave 8/20) (A): 3000
- Tripping characteristic: B, C
- Characteristic B (In): 3-5
- Characteristic C (In): 5-10
- Electrical life (times): 4,000
- Mechanical life (times): 10,000
- Degree of protection: IP20, with connected conductors Mounting
- position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25 Terminals
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity Storage
- temperature (°C): -40 ~ +75
- Altitude (meters): Max. 2000



Instruction of type code



Features

- The combination of an RCCB and a miniature circuit breaker in a compact design for personnel, fire and line protection.
- Electromagnetic type, voltage independent.
- The MCB part protects lines against overload and short circuits and is available in characteristics B and C.
- The handle provides a clear indication of the contact position.
- The earth reference cable ensures protection against earth leakage in case of loss of supply neutral.

Selection and ordering data

Type AC

Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B Type code	Characteristic C Type code
1P+N	10	6	LB5MC 2B06/010	LB5MC 2C06/010
		10	LB5MC 2B10/010	LB5MC 2C10/010
		16	LB5MC 2B16/010	LB5MC 2C16/010
		20	LB5MC 2B20/010	LB5MC 2C20/010
		25	LB5MC 2B25/010	LB5MC 2C25/010
		32	LB5MC 2B32/010	LB5MC 2C32/010
		40	LB5MC 2B40/010	LB5MC 2C40/010
		50	LB5MC 2B50/010	LB5MC 2C50/010
		63	LB5MC 2B63/010	LB5MC 2C63/010
	30	6	LB5MC 2B06/030	LB5MC 2C06/030
		10	LB5MC 2B10/030	LB5MC 2C10/030
		16	LB5MC 2B16/030	LB5MC 2C16/030
		20	LB5MC 2B20/030	LB5MC 2C20/030
		25	LB5MC 2B25/030	LB5MC 2C25/030
		32	LB5MC 2B32/030	LB5MC 2C32/030
		40	LB5MC 2B40/030	LB5MC 2C40/030
		50	LB5MC 2B50/030	LB5MC 2C50/030
	100	63	LB5MC 2B63/030	LB5MC 2C63/030
		6	LB5MC 2B06/100	LB5MC 2C06/100
		10	LB5MC 2B10/100	LB5MC 2C10/100
		16	LB5MC 2B16/100	LB5MC 2C16/100
		20	LB5MC 2B20/100	LB5MC 2C20/100
		25	LB5MC 2B25/100	LB5MC 2C25/100
		32	LB5MC 2B32/100	LB5MC 2C32/100
		40	LB5MC 2B40/100	LB5MC 2C40/100
	300	50	LB5MC 2B50/100	LB5MC 2C50/100
		63	LB5MC 2B60/100	LB5MC 2C63/100
		6	LB5MC 2B06/300	LB5MC 2C06/300
		10	LB5MC 2B10/300	LB5MC 2C10/300
		16	LB5MC 2B16/300	LB5MC 2C16/300
		20	LB5MC 2B20/300	LB5MC 2C20/300
		25	LB5MC 2B25/300	LB5MC 2C25/300
		32	LB5MC 2B32/300	LB5MC 2C32/300
		40	LB5MC 2B40/300	LB5MC 2C40/300
		50	LB5MC 2B50/300	LB5MC 2C50/300
		63	LB5MC 2B60/300	LB5MC 2C63/300
3P+N	10	6	LB5MC 4B06/010	LB5MC 4C06/010
		10	LB5MC 4B10/010	LB5MC 4C10/010
		16	LB5MC 4B16/010	LB5MC 4C16/010
		20	LB5MC 4B20/010	LB5MC 4C20/010
		25	LB5MC 4B25/010	LB5MC 4C25/010
		32	LB5MC 4B32/010	LB5MC 4C32/010
		40	LB5MC 4B40/010	LB5MC 4C40/010
		50	LB5MC 4B50/010	LB5MC 4C50/010
		63	LB5MC 4B63/010	LB5MC 4C63/010
	30	6	LB5MC 4B06/030	LB5MC 4C06/030
		10	LB5MC 4B10/030	LB5MC 4C10/030
		16	LB5MC 4B16/030	LB5MC 4C16/030
		20	LB5MC 4B20/030	LB5MC 4C20/030
		25	LB5MC 4B25/030	LB5MC 4C25/030
		32	LB5MC 4B32/030	LB5MC 4C32/030
		40	LB5MC 4B40/030	LB5MC 4C40/030
		50	LB5MC 4B50/030	LB5MC 4C50/030
		63	LB5MC 4B63/030	LB5MC 4C63/030
	100	6	LB5MC 4B06/100	LB5MC 4C06/100
		10	LB5MC 4B10/100	LB5MC 4C10/100
		16	LB5MC 4B16/100	LB5MC 4C16/100
		20	LB5MC 4B20/100	LB5MC 4C20/100
		25	LB5MC 4B25/100	LB5MC 4C25/100
		32	LB5MC 4B32/100	LB5MC 4C32/100
		40	LB5MC 4B40/100	LB5MC 4C40/100
		50	LB5MC 4B50/100	LB5MC 4C50/100
		63	LB5MC 4B60/100	LB5MC 4C63/100
	300	6	LB5MC 4B06/300	LB5MC 4C06/300
		10	LB5MC 4B10/300	LB5MC 4C10/300
		16	LB5MC 4B16/300	LB5MC 4C16/300
		20	LB5MC 4B20/300	LB5MC 4C20/300
		25	LB5MC 4B25/300	LB5MC 4C25/300
		32	LB5MC 4B32/300	LB5MC 4C32/300
		40	LB5MC 4B40/300	LB5MC 4C40/300
		50	LB5MC 4B50/300	LB5MC 4C50/300
		63	LB5MC 4B60/300	LB5MC 4C63/300

Selection and ordering data

Type A

Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B Type code	Characteristic C Type code
1P+N	10	6	LB5MA 2B06/010	LB5MA 2C06/010
		10	LB5MA 2B10/010	LB5MA 2C10/010
		16	LB5MA 2B16/010	LB5MA 2C16/010
		20	LB5MA 2B20/010	LB5MA 2C20/010
		25	LB5MA 2B25/010	LB5MA 2C25/010
		32	LB5MA 2B32/010	LB5MA 2C32/010
		40	LB5MA 2B40/010	LB5MA 2C40/010
		50	LB5MA 2B50/010	LB5MA 2C50/010
		63	LB5MA 2B63/010	LB5MA 2C63/010
	30	6	LB5MA 2B06/030	LB5MA 2C06/030
		10	LB5MA 2B10/030	LB5MA 2C10/030
		16	LB5MA 2B16/030	LB5MA 2C16/030
		20	LB5MA 2B20/030	LB5MA 2C20/030
		25	LB5MA 2B25/030	LB5MA 2C25/030
		32	LB5MA 2B32/030	LB5MA 2C32/030
		40	LB5MA 2B40/030	LB5MA 2C40/030
		50	LB5MA 2B50/030	LB5MA 2C50/030
	100	63	LB5MA 2B63/030	LB5MA 2C63/030
		6	LB5MA 2B06/100	LB5MA 2C06/100
		10	LB5MA 2B10/100	LB5MA 2C10/100
		16	LB5MA 2B16/100	LB5MA 2C16/100
		20	LB5MA 2B20/100	LB5MA 2C20/100
		25	LB5MA 2B25/100	LB5MA 2C25/100
		32	LB5MA 2B32/100	LB5MA 2C32/100
		40	LB5MA 2B40/100	LB5MA 2C40/100
	300	50	LB5MA 2B50/100	LB5MA 2C50/100
		63	LB5MA 2B60/100	LB5MA 2C63/100
		6	LB5MA 2B06/300	LB5MA 2C06/300
		10	LB5MA 2B10/300	LB5MA 2C10/300
		16	LB5MA 2B16/300	LB5MA 2C16/300
		20	LB5MA 2B20/300	LB5MA 2C20/300
		25	LB5MA 2B25/300	LB5MA 2C25/300
		32	LB5MA 2B32/300	LB5MA 2C32/300
		40	LB5MA 2B40/300	LB5MA 2C40/300
		50	LB5MA 2B50/300	LB5MA 2C50/300
		63	LB5MA 2B60/300	LB5MA 2C63/300
3P+N	10	6	LB5MA 4B06/010	LB5MA 4C06/010
		10	LB5MA 4B10/010	LB5MA 4C10/010
		16	LB5MA 4B16/010	LB5MA 4C16/010
		20	LB5MA 4B20/010	LB5MA 4C20/010
		25	LB5MA 4B25/010	LB5MA 4C25/010
		32	LB5MA 4B32/010	LB5MA 4C32/010
		40	LB5MA 4B40/010	LB5MA 4C40/010
		50	LB5MA 4B50/010	LB5MA 4C50/010
		63	LB5MA 4B63/010	LB5MA 4C63/010
	30	6	LB5MA 4B06/030	LB5MA 4C06/030
		10	LB5MA 4B10/030	LB5MA 4C10/030
		16	LB5MA 4B16/030	LB5MA 4C16/030
		20	LB5MA 4B20/030	LB5MA 4C20/030
		25	LB5MA 4B25/030	LB5MA 4C25/030
		32	LB5MA 4B32/030	LB5MA 4C32/030
		40	LB5MA 4B40/030	LB5MA 4C40/030
		50	LB5MA 4B50/030	LB5MA 4C50/030
		63	LB5MA 4B63/030	LB5MA 4C63/030
	100	6	LB5MA 4B06/100	LB5MA 4C06/100
		10	LB5MA 4B10/100	LB5MA 4C10/100
		16	LB5MA 4B16/100	LB5MA 4C16/100
		20	LB5MA 4B20/100	LB5MA 4C20/100
		25	LB5MA 4B25/100	LB5MA 4C25/100
		32	LB5MA 4B32/100	LB5MA 4C32/100
		40	LB5MA 4B40/100	LB5MA 4C40/100
		50	LB5MA 4B50/100	LB5MA 4C50/100
		63	LB5MA 4B60/100	LB5MA 4C63/100
	300	6	LB5MA 4B06/300	LB5MA 4C06/300
		10	LB5MA 4B10/300	LB5MA 4C10/300
		16	LB5MA 4B16/300	LB5MA 4C16/300
		20	LB5MA 4B20/300	LB5MA 4C20/300
		25	LB5MA 4B25/300	LB5MA 4C25/300
		32	LB5MA 4B32/300	LB5MA 4C32/300
		40	LB5MA 4B40/300	LB5MA 4C40/300
		50	LB5MA 4B50/300	LB5MA 4C50/300
		63	LB5MA 4B60/300	LB5MA 4C63/300

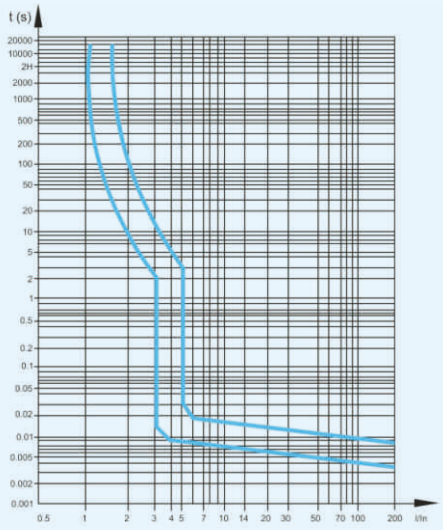
Selection and ordering data

Type B

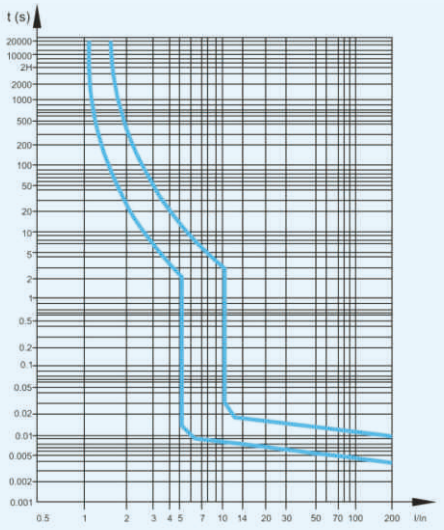
Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B Type code	Characteristic C Type code
1P+N	10	6	LB5MB 2B06/010	LB5MB 2C06/010
		10	LB5MB 2B10/010	LB5MB 2C10/010
		16	LB5MB 2B16/010	LB5MB 2C16/010
		20	LB5MB 2B20/010	LB5MB 2C20/010
		25	LB5MB 2B25/010	LB5MB 2C25/010
		32	LB5MB 2B32/010	LB5MB 2C32/010
		40	LB5MB 2B40/010	LB5MB 2C40/010
		50	LB5MB 2B50/010	LB5MB 2C50/010
		63	LB5MB 2B63/010	LB5MB 2C63/010
	30	6	LB5MB 2B06/030	LB5MB 2C06/030
		10	LB5MB 2B10/030	LB5MB 2C10/030
		16	LB5MB 2B16/030	LB5MB 2C16/030
		20	LB5MB 2B20/030	LB5MB 2C20/030
		25	LB5MB 2B25/030	LB5MB 2C25/030
		32	LB5MB 2B32/030	LB5MB 2C32/030
		40	LB5MB 2B40/030	LB5MB 2C40/030
		50	LB5MB 2B50/030	LB5MB 2C50/030
	100	63	LB5MB 2B63/030	LB5MB 2C63/030
		6	LB5MB 2B06/100	LB5MB 2C06/100
		10	LB5MB 2B10/100	LB5MB 2C10/100
		16	LB5MB 2B16/100	LB5MB 2C16/100
		20	LB5MB 2B20/100	LB5MB 2C20/100
		25	LB5MB 2B25/100	LB5MB 2C25/100
		32	LB5MB 2B32/100	LB5MB 2C32/100
		40	LB5MB 2B40/100	LB5MB 2C40/100
	300	50	LB5MB 2B50/100	LB5MB 2C50/100
		63	LB5MB 2B60/100	LB5MB 2C63/100
		6	LB5MB 2B06/300	LB5MB 2C06/300
		10	LB5MB 2B10/300	LB5MB 2C10/300
		16	LB5MB 2B16/300	LB5MB 2C16/300
		20	LB5MB 2B20/300	LB5MB 2C20/300
		25	LB5MB 2B25/300	LB5MB 2C25/300
		32	LB5MB 2B32/300	LB5MB 2C32/300
		40	LB5MB 2B40/300	LB5MB 2C40/300
		50	LB5MB 2B50/300	LB5MB 2C50/300
		63	LB5MB 2B60/300	LB5MB 2C63/300
3P+N	10	6	LB5MB 4B06/010	LB5MB 4C06/010
		10	LB5MB 4B10/010	LB5MB 4C10/010
		16	LB5MB 4B16/010	LB5MB 4C16/010
		20	LB5MB 4B20/010	LB5MB 4C20/010
		25	LB5MB 4B25/010	LB5MB 4C25/010
		32	LB5MB 4B32/010	LB5MB 4C32/010
		40	LB5MB 4B40/010	LB5MB 4C40/010
		50	LB5MB 4B50/010	LB5MB 4C50/010
		63	LB5MB 4B63/010	LB5MB 4C63/010
	30	6	LB5MB 4B06/030	LB5MB 4C06/030
		10	LB5MB 4B10/030	LB5MB 4C10/030
		16	LB5MB 4B16/030	LB5MB 4C16/030
		20	LB5MB 4B20/030	LB5MB 4C20/030
		25	LB5MB 4B25/030	LB5MB 4C25/030
		32	LB5MB 4B32/030	LB5MB 4C32/030
		40	LB5MB 4B40/030	LB5MB 4C40/030
		50	LB5MB 4B50/030	LB5MB 4C50/030
		63	LB5MB 4B63/030	LB5MB 4C63/030
	100	6	LB5MB 4B06/100	LB5MB 4C06/100
		10	LB5MB 4B10/100	LB5MB 4C10/100
		16	LB5MB 4B16/100	LB5MB 4C16/100
		20	LB5MB 4B20/100	LB5MB 4C20/100
		25	LB5MB 4B25/100	LB5MB 4C25/100
		32	LB5MB 4B32/100	LB5MB 4C32/100
		40	LB5MB 4B40/100	LB5MB 4C40/100
		50	LB5MB 4B50/100	LB5MB 4C50/100
		63	LB5MB 4B60/100	LB5MB 4C63/100
	300	6	LB5MB 4B06/300	LB5MB 4C06/300
		10	LB5MB 4B10/300	LB5MB 4C10/300
		16	LB5MB 4B16/300	LB5MB 4C16/300
		20	LB5MB 4B20/300	LB5MB 4C20/300
		25	LB5MB 4B25/300	LB5MB 4C25/300
		32	LB5MB 4B32/300	LB5MB 4C32/300
		40	LB5MB 4B40/300	LB5MB 4C40/300
		50	LB5MB 4B50/300	LB5MB 4C50/300
		63	LB5MB 4B60/300	LB5MB 4C63/300

Tripping characteristic curves

Characteristic B



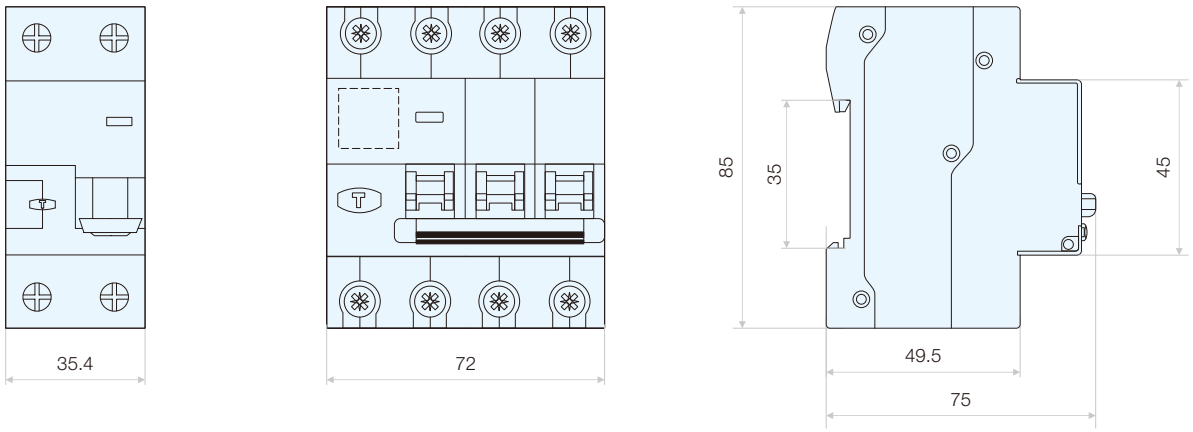
Characteristic C



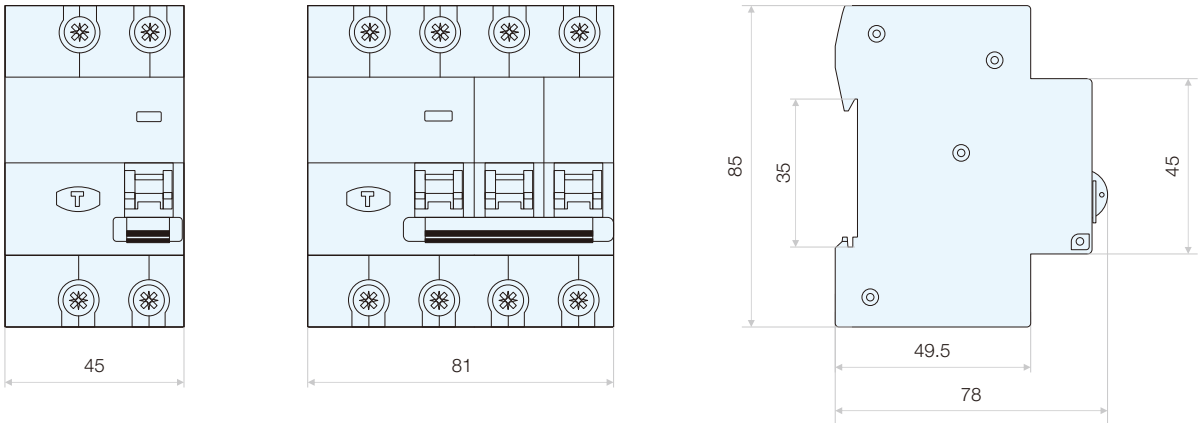
Outline and installation dimensions

unit in mm

Type A/AC



Type B



Residual Current Circuit Breakers with Overcurrent Protection
Series 3SB71L-50

Functions

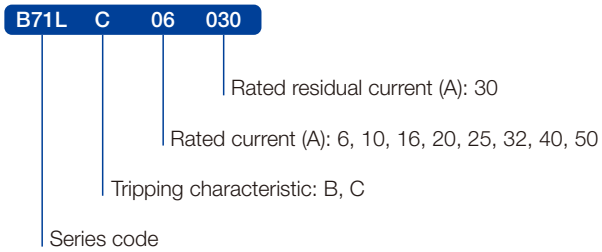
- Switching and isolation function.
- Protection against overload and short-circuit currents.
- Protection against the effects of sinusoidal alternating earth fault currents.
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults.
- Used in residential building and distribution boards.



Technical specifications

- Standard: IEC 61009-1
- Type (wave form of the earth leakage sensed): AC
- Number of pole: 1+N (1 module)
- Rated current In (A): 6, 10, 16, 20, 25, 32, 40, 50
- Rated voltage Ue (V AC): 230
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 30
- Rated breaking capacity acc. to IEC 61009-1 ultimate Icn (kA): 10
- Rated breaking capacity acc. to IEC 60947-2 ultimate Icu (kA): 10
- Rated residual breaking capacity IΔm (kA): 10
- Rated impulse withstand voltage (1.2/50) Uimp (kV): 4
- Dielectric test voltage at ind. freq. for 1 min. (kV): 2
- Surge current resistance (wave 8/20) (A): 3000
- Tripping characteristic: B, C
- Characteristic B (In): 3-5
- Characteristic C (In): 5-10
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25
- Terminals
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max. 2000

Instruction of type code



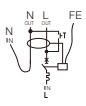
Features

- The combination of an RCCB and a miniature circuit breaker in a compact design.
- The MCB part protects lines against overload and short circuits and is available in characteristics B and C.
- Electronic Type, voltage dependent
- The handle provides a clear indication of the contact position.
- The earth reference cable ensures protection against earth leakage in case of loss of supply neutral.

Selection and ordering data

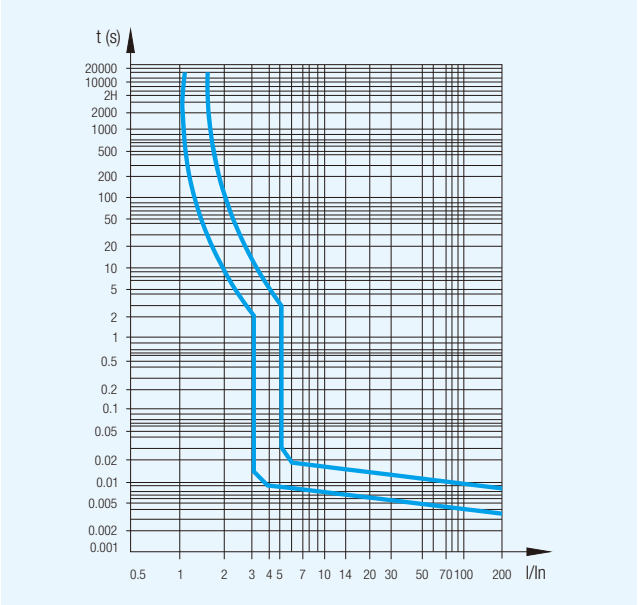
Type AC

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C	
				Type code	Order code	Type code	Order code
	1P+N	30	6	B71L B06/030	**23589**	B71L C06/030	**23597**
			10	B71L B10/030	**23590**	B71L C10/030	**23598**
			16	B71L B16/030	**23591**	B71L C16/030	**23599**
			20	B71L B20/030	**23592**	B71L C20/030	**23600**
			25	B71L B25/030	**23593**	B71L C25/030	**23601**
			32	B71L B32/030	**23594**	B71L C32/030	**23602**
			40	B71L B40/030	**23595**	B71L C40/030	**23603**
			50	B71L B50/030	**23596**	B71L C50/030	**23604**

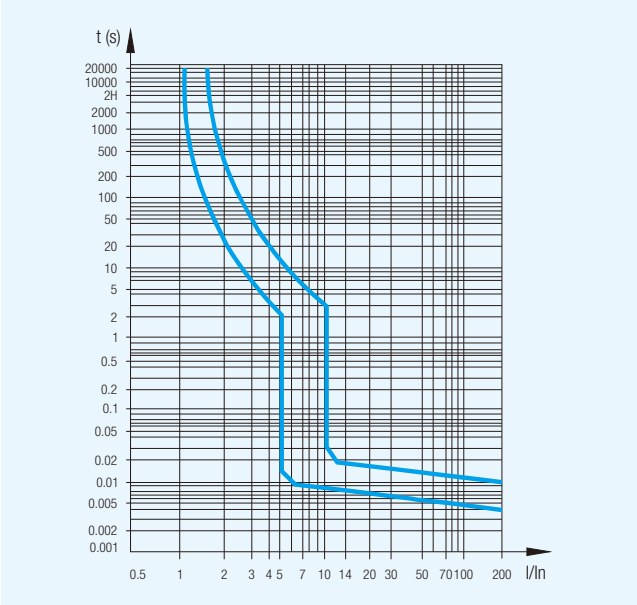


Tripping characteristic curves

Characteristic B

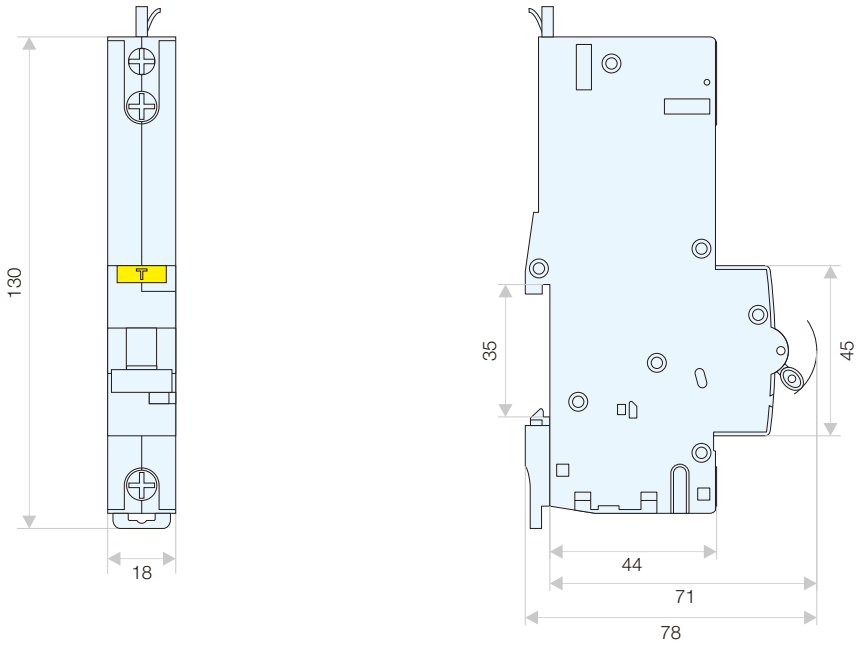


Characteristic C



Outline and installation dimensions

unit in mm



Residual Current Circuit Breakers with Overcurrent Protection
Series 3SB71LN

Functions

- Switching and isolation function
- Protection against overload and short-circuit currents
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts.
- Protection against fire hazard caused by insulation faults
- Used in residential building



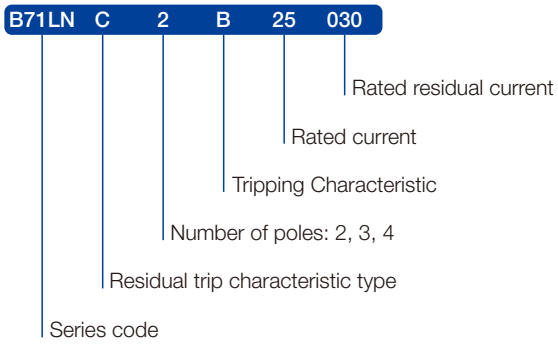
Technical specifications

- Standard: IEC 61009-1
- Type (wave form of the earth leakage sensed): AC, A
- Number of poles (P): 2, 3, 4
- Rated current In (A): 6, 10, 16, 20, 25, 32, 40
- Rated voltage Ue (V AC): 230/400
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 30, 100, 300
- Rated breaking capacity acc. to IEC 61009-1 ultimate Icn (kA): 10
- Rated breaking capacity acc. to IEC 60947-2 ultimate Icu (kA): 10
- Rated residual breaking capacity IΔm (kA): 6
- Rated impulse withstand voltage (1.2/50) Uimp (kV): 4
- Dielectric test voltage at ind. freq. for 1 min. (kV): 2.5
- Surge current resistance (wave 8/20) (A): 3000
- Tripping characteristic: B, C, D
  - Characteristic B (In): 3-5
  - Characteristic C (In): 5-10
  - Characteristic D (In): 10-14
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections
  - Solid and stranded (mm^2): 0.75-35
  - Finely stranded with end sleeve (mm^2): 0.75-25
- Terminals
  - Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000

References

- Additional components: page 85 ~ 86

Instruction of type code

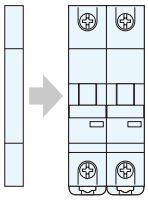


Features

- The combination of an RCCB and a miniature circuit breaker in a compact design for personnel, fire and line protection.
- Electromagnetic type, voltage independent.
- The MCB part protects lines against overload and short circuits and is available in characteristics B, C and D.
- The handle provides a clear indication of the contact position.

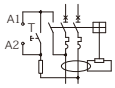
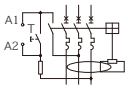
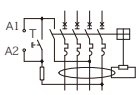
Add-on devices

Auxiliaries



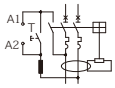
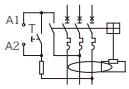
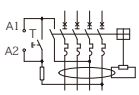
Selection and ordering data

Type AC

Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D	
			Type code	Order code	Type code	Order code	Type code	Order code
2	30	6	B71LNC 2B06/030H	**16947**	B71LNC 2C06/030H	**16968**	B71LNC 2D06/030H	**16989**
		10	B71LNC 2B10/030H	**16948**	B71LNC 2C10/030H	**16969**	B71LNC 2D10/030H	**16990**
		16	B71LNC 2B16/030H	**16949**	B71LNC 2C16/030H	**16970**	B71LNC 2D16/030H	**16991**
		20	B71LNC 2B20/030H	**16950**	B71LNC 2C20/030H	**16971**	B71LNC 2D20/030H	**16992**
		25	B71LNC 2B25/030H	**16951**	B71LNC 2C25/030H	**16972**	B71LNC 2D25/030H	**16993**
		32	B71LNC 2B32/030H	**16952**	B71LNC 2C32/030H	**16973**	B71LNC 2D32/030H	**16994**
		40	B71LNC 2B40/030H	**16953**	B71LNC 2C40/030H	**16974**	B71LNC 2D40/030H	**16995**
	100	6	B71LNC 2B06/100H	**17010**	B71LNC 2C06/100H	**17031**	B71LNC 2D06/100H	**17052**
		10	B71LNC 2B10/100H	**17011**	B71LNC 2C10/100H	**17032**	B71LNC 2D10/100H	**17053**
		16	B71LNC 2B16/100H	**17012**	B71LNC 2C16/100H	**17033**	B71LNC 2D16/100H	**17054**
		20	B71LNC 2B20/100H	**17013**	B71LNC 2C20/100H	**17034**	B71LNC 2D20/100H	**17055**
		25	B71LNC 2B25/100H	**17014**	B71LNC 2C25/100H	**17035**	B71LNC 2D25/100H	**17056**
		32	B71LNC 2B32/100H	**17015**	B71LNC 2C32/100H	**17036**	B71LNC 2D32/100H	**17057**
		40	B71LNC 2B40/100H	**17016**	B71LNC 2C40/100H	**17037**	B71LNC 2D40/100H	**17058**
	300	6	B71LNC 2B06/300H	**17073**	B71LNC 2C06/300H	**17094**	B71LNC 2D06/300H	**17115**
		10	B71LNC 2B10/300H	**17074**	B71LNC 2C10/300H	**17095**	B71LNC 2D10/300H	**17116**
		16	B71LNC 2B16/300H	**17075**	B71LNC 2C16/300H	**17096**	B71LNC 2D16/300H	**17117**
		20	B71LNC 2B20/300H	**17076**	B71LNC 2C20/300H	**17097**	B71LNC 2D20/300H	**17118**
		25	B71LNC 2B25/300H	**17077**	B71LNC 2C25/300H	**17098**	B71LNC 2D25/300H	**17119**
		32	B71LNC 2B32/300H	**17078**	B71LNC 2C32/300H	**17099**	B71LNC 2D32/300H	**17120**
		40	B71LNC 2B40/300H	**17079**	B71LNC 2C40/300H	**17100**	B71LNC 2D40/300H	**17121**
3	30	6	B71LNC 3B06/030H	**16954**	B71LNC 3C06/030H	**16975**	B71LNC 3D06/030H	**16996**
		10	B71LNC 3B10/030H	**16955**	B71LNC 3C10/030H	**16976**	B71LNC 3D10/030H	**16997**
		16	B71LNC 3B16/030H	**16956**	B71LNC 3C16/030H	**16977**	B71LNC 3D16/030H	**16998**
		20	B71LNC 3B20/030H	**16957**	B71LNC 3C20/030H	**16978**	B71LNC 3D20/030H	**16999**
		25	B71LNC 3B25/030H	**16958**	B71LNC 3C25/030H	**16979**	B71LNC 3D25/030H	**17000**
		32	B71LNC 3B32/030H	**16959**	B71LNC 3C32/030H	**16980**	B71LNC 3D32/030H	**17001**
		40	B71LNC 3B40/030H	**16960**	B71LNC 3C40/030H	**16981**	B71LNC 3D40/030H	**17002**
	100	6	B71LNC 3B06/100H	**17017**	B71LNC 3C06/100H	**17038**	B71LNC 3D06/100H	**17059**
		10	B71LNC 3B10/100H	**17018**	B71LNC 3C10/100H	**17039**	B71LNC 3D10/100H	**17060**
		16	B71LNC 3B16/100H	**17019**	B71LNC 3C16/100H	**17040**	B71LNC 3D16/100H	**17061**
		20	B71LNC 3B20/100H	**17020**	B71LNC 3C20/100H	**17041**	B71LNC 3D20/100H	**17062**
		25	B71LNC 3B25/100H	**17021**	B71LNC 3C25/100H	**17042**	B71LNC 3D25/100H	**17063**
		32	B71LNC 3B32/100H	**17022**	B71LNC 3C32/100H	**17043**	B71LNC 3D32/100H	**17064**
		40	B71LNC 3B40/100H	**17023**	B71LNC 3C40/100H	**17044**	B71LNC 3D40/100H	**17065**
	300	6	B71LNC 3B06/300H	**17080**	B71LNC 3C06/300H	**17101**	B71LNC 3D06/300H	**17122**
		10	B71LNC 3B10/300H	**17081**	B71LNC 3C10/300H	**17102**	B71LNC 3D10/300H	**17123**
		16	B71LNC 3B16/300H	**17082**	B71LNC 3C16/300H	**17103**	B71LNC 3D16/300H	**17124**
		20	B71LNC 3B20/300H	**17083**	B71LNC 3C20/300H	**17104**	B71LNC 3D20/300H	**17125**
		25	B71LNC 3B25/300H	**17084**	B71LNC 3C25/300H	**17105**	B71LNC 3D25/300H	**17126**
		32	B71LNC 3B32/300H	**17085**	B71LNC 3C32/300H	**17106**	B71LNC 3D32/300H	**17127**
		40	B71LNC 3B40/300H	**17086**	B71LNC 3C40/300H	**17107**	B71LNC 3D40/300H	**17128**
4	30	6	B71LNC 4B06/030H	**16961**	B71LNC 4C06/030H	**16982**	B71LNC 4D06/030H	**17003**
		10	B71LNC 4B10/030H	**16962**	B71LNC 4C10/030H	**16983**	B71LNC 4D10/030H	**17004**
		16	B71LNC 4B16/030H	**16963**	B71LNC 4C16/030H	**16984**	B71LNC 4D16/030H	**17194**
		20	B71LNC 4B20/030H	**16964**	B71LNC 4C20/030H	**16985**	B71LNC 4D20/030H	**17195**
		25	B71LNC 4B25/030H	**16965**	B71LNC 4C25/030H	**16986**	B71LNC 4D25/030H	**17196**
		32	B71LNC 4B32/030H	**16966**	B71LNC 4C32/030H	**16987**	B71LNC 4D32/030H	**17197**
		40	B71LNC 4B40/030H	**16967**	B71LNC 4C40/030H	**16988**	B71LNC 4D40/030H	**17198**
	100	6	B71LNC 4B06/100H	**17024**	B71LNC 4C06/100H	**17045**	B71LNC 4D06/100H	**17066**
		10	B71LNC 4B10/100H	**17025**	B71LNC 4C10/100H	**17046**	B71LNC 4D10/100H	**17067**
		16	B71LNC 4B16/100H	**17026**	B71LNC 4C16/100H	**17047**	B71LNC 4D16/100H	**17257**
		20	B71LNC 4B20/100H	**17027**	B71LNC 4C20/100H	**17048**	B71LNC 4D20/100H	**17258**
		25	B71LNC 4B25/100H	**17028**	B71LNC 4C25/100H	**17049**	B71LNC 4D25/100H	**17259**
		32	B71LNC 4B32/100H	**17029**	B71LNC 4C32/100H	**17050**	B71LNC 4D32/100H	**17260**
		40	B71LNC 4B40/100H	**17030**	B71LNC 4C40/100H	**17051**	B71LNC 4D40/100H	**17261**
	300	6	B71LNC 4B06/300H	**17087**	B71LNC 4C06/300H	**17108**	B71LNC 4D06/300H	**17129**
		10	B71LNC 4B10/300H	**17088**	B71LNC 4C10/300H	**17109**	B71LNC 4D10/300H	**17130**
		16	B71LNC 4B16/300H	**17089**	B71LNC 4C16/300H	**17110**	B71LNC 4D16/300H	**17320**
		20	B71LNC 4B20/300H	**17090**	B71LNC 4C20/300H	**17111**	B71LNC 4D20/300H	**17321**
		25	B71LNC 4B25/300H	**17091**	B71LNC 4C25/300H	**17112**	B71LNC 4D25/300H	**17322**
		32	B71LNC 4B32/300H	**17092**	B71LNC 4C32/300H	**17113**	B71LNC 4D32/300H	**17323**
		40	B71LNC 4B40/300H	**17093**	B71LNC 4C40/300H	**17114**	B71LNC 4D40/300H	**17324**

Selection and ordering data

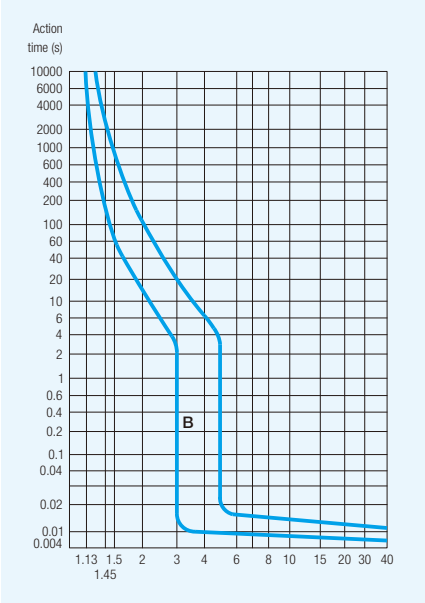
Type A

Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Characteristic B		Characteristic C		Characteristic D	
			Type code	Order code	Type code	Order code	Type code	Order code
2	30	6	B71LNA 2B06/030H	**17136**	B71LNA 2C06/030H	**17157**	B71LNA 2D06/030H	**17178**
		10	B71LNA 2B10/030H	**17137**	B71LNA 2C10/030H	**17158**	B71LNA 2D10/030H	**17179**
		16	B71LNA 2B16/030H	**17138**	B71LNA 2C16/030H	**17159**	B71LNA 2D16/030H	**17180**
		20	B71LNA 2B20/030H	**17139**	B71LNA 2C20/030H	**17160**	B71LNA 2D20/030H	**17181**
		25	B71LNA 2B25/030H	**17140**	B71LNA 2C25/030H	**17161**	B71LNA 2D25/030H	**17182**
		32	B71LNA 2B32/030H	**17141**	B71LNA 2C32/030H	**17162**	B71LNA 2D32/030H	**17183**
		40	B71LNA 2B40/030H	**17142**	B71LNA 2C40/030H	**17163**	B71LNA 2D40/030H	**17184**
	100	6	B71LNA 2B06/100H	**17199**	B71LNA 2C06/100H	**17220**	B71LNA 2D06/100H	**17241**
		10	B71LNA 2B10/100H	**17200**	B71LNA 2C10/100H	**17221**	B71LNA 2D10/100H	**17242**
		16	B71LNA 2B16/100H	**17201**	B71LNA 2C16/100H	**17222**	B71LNA 2D16/100H	**17243**
		20	B71LNA 2B20/100H	**17202**	B71LNA 2C20/100H	**17223**	B71LNA 2D20/100H	**17244**
		25	B71LNA 2B25/100H	**17203**	B71LNA 2C25/100H	**17224**	B71LNA 2D25/100H	**17245**
		32	B71LNA 2B32/100H	**17204**	B71LNA 2C32/100H	**17225**	B71LNA 2D32/100H	**17246**
		40	B71LNA 2B40/100H	**17205**	B71LNA 2C40/100H	**17226**	B71LNA 2D40/100H	**17247**
	300	6	B71LNA 2B06/300H	**17262**	B71LNA 2C06/300H	**17283**	B71LNA 2D06/300H	**17304**
		10	B71LNA 2B10/300H	**17263**	B71LNA 2C10/300H	**17284**	B71LNA 2D10/300H	**17305**
		16	B71LNA 2B16/300H	**17264**	B71LNA 2C16/300H	**17285**	B71LNA 2D16/300H	**17306**
		20	B71LNA 2B20/300H	**17265**	B71LNA 2C20/300H	**17286**	B71LNA 2D20/300H	**17307**
		25	B71LNA 2B25/300H	**17266**	B71LNA 2C25/300H	**17287**	B71LNA 2D25/300H	**17308**
		32	B71LNA 2B32/300H	**17267**	B71LNA 2C32/300H	**17288**	B71LNA 2D32/300H	**17309**
		40	B71LNA 2B40/300H	**17268**	B71LNA 2C40/300H	**17289**	B71LNA 2D40/300H	**17310**
3	30	6	B71LNA 3B06/030H	**17143**	B71LNA 3C06/030H	**17164**	B71LNA 3D06/030H	**17185**
		10	B71LNA 3B10/030H	**17144**	B71LNA 3C10/030H	**17165**	B71LNA 3D10/030H	**17186**
		16	B71LNA 3B16/030H	**17145**	B71LNA 3C16/030H	**17166**	B71LNA 3D16/030H	**17187**
		20	B71LNA 3B20/030H	**17146**	B71LNA 3C20/030H	**17167**	B71LNA 3D20/030H	**17188**
		25	B71LNA 3B25/030H	**17147**	B71LNA 3C25/030H	**17168**	B71LNA 3D25/030H	**17189**
		32	B71LNA 3B32/030H	**17148**	B71LNA 3C32/030H	**17169**	B71LNA 3D32/030H	**17190**
		40	B71LNA 3B40/030H	**17149**	B71LNA 3C40/030H	**17170**	B71LNA 3D40/030H	**17191**
	100	6	B71LNA 3B06/100H	**17206**	B71LNA 3C06/100H	**17227**	B71LNA 3D06/100H	**17248**
		10	B71LNA 3B10/100H	**17207**	B71LNA 3C10/100H	**17228**	B71LNA 3D10/100H	**17249**
		16	B71LNA 3B16/100H	**17208**	B71LNA 3C16/100H	**17229**	B71LNA 3D16/100H	**17250**
		20	B71LNA 3B20/100H	**17209**	B71LNA 3C20/100H	**17230**	B71LNA 3D20/100H	**17251**
		25	B71LNA 3B25/100H	**17210**	B71LNA 3C25/100H	**17231**	B71LNA 3D25/100H	**17252**
		32	B71LNA 3B32/100H	**17211**	B71LNA 3C32/100H	**17232**	B71LNA 3D32/100H	**17253**
		40	B71LNA 3B40/100H	**17212**	B71LNA 3C40/100H	**17233**	B71LNA 3D40/100H	**17254**
	300	6	B71LNA 3B06/300H	**17269**	B71LNA 3C06/300H	**17290**	B71LNA 3D06/300H	**17311**
		10	B71LNA 3B10/300H	**17270**	B71LNA 3C10/300H	**17291**	B71LNA 3D10/300H	**17312**
		16	B71LNA 3B16/300H	**17271**	B71LNA 3C16/300H	**17292**	B71LNA 3D16/300H	**17313**
		20	B71LNA 3B20/300H	**17272**	B71LNA 3C20/300H	**17293**	B71LNA 3D20/300H	**17314**
		25	B71LNA 3B25/300H	**17273**	B71LNA 3C25/300H	**17294**	B71LNA 3D25/300H	**17315**
		32	B71LNA 3B32/300H	**17274**	B71LNA 3C32/300H	**17295**	B71LNA 3D32/300H	**17316**
		40	B71LNA 3B40/300H	**17275**	B71LNA 3C40/300H	**17296**	B71LNA 3D40/300H	**17317**
4	30	6	B71LNA 4B06/030H	**17150**	B71LNA 4C06/030H	**17171**	B71LNA 4D06/030H	**17192**
		10	B71LNA 4B10/030H	**17151**	B71LNA 4C10/030H	**17172**	B71LNA 4D10/030H	**17193**
		16	B71LNA 4B16/030H	**17152**	B71LNA 4C16/030H	**17173**	B71LNA 4D16/030H	**17194**
		20	B71LNA 4B20/030H	**17153**	B71LNA 4C20/030H	**17174**	B71LNA 4D20/030H	**17195**
		25	B71LNA 4B25/030H	**17154**	B71LNA 4C25/030H	**17175**	B71LNA 4D25/030H	**17196**
		32	B71LNA 4B32/030H	**17155**	B71LNA 4C32/030H	**17176**	B71LNA 4D32/030H	**17197**
		40	B71LNA 4B40/030H	**17156**	B71LNA 4C40/030H	**17177**	B71LNA 4D40/030H	**17198**
	100	6	B71LNA 4B06/100H	**17213**	B71LNA 4C06/100H	**17234**	B71LNA 4D06/100H	**17255**
		10	B71LNA 4B10/100H	**17214**	B71LNA 4C10/100H	**17235**	B71LNA 4D10/100H	**17256**
		16	B71LNA 4B16/100H	**17215**	B71LNA 4C16/100H	**17236**	B71LNA 4D16/100H	**17257**
		20	B71LNA 4B20/100H	**17216**	B71LNA 4C20/100H	**17237**	B71LNA 4D20/100H	**17258**
		25	B71LNA 4B25/100H	**17217**	B71LNA 4C25/100H	**17238**	B71LNA 4D25/100H	**17259**
		32	B71LNA 4B32/100H	**17218**	B71LNA 4C32/100H	**17239**	B71LNA 4D32/100H	**17260**
		40	B71LNA 4B40/100H	**17219**	B71LNA 4C40/100H	**17240**	B71LNA 4D40/100H	**17261**
	300	6	B71LNA 4B06/300H	**17276**	B71LNA 4C06/300H	**17297**	B71LNA 4D06/300H	**17318**
		10	B71LNA 4B10/300H	**17277**	B71LNA 4C10/300H	**17298**	B71LNA 4D10/300H	**17319**
		16	B71LNA 4B16/300H	**17278**	B71LNA 4C16/300H	**17299**	B71LNA 4D16/300H	**17320**
		20	B71LNA 4B20/300H	**17279**	B71LNA 4C20/300H	**17300**	B71LNA 4D20/300H	**17321**
		25	B71LNA 4B25/300H	**17280**	B71LNA 4C25/300H	**17301**	B71LNA 4D25/300H	**17322**
		32	B71LNA 4B32/300H	**17281**	B71LNA 4C32/300H	**173023**	B71LNA 4D32/300H	**17323**
		40	B71LNA 4B40/300H	**17282**	B71LNA 4C40/300H	**17303**	B71LNA 4D40/300H	**17324**

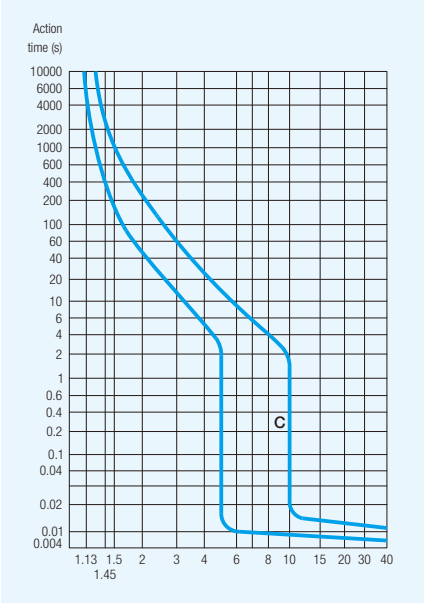
2

Tripping characteristic curves

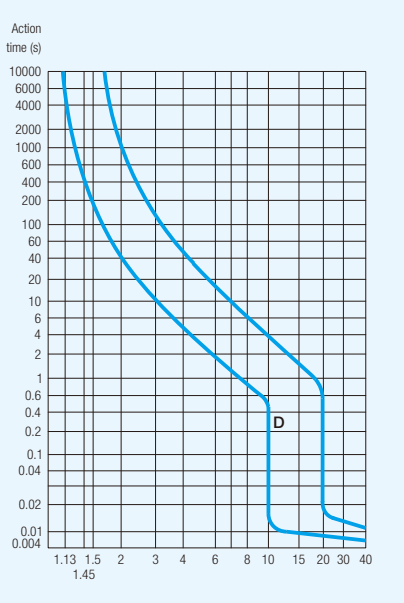
Characteristic B



Characteristic C

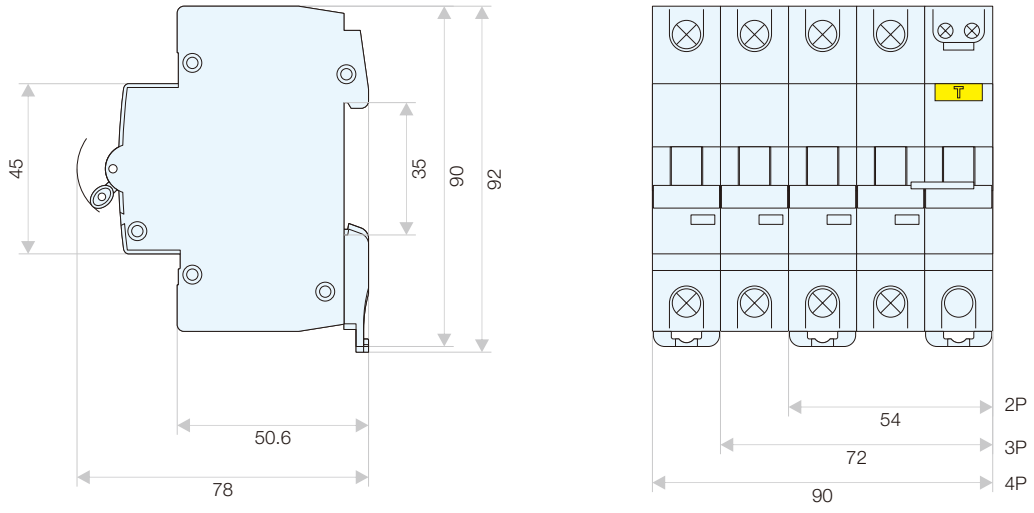


Characteristic D



Outline and installation dimensions

unit in mm



Functions

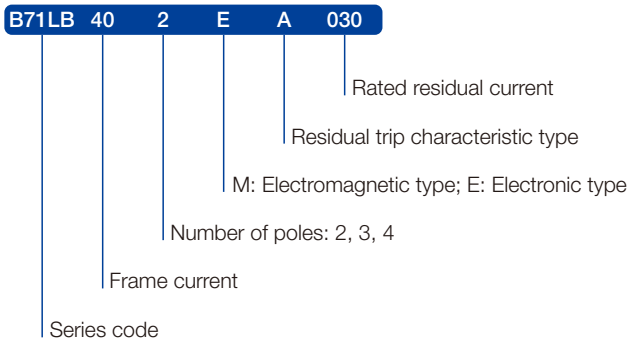
- Assembly on side with MCBs
- Protection against the effects of sinusoidal alternating earth fault currents
- Protection against indirect contacts and additional protection against direct contacts

Technical specifications

- Standard: IEC 61009-1
- Type (wave form of the earth leakage sensed): AC, A
- Number of poles: 2, 3, 4
- Rated current In (A): 40, 63
- Rated voltage Ue (V AC): 230/400
- Rated insulation voltage Ui (V AC): 500
- Rated frequency Fn (Hz): 50/60
- Rated residual currents IΔn (mA): 30, 100, 300
- Rated breaking capacity (Icn) : Icn of the associated MCB
- Rated residual breaking capacity Im: Icn of the associated MCB
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Degree of protection: IP20, with connected conductors
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25
- Terminals
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -25 ~ +45, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Altitude (meters): Max 2,000



Instruction of type code



Features

- Electronic Type, voltage dependent and Electromagnetic type, voltage independent.
- Assembly on side with MCBs 3SB71 series.

Selection and ordering data

Electronic Type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type A Type code	Type A Order code
	2	30	40	B71LB40 2EA030	**19538**
		100	40	B71LB40 2EA100	**19539**
		300	40	B71LB40 2EA300	**19540**
		30	63	B71LB63 2EA030	**19541**
		100	63	B71LB63 2EA100	**19542**
		300	63	B71LB63 2EA300	**19543**
	3	30	40	B71LB40 3EA030	**19544**
		100	40	B71LB40 3EA100	**19545**
		300	40	B71LB40 3EA300	**19546**
		30	63	B71LB63 3EA030	**19547**
		100	63	B71LB63 3EA100	**19548**
		300	63	B71LB63 3EA300	**19549**
	4	30	40	B71LB40 4EA030	**19550**
		100	40	B71LB40 4EA100	**19551**
		300	40	B71LB40 4EA300	**19552**
		30	63	B71LB63 4EA030	**19553**
		100	63	B71LB63 4EA100	**19554**
		300	63	B71LB63 4EA300	**19555**

Electromagnetic type

	Number of poles	Rated residual current IΔn (mA)	Rated current In (A)	Type AC Type code	Type AC Order code	Type A Type code	Type A Order code
	2	30	40	B71LB40 2MC030	**19502**	B71LB40 2MA030	**19508**
		100	40	B71LB40 2MC100	**19503**	B71LB40 2MA100	**19509**
		300	40	B71LB40 2MC300	**19504**	B71LB40 2MA300	**19510**
		30	63	B71LB63 2MC030	**19505**	B71LB63 2MA030	**19511**
		100	63	B71LB63 2MC100	**19506**	B71LB63 2MA100	**19512**
		300	63	B71LB63 2MC300	**19507**	B71LB63 2MA300	**19513**
	3	30	40	B71LB40 3MC030	**19514**	B71LB40 3MA030	**19520**
		100	40	B71LB40 3MC100	**19515**	B71LB40 3MA100	**19521**
		300	40	B71LB40 3MC300	**19516**	B71LB40 3MA300	**19522**
		30	63	B71LB63 3MC030	**19517**	B71LB63 3MA030	**19523**
		100	63	B71LB63 3MC100	**19518**	B71LB63 3MA100	**19524**
		300	63	B71LB63 3MC300	**19519**	B71LB63 3MA300	**19525**
	4	30	40	B71LB40 4MC030	**19526**	B71LB40 4MA030	**19532**
		100	40	B71LB40 4MC100	**19527**	B71LB40 4MA100	**19533**
		300	40	B71LB40 4MC300	**19528**	B71LB40 4MA300	**19534**
		30	63	B71LB63 4MC030	**19529**	B71LB63 4MA030	**19535**
		100	63	B71LB63 4MC100	**19530**	B71LB63 4MA100	**19536**
		300	63	B71LB63 4MC300	**19531**	B71LB63 4MA300	**19537**

Types

Both RCCBs and RCBOs are further divided into types depending on the operating function:

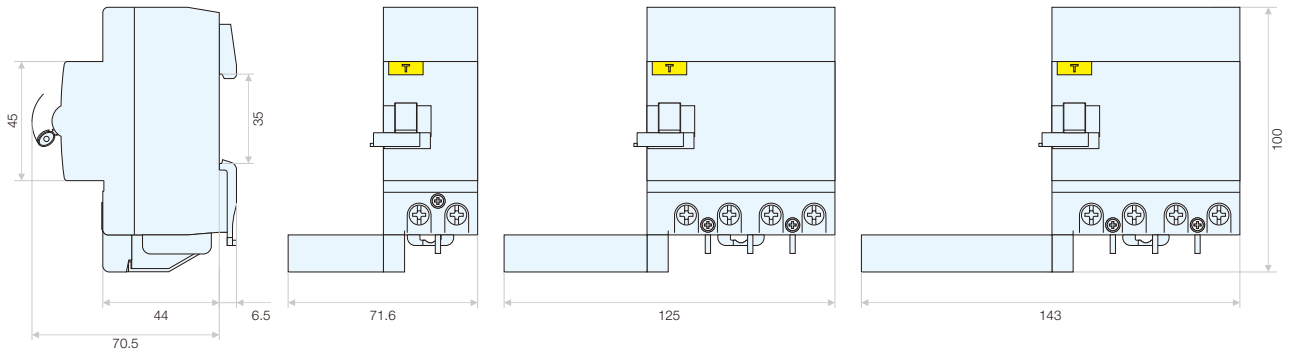
- Type AC ⏦: For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.
- Type A ⏦: For which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

Tripping sensitivity data

- RCD with a rated residual current of maximum 30 mA are used for personnel, material and fire protection, as well as for protection against direct contact.
- RCD with a rated residual current of maximum 300 mA are used as preventative fire protection in case of insulation faults.
- RCD with a rated residual current of 100 mA co-ordinated with the earth system according to the formula IΔn < 50/R, to provide protection against indirect contacts.

Outline and installation dimensions

unit in mm



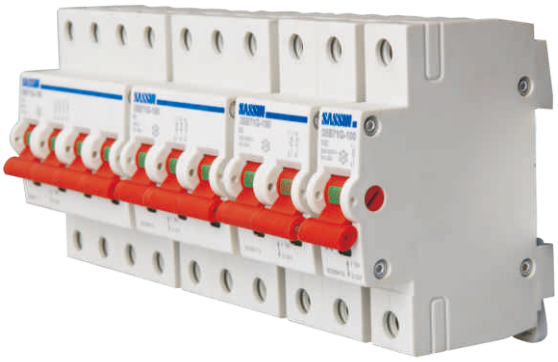
Switch Disconnectors
Series 3SB71G

Functions

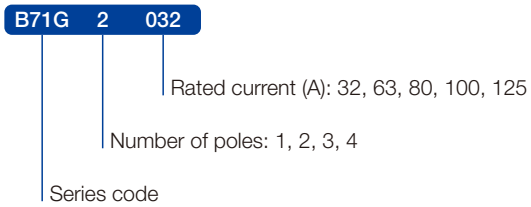
- Making and breaking under load condition
- Providing safety isolation for terminal distribution system
- Used in residential building, non-residential building

Features

- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides longterm identification
- Based on the technology of MCB series 3SB71, similar design to series 3SB71
- Matched with series 3SB71



Instruction of type code



Technical specifications

Type		3SB71G-125	3SB71G-125 DC			
Standard		IEC 60947-3	IEC 60947-3			
Rated current In	(A)	32, 63, 100, 125	63, 80, 100, 125			
Number of poles		1P, 2P, 3P, 4P	1P	2P	3P	4P
Rated voltage Un		230/400 V AC	230 V DC	400 V DC	750 V DC	1000 V DC
Rated insulation voltage Ui	(V)	500	1000			
Rated short-time withstand current Icw	(A)	20 In	12 In			
Degree of protection		IP20, with connected conductors	IP20, with connected conductors			
Electrical life	(times)	10,000	1500			
Mechanical life	(times)	20,000	8500			
Mounting position		Any	Any			
Conductor cross-sections						
Solid and stranded	(mm^2)	0.75-35	0.75-35			
Finely stranded with end sleeve	(mm^2)	0.75-25	0.75-25			
Terminal tightening torque	(N·m)	2-2.5	2-2.5			
Ambient temperature	(°C)	-25 ~ +45, max. 95% humidity	-25 ~ +45, max. 95% humidity			
Storage temperature	(°C)	-40 ~ +75	-40 ~ +70			
Altitude	(meters)	Max. 2000	Max. 2000			

Selection and ordering data

3SB71G-125

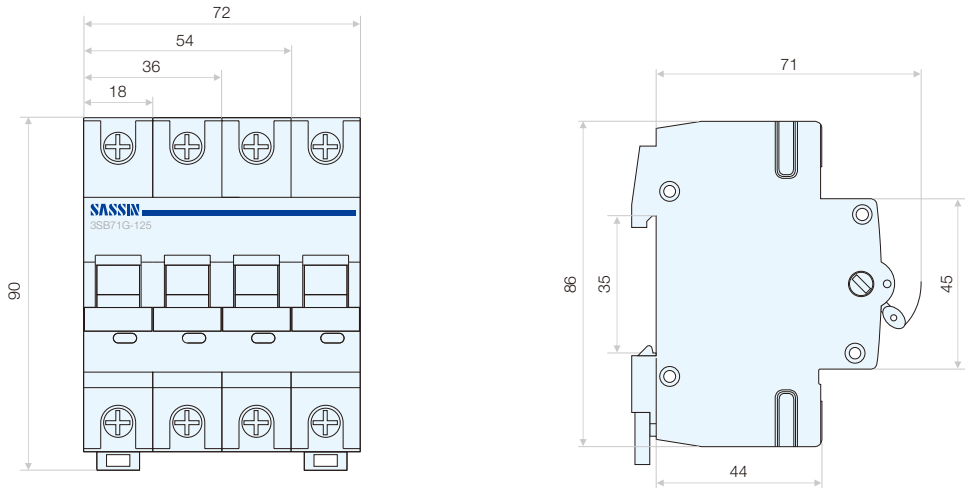
	Number of poles (P)	Rated current In (A)	Type code	Order code	Pack.
	1	32	B71G 1032	**22899**	12
		63	B71G 1063	**22900**	12
		100	B71G 1100	**22901**	12
		125	B71G 1125	**38876**	12
					
	2	32	B71G 2032	**22902**	6
		63	B71G 2063	**22903**	6
		100	B71G 2100	**22904**	6
		125	B71G 2125	**38877**	6
					
	3	32	B71G 3032	**22905**	4
		63	B71G 3063	**22906**	4
		100	B71G 3100	**22907**	4
		125	B71G 3125	**38878**	4
					
	4	32	B71G 4032	**22908**	3
		63	B71G 4063	**22909**	3
		100	B71G 4100	**22910**	3
		125	B71G 4125	**38879**	3
					

3SB71G-125 DC

	Number of poles (P)	Rated voltage Un (V)	Rated current In (A)	Type code	Order code	Pack.
	1	230	63	B71G 163D	**39195**	12
			80	B71G 180D	**24361**	12
			100	B71G 1100D	**24365**	12
			125	B71G 1125D	**24383**	12
						
	2	400 ⎓	63	B71G 263D	**39196**	6
			80	B71G 280D	**24362**	6
			100	B71G 2100D	**24366**	6
			125	B71G 2125D	**24384**	6
						
	3	750 ⎓	63	B71G 363D	**39197**	4
			80	B71G 380D	**24363**	4
			100	B71G 3100D	**24367**	4
			125	B71G 3125D	**24385**	4
						
	4	1000 ⎓	63	B71G 463D	**39198**	3
			80	B71G 480D	**24364**	3
			100	B71G 4100D	**24382**	3
			125	B71G 4125D	**24386**	3
						

Outline and installation dimensions

unit in mm



Functions

- Making and breaking under load condition
- Providing safety isolation for terminal distribution systems
- Used in residential buildings, non-residential buildings

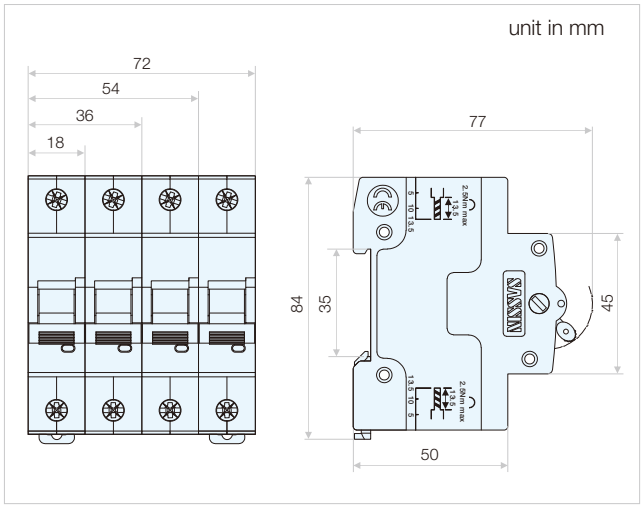
Technical specifications

- Standard: IEC 60947-3
- Rated current In (A): 25, 40, 63, 80, 100
- Rated voltage Un (V AC): 1P: 230/400; 2-4P: 400
- Rated insulation voltage (V AC): 500
- Number of poles (P): 1, 2, 3, 4
- Rated short-time withstand current 20 In: 1 s
- Degree of protection: IP20, with connected conductors
- Electrical endurance (Cycles): 10,000
- Mechanical endurance (Cycles): 20,000
- Fire resistance according to IEC 60695: 960 °C
- Mounting position: Any
- Busbar Connection: Pin type
- Conductor cross-sections
- Solid and stranded (mm^2): 1-35
- Finely stranded with end sleeve (mm^2): 1-25
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (°C): -5 ~ +45, max. 95% humidity
- Altitude (meters): Max 2,000

Features

- Adequate printing of all data on the front provides long term identification
- Matched with series 3SB6

Outline and installation dimensions





Selection and ordering data

Number of poles (P)	Rated current In (A)	Type code	Order code	Pack.
1	25	G6 1025	**39949**	12
	40	G6 1040	**39950**	12
	63	G6 1063	**39951**	12
	80	G6 1080	**39952**	12
	100	G6 1100	**39953**	12
2	25	G6 2025	**39954**	6
	40	G6 2040	**39955**	6
	63	G6 2063	**39956**	6
	80	G6 2080	**39957**	6
	100	G6 2100	**39958**	6
3	25	G6 3025	**39959**	4
	40	G6 3040	**39960**	4
	63	G6 3063	**39961**	4
	80	G6 3080	**39962**	4
	100	G6 3100	**39963**	4
4	25	G6 4025	**39964**	3
	40	G6 4040	**39965**	3
	63	G6 4063	**39966**	3
	80	G6 4080	**39967**	3
	100	G6 4100	**39968**	3

Switch Disconnectors
Series VG510

2

Functions

- Making and breaking under load condition
- Providing safety isolation for terminal distribution system
- Used in residential building, non-residential building

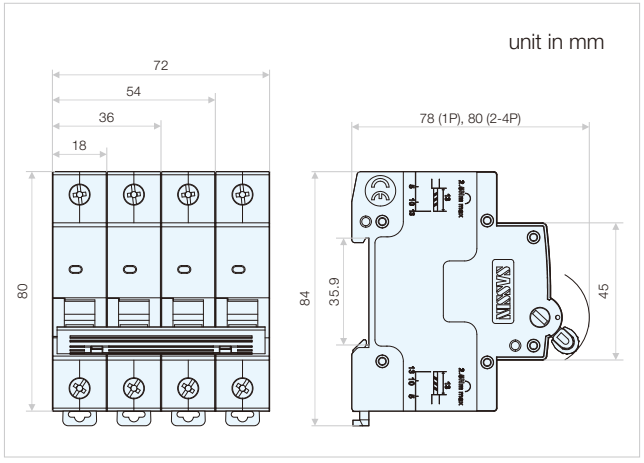
Technical specifications

- Standard: IEC 60947-3
- Rated current In (A): 32, 40, 63, 80, 100, 125
- Rated voltage Ui (V AC): 230/400
- Rated insulation voltage Vi (V AC): 500
- Number of poles: 1, 2, 3, 4
- Degree of protection: IP20, with connected conductors
- Electrical life (times): 10,000
- Mechanical life (times): 20,000
- Rated short-time withstand current 12 Ie: 1 s
- Mounting position: Any
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35
- Finely stranded with end sleeve (mm^2): 0.75-25
- Terminal tightening torque (N·m): 2.5
- Ambient temperature (℃): -25~+45, max. 95% humidity
- Storage temperature (℃): -40~+75
- Altitude (meters): Max 2,000

Features

- The handle provides a clear indication of the contact position
- Adequate printing of all data on the front provides long-term identification
- Based the technology of MCB series VB510, similar design to series VB510
- Matched with series MCB VB510
- Full sets of accessories

Outline and installation dimensions





Selection and ordering data

Number of poles (P)	Rated current In (A)	Type code
1	32	VG511-32
	40	VG511-40
	63	VG511-63
	80	VG511-80
	100	VG511-100
	125	VG511-125
2	32	VG512-32
	40	VG512-40
	63	VG512-63
	80	VG512-80
	100	VG512-100
	125	VG512-125
3	32	VG513-32
	40	VG513-40
	63	VG513-63
	80	VG513-80
	100	VG513-100
	125	VG513-125
4	32	VG514-32
	40	VG514-40
	63	VG514-63
	80	VG514-80
	100	VG514-100
	125	VG514-125

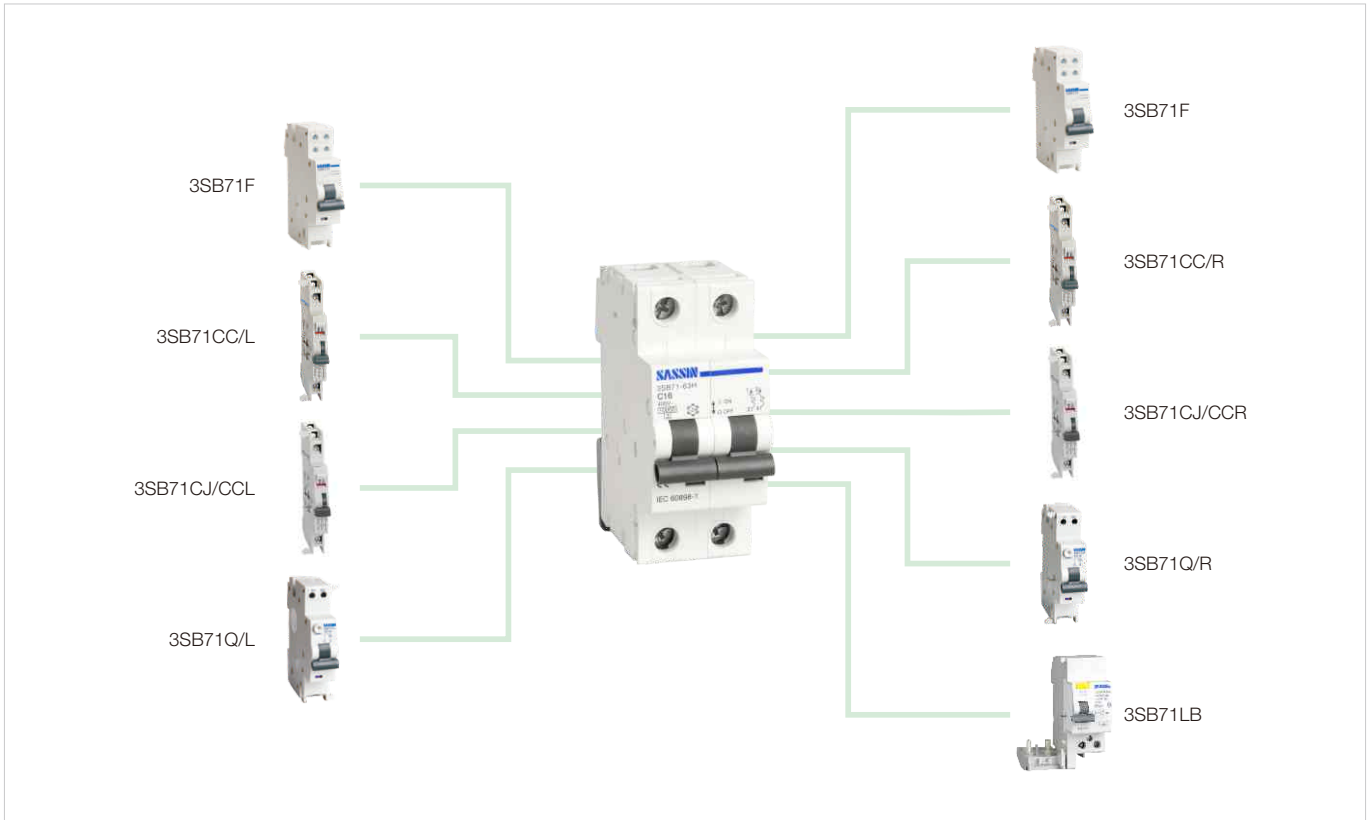
Functions



- **3SB71C Auxiliary contact:**
  Indication of the position of MCB and RCD.
- **3SB71J Auxiliary alarm:**
  Signaling of status making or breaking of MCB and RCD through Alarm.
- **3SB71CC/CJ Auxiliary contact & alarm:**
  Combination of auxillary contact and alarm.
- **3SB71Q Under voltage release:**
  Protection of the load in the event of a voltage drop (between 70% and 35% of its rated value).
- **3SB71F Shunt release:**
  Remote opening of the device when a voltage is applied.
- Suitable for MCB Series: 3SB71-63, 3SB71-125, 3SB71Z, RCBO Series: 3SL71N-40, 3SB71LN.

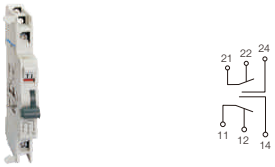
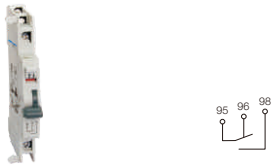
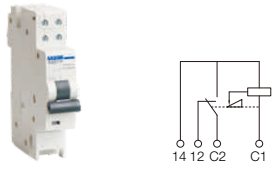
Technical specifications

- Standard: IEC 60947-2
- Rated insulation voltage (V AC): 500
- Rated frequency (Hz): 50/60
- Utilization category: AC14
- Mechanical life (times): 4,000
- Conductor cross-sections
- Solid and stranded (mm^2): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Terminal tightening torque (N·m): 0.5
- Dielectric Strength: 2,000



2

Selection and ordering data

	Rated current (A)	Rated voltage (V)	Installation side	Type code	Order code	Packing Unit pc
3SB71CC Auxiliary contact						
	5	AC 230	R	B71CR	**20271**	1
	5	AC 230	L	B71CL	**20272**	1
3SB71J Auxiliary alarm contact						
	5	AC 230	R	B71JR	**20273**	1
	5	AC 230	L	B71JL	**20274**	1
3SB71CJ/CC Auxiliary contact & Auxiliary alarm contact						
	5	AC 230	R	B71CJR	**10467**	1
	5	AC 230	L	B71CJL	**10466**	1
3SB71Q Under voltage release						
	5	12 V	R	B71QR12	**16078**	1
	5	24 V	R	B71QR24	**16079**	1
	5	48 V	R	B71QR48	**16080**	1
	5	127 V	R	B71QRD127	**16081**	1
	5	230 V AC	R	B71QRA230	**16084**	1
	5	12 V	L	B71QL12	**16085**	1
	5	24 V	L	B71QL24	**16086**	1
	5	48 V	L	B71QL48	**16087**	1
	5	127 V	L	B71QLD127	**16088**	1
	5	230 V AC	L	B71QLA230	**16091**	1
3SB71F Shunt release						
	5	AC 24-60 DC 16-48	R	B71FR2	**17726**	1
	5	AC 110-415 DC 110-125	R	B71FR1	**20275**	1
	5	AC 24-60 DC 16-48	L	B71FL2	**26330**	1
	5	AC 110-415 DC 110-125	L	B71FL1	**26329**	1

Padlock for MCBs and switches

Prevents unauthorized or dangerous operation of the operating lever. An adaptor makes it possible to block the operating lever when switched ON or OFF. The key lock should be provided by user.

	Application	Type code	Order code
	3SB71 series MCBs, 3SL71 series RCCBs, 3SL71N-40 series RCBOs, 3SB71LN-40 series RCBOs, 3SB72LE-25 series RCBOs, 3SB71LB series RCD blocks, 3SB71G series switch disconnectors	PL3	**32961**

P6-AC, P6-FC, P6-AF, P6-URX, P6-UR, P6-OR, P6-OUR

Functions



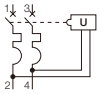
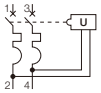
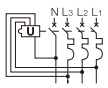
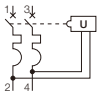
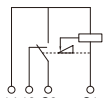
- **P6-AC Auxiliary contact:**
  Indication of the device contact positions (Open/Closed).
- **P6-FC Fault signal contact:**
  Indication of the device contact positions only after the automatic release due to overcurrent.
- **P6-AF Auxiliary contact and fault signal contact:**
  Two change-over contacts that include both functions of P6-AC and P6-FC.
- **P6-URX Under-voltage release:**
  Protection of the load in the event of a voltage drop (between 75% and 35% of its rated value), and prevent the device closing again until its input voltage is restored.
- **P6-UR Under-voltage release:**
  Protection of the load in the event of the input voltage drop to 170V ± 5%.
- **P6-OR Over-voltage release:**
  Protection of the load in the event of the voltage exceed 280 V ± 5%.
- **P6-OUR Over-voltage and undervoltage release:**
  Protection of the load as described above for P6-OR and P6-UR.
- Suitable for 3SB6 range MCBs.

Technical specifications

- Standard: IEC 60947-2
- Rated insulation voltage (V AC): 500
- Rated frequency (Hz): 50/60
- Utilization category: AC 14
- Mechanical life (times): 4,000
- Conductor cross-sections
  - Solid and stranded (mm^2): 2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Terminal tightening torque (N·m): 0.5
- Dielectric strength: 2,000

P6-AC, P6-FC, P6-AF, P6-URX, P6-UR, P6-OR, P6-OUR

Selection and ordering data

Description	Width (mm)	Mouting	Tripping voltage	Coil voltage	Type code
Auxiliary contact	9	Left	-	-	P6-AC-L
		Right	-	-	P6-AC-R
Fault signal contact	9	Left	-	-	P6-FC-L
		Right	-	-	P6-FC-R
Auxiliary contact and fault signal contact	9	Left	-	-	P6-AF-L
		Right	-	-	P6-AF-R
Under-voltage release  	18	Left	70% - 35% Un	12 V AC/DC	P6-URX-12-L
				24 V AC/DC	P6-URX-24-L
				48 V AC/DC	P6-URX-48-L
				127 V AC/DC	P6-URX-127-L
				230 V AC	P6-URX-230A-L
			170 V ± 5%	230 V AC	P6-UR-230
		Right	70% - 35% Un	12 V AC/DC	P6-URX-12-R
				24 V AC/DC	P6-URX-24-R
				48 V AC/DC	P6-URX-48-R
				127 V AC/DC	P6-URX-127-R
				230 V AC	P6-URX-230A-R
Over-voltage release  	18	Left	280 V ± 5%	230 V AC	P6-OR-1-230
	54	Left	280 V ± 5%	230 V AC	P6-OR-3-230
Over-voltage and under-voltage release  	18	-	-	230 V AC	P6-OUR-230
Shunt release  	18	Left	-	24-60 V AC 24-48 V DC	P6-SR-L2
				110-415 V AC 110-125 V DC	P6-SR-L1
		Right	-	24-60 V AC 24-48 V DC	P6-SR-R2
				110-415 V AC 110-125 V DC	P6-SR-R1

Padlock for MCBs and switches

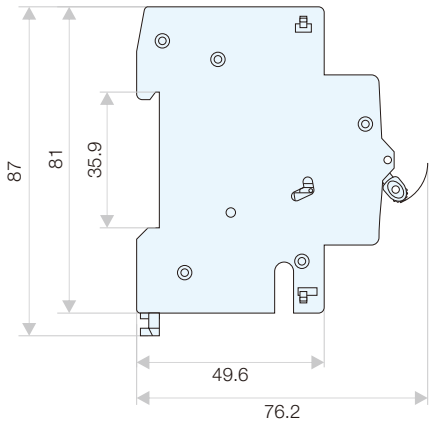
Prevent unauthorized or dangerous operation of the operating lever. An adaptor makes it possible to block the operating lever when switched ON or OFF. The key lock should be provided by user.

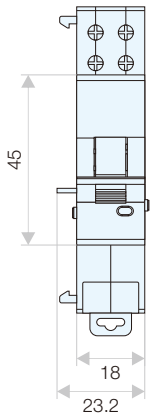
	Application	Type code
	3SB6 series MCBs, 3SL6 series RCCBs, PRBNE615 series RCBOs, 3SG6 series switch disconnectors	PL3

Outline and installation dimensions

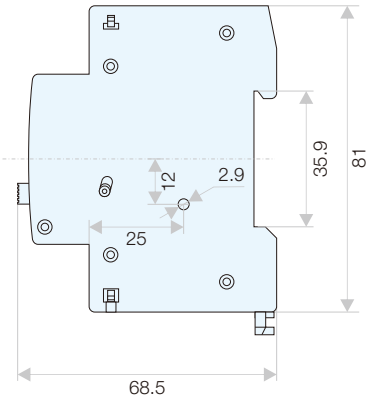
unit in mm

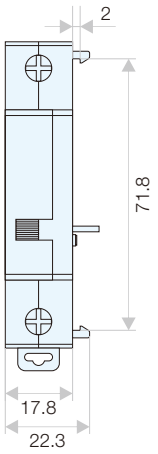
P6-SR





P6-OR, P6-UR, P6-OUR





Additional Components for Series VB510
OF, SD, MX, MV+MN

Functions

- **OF Auxiliary contact:**
  Indication of the position of the device's contacts.
- **SD Auxiliary alarm:**
  Signaling of the position of the device's contacts by alarm only after the automatic release of the MCBs and RCDs due to an overload or a short-circuit.
- **MX Shunt Release:**
  Remote opening of the device when a voltage is applied.
- **MX+MN Under voltage release:**
  Protection of the load in the event of a voltage drop (between 70% and 35% of its rated value).
- Suitable for MCB series VB510.

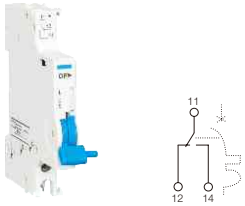


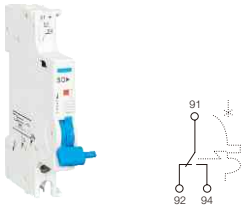
Technical specifications

- Standard: IEC 60947-5-1
- Rated insulation voltage (V AC): 500
- Rated frequency (Hz): 50/60
- Rated impulse withstand voltage (kA): 5
- Utilization category: AC14, AC15
- Mechanical life (times): 10,000
- Conductor cross-sections
- Solid and stranded (mm^2): 2-2.5
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75

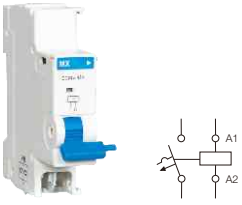
Selection and ordering data

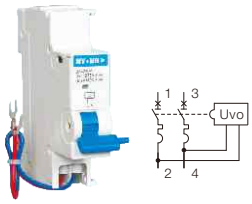
	Rated current In (A)	Type code	Order code
OF Auxiliary contact	5	VB5-OF	**16072**
SD Auxiliary alarm	5	VB5-SD	**16073**





	Rated voltage (V)	Type code	Order code
MX Shunt release	230 AC	VB5-MX230A	**16074**
	400 AC	VB5-MX400A	**16075**
	24 DC	VB5-MX24D	**16076**
	48 DC	VB5-MX48D	**16077**
MV & MN Under voltage / Over voltage release	2 Phase 230 V	VB5-MV+MN230D	**15499**
	3 Phase 400 V	VB5-MV+MN400T	**15500**
	3 Phase 4 line 230 V	VB5-MV+MN230D	**15501**





Padlock for MCBs and switches

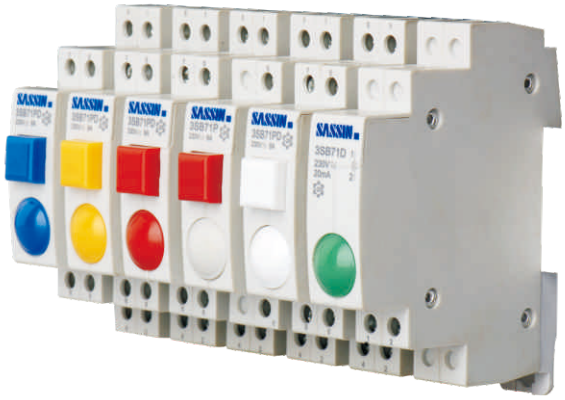
Prevents unauthorised or dangerous operation of the operating lever. An adaptor makes it possible to block the operating lever when switched ON or OFF

	Discription	Application	Type code	Order code
	Red	VB510, 3SB5, 3SB52, 3SB1-63N	PL1	**32959**
		VBH510, 3SB1-125	PL2	**32960**



Functions

- The pushbuttons are used for remote control in every kind of electric installation.
- The indicator lamps signal any event in every kind of electric installation.
- 3SB71P, 3SB71D, 3SB71PD may match with MCB series 3SB71-63

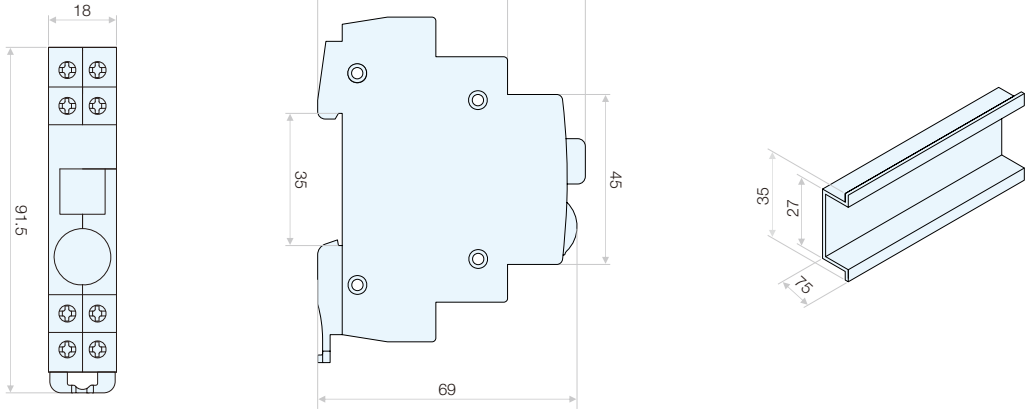


Technical specifications

- Standard: IEC 60947-5-1
- Rated voltage Ue (V): 230
- Rated current In (A): 6
- Conventional glowing current (A): 16
- Frequency (Hz): 50/60
- Modules (18mm): 1
- Utilization category: AC14, DC13
- Degree of protection: IP20, with connected conductors
- Conductor cross-sections
  - Solid and stranded (mm^2): 1-10
  - Finely stranded with end sleeve (mm^2): 1-4
- Terminal tightening torque (N·m): 0.5
- Ambient temperature (°C): -5 ~ +40, max. 95% humidity
- Storage temperature (°C): -40 ~ +75
- Connection capacity (mm^2): 1-16

Outline and installation dimensions

unit in mm



2

Selection and ordering data

3SB71P Pushbutton

Color Pushbutton		Indicator	Voltage AC/DC (V)	1 NO + 2 NC		2 NO + 1 NC		2 NO + 2 NC		3 NO	
				Type code	Order code	Type code	Order code	Type code	Order code	Type code	Order code
Green		-	-	B71P G12	**16185**	B71P G21	**16186**	B71P G22	**16187**	B71P G30	**16188**
Red		-	-	B71P R12	**16189**	B71P R21	**16190**	B71P R22	**16191**	B71P R30	**16192**
Black		-	-	B71P H12	**16193**	B71P H21	**16194**	B71P H22	**16195**	B71P H30	**16196**
Yellow		-	-	B71P Y12	**16197**	B71P Y21	**16198**	B71P Y22	**16199**	B71P Y30	**16200**
Blue		-	-	B71P B12	**16201**	B71P B21	**16202**	B71P B22	**16203**	B71P B30	**16204**

3SB71PD Pushbutton + Indicator

Color Pushbutton		Indicator	Voltage AC/DC (V)	1 NO + 2 NC		2 NO + 1 NC		2 NO + 2 NC		3 NO	
				Type code	Order code	Type code	Order code	Type code	Order code	Type code	Order code
Green			12	B71PD G12V12	**16205**	B71PD G21V12	**16206**	-	-	B71PD G30V12	**16207**
Red			12	B71PD R12V12	**16208**	B71PD R21V12	**16209**	-	-	B71PD R30V12	**16210**
White			12	B71PD W12V12	**16211**	B71PD W21V12	**16212**	-	-	B71PD W30V12	**16213**
Yellow			12	B71PD Y12V12	**16214**	B71PD Y21V12	**16215**	-	-	B71PD Y30V12	**16216**
Blue			12	B71PD B12V12	**16217**	B71PD B21V12	**16218**	-	-	B71PD B30V12	**16219**
Green			24	B71PD G12V24	**16220**	B71PD G21V24	**16221**	-	-	B71PD G30V24	**16222**
Red			24	B71PD R12V24	**16223**	B71PD R21V24	**16224**	-	-	B71PD R30V24	**16225**
White			24	B71PD W12V24	**16226**	B71PD W21V24	**16227**	-	-	B71PD W30V24	**16228**
Yellow			24	B71PD Y12V24	**16229**	B71PD Y21V24	**16230**	-	-	B71PD Y30V24	**16231**
Blue			24	B71PD B12V24	**16232**	B71PD B21V24	**16233**	-	-	B71PD B30V24	**16234**
Green			110	B71PD G12V110	**16235**	B71PD G21V110	**16236**	-	-	B71PD G30V110	**16237**
Red			110	B71PD R12V110	**16238**	B71PD R21V110	**16239**	-	-	B71PD R30V110	**16240**
White			110	B71PD W12V110	**16241**	B71PD W21V110	**16242**	-	-	B71PD W30V110	**16243**
Yellow			110	B71PD Y12V110	**16244**	B71PD Y21V110	**16245**			B71PD Y30V110	**16246**
Blue			110	B71PD B12V110	**16247**	B71PD B21V110	**16248**	-	-	B71PD B30V110	**16249**
Green			230	B71PD G12V230	**16250**	B71PD G21V230	**16251**	-	-	B71PD G30V230	**16252**
Red			230	B71PD R12V230	**16253**	B71PD R21V230	**16254**	-	-	B71PD R30V230	**16255**
White			230	B71PD W12V230	**16256**	B71PD W21V230	**16257**	-	-	B71PD W30V230	**16258**
Yellow			230	B71PD Y12V230	**16259**	B71PD Y21V230	**16260**	-	-	B71PD Y30V230	**16261**
Blue			230	B71PD B12V230	**16262**	B71PD B21V230	**16263**	-	-	B71PD B30V230	**16264**

3SB71D Indicator

Color Pushbutton		Indicator	12 V AC/DC		24 V AC/DC		110 V AC/DC		230 V AC/DC	
			Type code	Order code	Type code	Order code	Type code	Order code	Type code	Order code
Green	-		B71D G12	**16265**	B71D G24	**16266**	B71D G110	**16267**	B71D G230	**16268**
Red	-		B71D R12	**16269**	B71D R24	**16270**	B71D R110	**16271**	B71D R230	**16272**
White	-		B71D W12	**16273**	B71D W24	**16274**	B71D W110	**16275**	B71D W230	**16276**
Yellow	-		B71D Y12	**16277**	B71D Y24	**16278**	B71D Y110	**16279**	B71D Y230	**16280**
Blue	-		B71D B12	**16281**	B71D B24	**16282**	B71D B110	**16283**	B71D B230	**16284**

Functions

- The pushbuttons are used for remote control in every kind of electric installation.
- The indicator lamps signal any event in every kind of electric installation.
- P6-E may match with MCB series 3SB6-63.



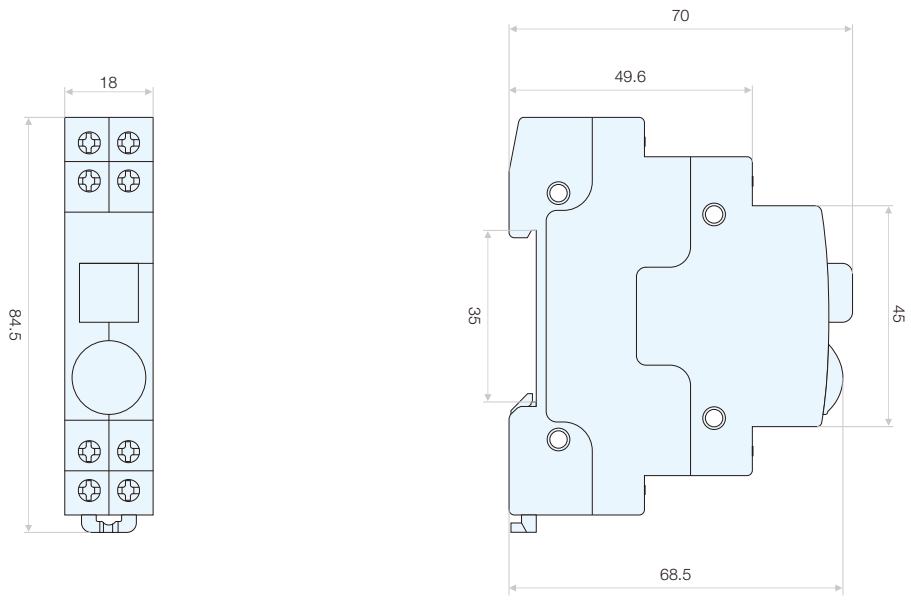
Technical specifications

- Standard: IEC 60947-5-1
- Rated voltage Ue (V): 230
- Rated current In (A): 6
- Conventional glowing current (A): 16
- Frequency (Hz): 50/60
- Modules (18 mm): 1
- Utilization category: AC14, DC13
- Degree of protection: IP20, with connected conductors
- Conductor cross-sections
  - Solid and stranded (mm^2): 1-10
  - Finely stranded with end sleeve (mm^2): 1-4
- Terminal tightening torque (N·m): 0.5
- Ambient temperature (°C): -5 ~ +40, max. 95% humidity
- Storage temperature (°C): -40 ~ +75
- Connection Capacity (mm^2): 1-16



Outline and installation dimensions

unit in mm



2

Selection and ordering data

Pushbutton

Color	Type of contact	Type code
Green	1NO+2NC	P6-E1-G-12
	2NO+1NC	P6-E1-G-21
	2NO+2NC	P6-E1-G-22
	3NO	P6-E1-G-30
Red	1NO+2NC	P6-E1-R-12
	2NO+1NC	P6-E1-R-21
	2NO+2NC	P6-E1-R-22
	3NO	P6-E1-R-30
Yellow	1NO+2NC	P6-E1-Y-12
	2NO+1NC	P6-E1-Y-21
	2NO+2NC	P6-E1-Y-22
	3NO	P6-E1-Y-30
Blue	1NO+2NC	P6-E1-B-12
	2NO+1NC	P6-E1-B-21
	2NO+2NC	P6-E1-B-22
	3NO	P6-E1-B-30
Black	1NO+2NC	P6-E1-H-12
	2NO+1NC	P6-E1-H-21
	2NO+2NC	P6-E1-H-22
	3NO	P6-E1-H-30

Indicator

Color	Voltage AC/DC (V)	Type code
Green	12	P6-E21-G-12
	24	P6-E21-G-24
	110	P6-E21-G-110
	230	P6-E21-G-230
Red	12	P6-E21-R-12
	24	P6-E21-R-24
	110	P6-E21-R-110
	230	P6-E21-R-230
White	12	P6-E21-W-12
	24	P6-E21-W-24
	110	P6-E21-W-110
	230	P6-E21-W-230
Yellow	12	P6-E21-Y-12
	24	P6-E21-Y-24
	110	P6-E21-Y-110
	230	P6-E21-Y-230
Blue	12	P6-E21-B-12
	24	P6-E21-B-24
	110	P6-E21-B-110
	230	P6-E21-B-230
Green + Red	12	P6-E22-GR-12
	24	P6-E22-GR-24
	110	P6-E22-GR-110
	230	P6-E22-GR-230

Pushbutton and indicator

Color	Voltage AC/DC (V)	Type of contact	Type code
Green	12	1NO+2NC	P6-E3-G-11-12
		2NO+1NC	P6-E3-G-22-12
		3NO	P6-E3-G-30-12
	24	1NO+2NC	P6-E3-G-11-24
		2NO+1NC	P6-E3-G-22-24
		3NO	P6-E3-G-30-24
	110	1NO+2NC	P6-E3-G-11-110
		2NO+1NC	P6-E3-G-22-110
		3NO	P6-E3-G-30-110
	230	1NO+2NC	P6-E3-G-11-230
		2NO+1NC	P6-E3-G-22-230
		3NO	P6-E3-G-30-230
Red	12	1NO+2NC	P6-E3-R-11-12
		2NO+1NC	P6-E3-R-22-12
		3NO	P6-E3-R-30-12
	24	1NO+2NC	P6-E3-R-11-24
		2NO+1NC	P6-E3-R-22-24
		3NO	P6-E3-R-30-24
	110	1NO+2NC	P6-E3-R-11-110
		2NO+1NC	P6-E3-R-22-110
		3NO	P6-E3-R-30-110
	230	1NO+2NC	P6-E3-R-11-230
		2NO+1NC	P6-E3-R-22-230
		3NO	P6-E3-R-30-230
White	12	1NO+2NC	P6-E3-W-11-12
		2NO+1NC	P6-E3-W-22-12
		3NO	P6-E3-W-30-12
	24	1NO+2NC	P6-E3-W-11-24
		2NO+1NC	P6-E3-W-22-24
		3NO	P6-E3-W-30-24
	110	1NO+2NC	P6-E3-W-11-110
		2NO+1NC	P6-E3-W-22-110
		3NO	P6-E3-W-30-110
	230	1NO+2NC	P6-E3-W-11-230
		2NO+1NC	P6-E3-W-22-230
		3NO	P6-E3-W-30-230
Yellow	12	1NO+2NC	P6-E3-Y-11-12
		2NO+1NC	P6-E3-Y-22-12
		3NO	P6-E3-Y-30-12
	24	1NO+2NC	P6-E3-Y-11-24
		2NO+1NC	P6-E3-Y-22-24
		3NO	P6-E3-Y-30-24
	110	1NO+2NC	P6-E3-Y-11-110
		2NO+1NC	P6-E3-Y-22-110
		3NO	P6-E3-Y-30-110
	230	1NO+2NC	P6-E3-Y-11-230
		2NO+1NC	P6-E3-Y-22-230
		3NO	P6-E3-Y-30-230
Blue	12	1NO+2NC	P6-E3-B-11-12
		2NO+1NC	P6-E3-B-22-12
		3NO	P6-E3-B-30-12
	24	1NO+2NC	P6-E3-B-11-24
		2NO+1NC	P6-E3-B-22-24
		3NO	P6-E3-B-30-24
	110	1NO+2NC	P6-E3-B-11-110
		2NO+1NC	P6-E3-B-22-110
		3NO	P6-E3-B-30-110
	230	1NO+2NC	P6-E3-B-11-230
		2NO+1NC	P6-E3-B-22-230
		3NO	P6-E3-B-30-230

Functions

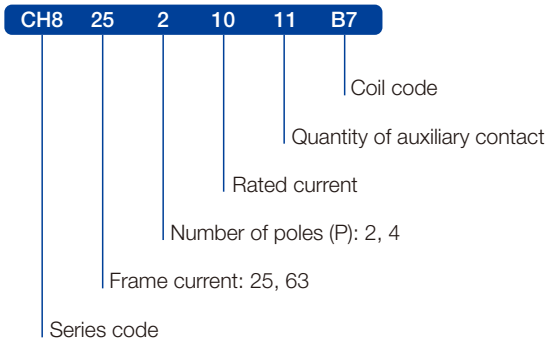
- Remote switching and controlling of power circuits
- Used in building automation, controlling of small pumps, ventilations, heating systems, lighting systems, and so on



Technical specifications

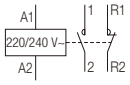
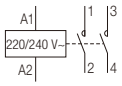
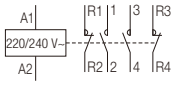
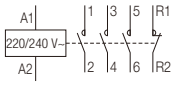
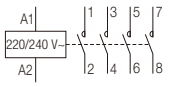
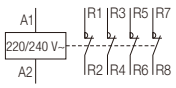
Type	3SCH8-25	3SCH8-63
Standard	IEC 6097-4-1	IEC 60947-4-1
Number of poles (P)	2, 4	
Type of current	AC	
Frequency (Hz)	50/60	
Rated voltage Un (V)	230/400	
Rated current In in AC-7a / AC1 (A)	10, 16, 20, 25	25, 32, 40, 63
Rated current In in AC-7b / AC1 (A)	4, 5.5, 7, 8.5	8.5, 12, 15, 25
Rated power in AC3 (Kw)		
230 V	2-5	5-13
400 V	6-13	15-40
Control circuit voltage (V)	24, 230	
Mechanical life (times)	300,000	
Electrical life (times)		
AC-7a / AC1	10,000	80,000
AC-7b / AC1	50,000	40,000
Degree of protection	IP20, with connected conductors	
Conductor cross-sections		
Solid and stranded (mm^2)	2-25	
Finely stranded with end sleeve (mm^2)	2-25	
Terminals		
Terminal tightening torque (N·m)	0.8-2.4	
Ambient temperature (°C)	-5 ~ +40, max. 95 % humidity	
Storage temperature (°C)	-40 ~ +75	
Connection capacity (mm^2)	1-25	

Instruction of type code



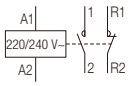
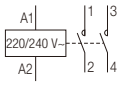
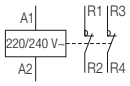
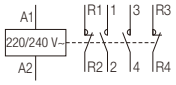
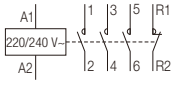
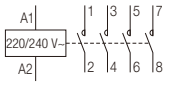
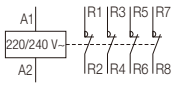
2

Selection and ordering data

	Number of poles	Width 18 mm mods	Rated current In AC-7a AC (A)	Rated current In AC-7b AC	Contact position	Control voltage (V AC)	Rated control Power in AC-7a /230 V (kW)	Rated control Power in AC-7b /230 V	Type code	Order code
	2	1	10	4	1NO+1NC	24	2	0.75	CH825 210 11B7	**25896**
			10	4	2NO	24	2	0.75	CH825 210 20B7	**25897**
			16	5.5	1NO+1NC	24	3.2	1.0	CH825 216 11B7	**25898**
			16	5.5	2NO	24	3.2	1.0	CH825 216 20B7	**25899**
			20	7	1NO+1NC	24	4	1.2	CH825 220 11B7	**25900**
			20	7	2NO	24	4	1.2	CH825 220 20B7	**25901**
			25	8.5	1NO+1NC	24	5	1.4	CH825 225 11B7	**25902**
			25	8.5	2NO	24	5	1.4	CH825 225 20B7	**25903**
		1	10	4	1NO+1NC	230	2	0.75	CH825 210 11P7	**26156**
			10	4	2NO	230	2	0.75	CH825 210 20P7	**26157**
			16	5.5	1NO+1NC	230	3.2	1.0	CH825 216 11P7	**26158**
			16	5.5	2NO	230	3.2	1.0	CH825 216 20P7	**26159**
			20	7	1NO+1NC	230	4	1.2	CH825 220 11P7	**26160**
			20	7	2NO	230	4	1.2	CH825 220 20P7	**26161**
			25	8.5	1NO+1NC	230	5	1.4	CH825 225 11P7	**26162**
			25	8.5	2NO	230	5	1.4	CH825 225 20P7	**26163**
	4	2	10	4	2NO+2NC	24	6.2	2.2	CH825 410 22B7	**25904**
			10	4	3NO+1NC	24	6.2	2.2	CH825 410 31B7	**25905**
			10	4	4NO	24	6.2	2.2	CH825 410 40B7	**25906**
			10	4	4NC	24	6.2	2.2	CH825 410 04B7	**25907**
			16	5.5	2NO+2NC	24	10	3	CH825 416 22B7	**25908**
			16	5.5	3NO+1NC	24	10	3	CH825 416 31B7	**25909**
			16	5.5	4NO	24	10	3	CH825 416 40B7	**25910**
			16	5.5	4NC	24	10	3	CH825 416 04B7	**25911**
		2	20	7	2NO+2NC	24	13	3.5	CH825 420 22B7	**25912**
			20	7	3NO+1NC	24	13	3.5	CH825 420 31B7	**25913**
			20	7	4NO	24	13	3.5	CH825 420 40B7	**25914**
			20	7	4NC	24	13	3.5	CH825 420 04B7	**25915**
			25	8.5	2NO+2NC	24	15	4	CH825 425 22B7	**25916**
			25	8.5	3NO+1NC	24	15	4	CH825 425 31B7	**25917**
			25	8.5	4NO	24	15	4	CH825 425 40B7	**25918**
			25	8.5	4NC	24	15	4	CH825 425 04B7	**25919**
		2	10	4	2NO+2NC	230	6.2	2.2	CH825 410 22P7	**26164**
			10	4	3NO+1NC	230	6.2	2.2	Ch825 410 31P7	**26165**
			10	4	4NO	230	6.2	2.2	CH825 410 40P7	**26166**
			10	4	4NC	230	6.2	2.2	CH825 410 04P7	**26167**
			16	5.5	2NO+2NC	230	10	3	CH825 416 22P7	**26168**
			16	5.5	3NO+1NC	230	10	3	CH825 416 31P7	**26169**
			16	5.5	4NO	230	10	3	CH825 416 40P7	**26170**
			16	5.5	4NC	230	10	3	CH825 416 04P7	**26171**
		2	20	7	2NO+2NC	230	13	3.5	CH825 420 22P7	**26172**
			20	7	3NO+1NC	230	13	3.5	CH825 420 31P7	**26173**
			20	7	4NO	230	13	3.5	CH825 420 40P7	**26174**
			20	7	4NC	230	13	3.5	CH825 420 04P7	**26175**
			25	8.5	2NO+2NC	230	15	4	CH825 425 22P7	**26176**
			25	8.5	3NO+1NC	230	15	4	CH825 425 31P7	**26177**
			25	8.5	4NO	230	15	4	CH825 425 40P7	**26178**
			25	8.5	4NC	230	15	4	CH825 425 04P7	**26179**

(1) Please contact us if any other coil voltage required

Selection and ordering data

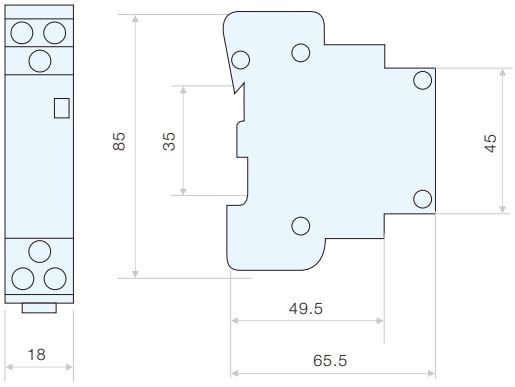
	Number of poles	Width 18 mm mods	Rated current In AC-7a AC (A)	Rated current In AC-7b AC	Contact position	Control voltage (V AC)	Rated control Power in AC-7a /230 V (kW)	Rated control Power in AC-7b /230 V	Type code	Order code
	2	2	25	8.5	1NO+1NC	24	5	1.4	CH863 225 11B7	**25920**
			25	8.5	2NO	24	5	1.4	CH863 225 20B7	**25921**
			25	8.5	2NC	24	5	1.4	CH863 225 02B7	**25922**
			32	12	1NO+1NC	24	6.5	2	CH863 232 11B7	**25923**
			32	12	2NO	24	6.5	2	CH863 232 20B7	**25924**
			32	12	2NC	24	6.5	2	CH863 232 02B7	**25925**
			40	15	1NO+1NC	24	8.5	2.5	CH863 240 11B7	**25926**
			40	15	2NO	24	8.5	2.5	CH863 240 20B7	**25927**
			40	15	2NC	24	8.5	2.5	CH863 240 02B7	**25928**
			63	25	1NO+1NC	24	13	4	CH863 263 11B7	**25929**
			63	25	2NO	24	13	4	CH863 263 20B7	**25930**
			63	25	2NC	24	13	4	CH863 263 02B7	**25931**
		2	25	8.5	1NO+1NC	230	5	1.4	CH863 225 11P7	**26180**
			25	8.5	2NO	230	5	1.4	CH863 225 20P7	**26181**
			25	8.5	2NC	230	5	1.4	CH863 225 02P7	**26182**
			32	12	1NO+1NC	230	6.5	2	CH863 232 11P7	**26183**
			32	12	2NO	230	6.5	2	CH863 232 20P7	**26184**
			32	12	2NC	230	6.5	2	CH863 232 02P7	**26185**
			40	15	1NO+1NC	230	8.5	2.5	CH863 240 11P7	**26186**
			40	15	2NO	230	8.5	2.5	CH863 240 20P7	**26187**
			40	15	2NC	230	8.5	2.5	CH863 240 02P7	**26188**
			63	25	1NO+1NC	230	13	4	CH863 263 11P7	**26189**
			63	25	2NO	230	13	4	CH863 263 20P7	**26190**
			63	25	2NC	230	13	4	CH863 263 02P7	**26191**
	4	3	25	8.5	2NO+2NC	24	15	4	CH863 425 22B7	**25932**
			25	8.5	3NO+1NC	24	15	4	CH863 425 31B7	**25933**
			25	8.5	4NO	24	15	4	CH863 425 40B7	**25934**
			25	8.5	4NC	24	15	4	CH863 425 04B7	**25935**
			32	12	2NO+2NC	24	21	6.5	CH863 432 22B7	**25936**
			32	12	3NO+1NC	24	21	6.5	CH863 432 31B7	**25937**
			32	12	4NO	24	21	6.5	CH863 432 40B7	**25938**
			32	12	4NC	24	21	6.5	CH863 432 04B7	**25939**
		3	40	15	2NO+2NC	24	26	7.5	CH863 440 22B7	**25940**
			40	15	3NO+1NC	24	26	7.5	CH863 440 31B7	**25941**
			40	15	4NO	24	26	7.5	CH863 440 40B7	**25942**
			40	15	4NC	24	26	7.5	CH863 440 04B7	**25943**
			63	25	2NO+2NC	24	40	13	CH863 463 22B7	**25944**
			63	25	3NO+1NC	24	40	13	CH863 463 31B7	**25945**
			63	25	4NO	24	40	13	CH863 463 40B7	**25946**
			63	25	4NC	24	40	13	CH863 463 04B7	**25947**
		3	25	8.5	2NO+2NC	230	15	4	CH863 425 22P7	**26192**
			25	8.5	3NO+1NC	230	15	4	CH863 425 31P7	**26193**
			25	8.5	4NO	230	15	4	CH863 425 40P7	**26194**
			25	8.5	4NC	230	15	4	CH863 425 04P7	**26195**
			32	12	2NO+2NC	230	21	6.5	CH863 432 22P7	**26196**
			32	12	3NO+1NC	230	21	6.5	CH863 432 31P7	**26197**
			32	12	4NO	230	21	6.5	CH863 432 40P7	**26198**
			32	12	4NC	230	21	6.5	CH863 432 04P7	**26199**
		3	40	15	2NO+2NC	230	26	7.5	CH863 440 22P7	**26200**
			40	15	3NO+1NC	230	26	7.5	CH863 440 31P7	**26201**
			40	15	4NO	230	26	7.5	CH863 440 40P7	**26202**
			40	15	4NC	230	26	7.5	CH863 440 04P7	**26203**
			63	25	2NO+2NC	230	40	13	CH863 463 22P7	**26204**
			63	25	3NO+1NC	230	40	13	CH863 463 31P7	**26205**
			63	25	4NO	230	40	13	CH863 463 40P7	**26206**
			63	25	4NC	230	40	13	CH863 463 04P7	**26207**

(1) Please contact us if any other coil voltage required

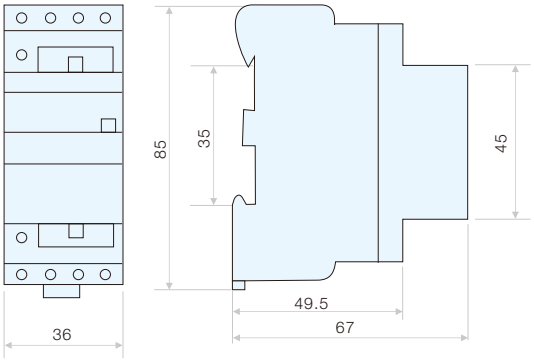
Outline and installation dimensions

unit in mm

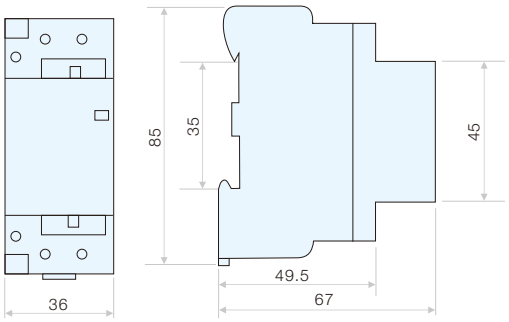
3SCH8-25 2P



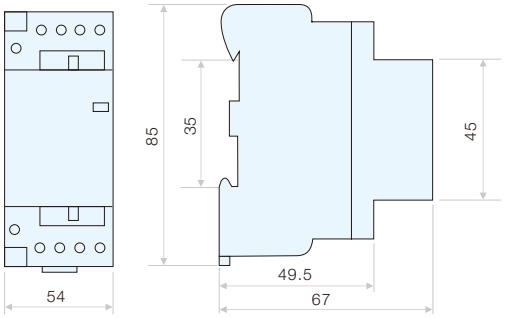
3SCH8-25 4P



3SCH8-63 2P



3SCH8-63 4P



Functions

- Widely used in terminal distribution system
- Being complete series of terminal distribution system together with series 3SB71



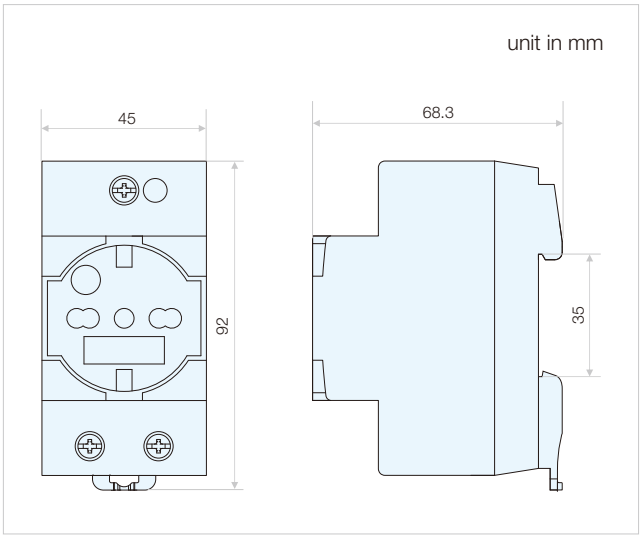
Technical specifications

- Standard: IEC 60884-1
- Rated current (A): 16
- Modules: 2.5
- Rated voltage Ue (V): 230/400
- Conductor cross-sections
- Solid and stranded (mm^2): 0.75-35

Selection and ordering data

	Number of poles (P)	Rated current In (A)	Type code	Order code
	2+E	16	MS71	**17727**

Outline and installation dimensions



Modular Time Swtiches
Series 3SE8, 3SUL181H, 3SRC18, 3SHC18A

Functions

- Controlling circuit opening and closing according to the scheduled program.
- Can be set on the scheduled program
- Available on hourly, daily and weekly version and equipped with a 16 A contact
- Fitting applications such as shop lighting systems, public buildings, schools, heating and irrigation systems and so forth.



Technical specifications

Type	3SE8	3SUL181H	3SRC18	3SHC18A
				
Standard	IEC 60730-1			
Rated supply voltage (V)	AC 220-240			
Contact type	-	-	-	1NC OR 1NO
Switching capacity				
resistive load (A)	16	16	16	16
inductive load (A)	4			
Rated frequency (Hz)	50/60			
Full time range	7 minutes	24 minutes	20 minutes	24 hours or one week
Minimum setting unit	0.5 minutes	30 minutes	0.5 minutes	-
Electrical life (times)	10^5 times	10^5 times	10^5 times	10^5 times
Mechanical life (times)	10^7 times	10^7 times	10^7 times	10^7 times
Modules (18 mm)	1	3	1	2
Operating temperature (°C)	-5 ~ +40, max. 95 % humidity			
Storage temperature (°C)	-40 ~ +75			
Mounting	ON DIN RAIL			
Terminal size for cable (mm^2)	2.5			

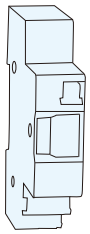
Selection and ordering data

	Rated current In (A)	Full time range	Type code	Order code
3SE8	16	7 minutes	E8	**24776**
3SUL181H	16	24 hours	SUL181H	**13684**
3SRC18	16	20 minutes	ALC18	**24780**
3SHC18A	16	24 hours or one week	HC18A	**24777**

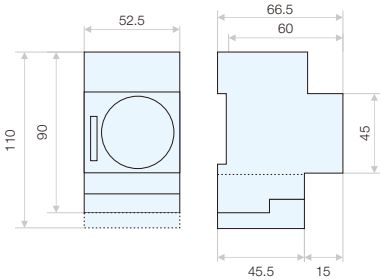
Outline and installation dimensions

unit in mm

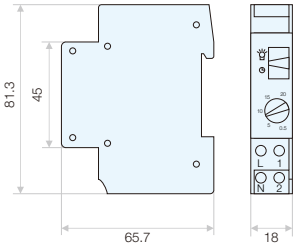
3SE8



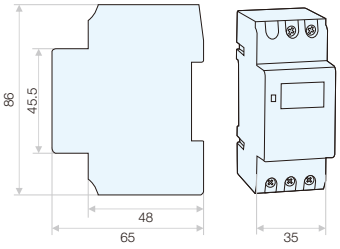
3SUL181H



3SRC18



3SHC18A



Functions

- Types 2 surge arresters
- Handling energy from distant/ indirect lightning strikes or from switching operations
- Feature lower protection level (Up)
- Recommended at the incoming of installation for locations with no exposure to direct lightning impulses



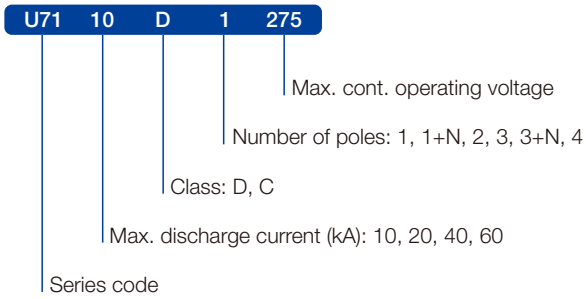
Technical specifications

- Standard: IEC 61643-1
- Type / test class: 2 / II
- Number of poles: 1P, 1P+N, 2P, 3P, 3P+N, 4P
- Type of current: AC
- Frequency (Hz): 50/60
- Rated voltage Un (V): 230/400
- Max. Cont. operating voltage U (V): 140, 275, 320, 385, 420
- Max. discharge current Imax (8/20) per pole (kA): 10, 20, 40, 60
- Norminal discharge current In (8/20) per pole (kA): 5, 10, 15, 20
- Voltage protection level Up (kV): 1.0, 1.2, 1.2, 1.5
- Tov (Temporary overvoltage) withstand UT (5 s.) (V): 440
- Continuous operating current Ic (mA): < 1
- Degree of protection: IP20, with connected conductors
- Pluggable cartridge: Yes
- State indicator: Yes
- Integrated auxiliary contact: Yes
- Conductor cross-sections
- Solid and stranded (mm^2): 2-35
- Finely stranded with end sleeve (mm^2): 2-25
- Terminals
- Terminal tightening torque (N·m): 2.8
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Connection Capacity (mm^2): 1-25

Technical specification of the integrated remote signal contact

- Contact complement: 1 NO +1 NC
- Min. load: 24 V DC - 10 mA
- Max. load: 240 V AC - 1 A

Instruction of type code



2

Selection and ordering data

Test classification	Max. Cont. operating voltage Uc (V)	Remote signal contact	Number of poles	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Type code	Order code
T2	140	with	1P	10	5	U71C T210 1/140	**34823**
			2P	10	5	U71C T210 2/140	**34828**
			3P	10	5	U71C T210 3/140	**34833**
			4P	10	5	U71C T210 4/140	**34838**
			1P+N	10	5	U71C T210 1N/140	**38093**
			3P+N	10	5	U71C T210 3N/140	**38098**
	275	with	1P	10	5	U71C T210 1/275	**34824**
				20	10	U71C T220 1/275	**34843**
				40	20	U71C T240 1/275	**34859**
				60	30	U71C T260 1/275	**34875**
			1P+N	10	5	U71C T210 1N/275	**38094**
				20	10	U71C T220 1N/275	**38103**
				40	20	U71C T240 1N/275	**38111**
				60	30	U71C T260 1N/275	**38119**
			2P	10	5	U71C T210 2/275	**34829**
				20	10	U71C T220 2/275	**34847**
				40	20	U71C T240 2/275	**34863**
				60	30	U71C T260 2/275	**34879**
			3P	10	5	U71C T210 3/275	**34834**
				20	10	U71C T220 3/275	**34851**
				40	20	U71C T240 3/275	**34867**
				60	30	U71C T260 3/275	**34883**
			3P+N	10	5	U71C T210 3N/275	**38099**
				20	10	U71C T220 3N/275	**38107**
				40	20	U71C T240 3N/275	**38115**
				60	30	U71C T260 3N/275	**38123**
			4P	10	5	U71C T210 4/275	**34839**
				20	10	U71C T220 4/275	**34855**
				40	20	U71C T240 4/275	**34871**
				60	30	U71C T260 4/275	**34887**
	320	with	1P	10	5	U71C T210 1/320	**34825**
				20	10	U71C T220 1/320	**34844**
				40	20	U71C T240 1/320	**34860**
				60	30	U71C T260 1/320	**34876**
			1P+N	10	5	U71C T210 1N/320	**38095**
				20	10	U71C T220 1N/320	**38104**
				40	20	U71C T240 1N/320	**38112**
				60	30	U71C T260 1N/320	**38120**
			2P	10	5	U71C T210 2/320	**34830**
				20	10	U71C T220 2/320	**34848**
				40	20	U71C T240 2/320	**34864**
				60	30	U71C T260 2/320	**34880**
			3P	10	5	U71C T210 3/320	**34835**
				20	10	U71C T220 3/320	**34852**
				40	20	U71C T240 3/320	**34868**
				60	30	U71C T260 3/320	**34884**
			3P+N	10	5	U71C T210 3N/320	**38100**
				20	10	U71C T220 3N/320	**38108**
				40	20	U71C T240 3N/320	**38116**
				60	30	U71C T260 3N/320	**38124**
			4P	10	5	U71C T210 4/320	**34840**
				20	10	U71C T220 4/320	**34856**
				40	20	U71C T240 4/320	**34872**
				60	30	U71C T260 4/320	**34888**









Selection and ordering data

	Test classification	Max. Cont. operating voltage Uc (V)	Remote signal contact	Number of poles	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Type code	Order code
	T2	385	with	1P	10	5	U71C T210 1/385	**34826**
					20	10	U71C T220 1/385	**34845**
					40	20	U71C T240 1/385	**34861**
					60	30	U71C T260 1/385	**34877**
				1P+N	10	5	U71C T210 1N/385	**38096**
					20	10	U71C T220 1N/385	**38105**
					40	20	U71C T240 1N/385	**38113**
					60	30	U71C T260 1N/385	**38121**
				2P	10	5	U71C T210 2/385	**34831**
					20	10	U71C T220 2/385	**34849**
					40	20	U71C T240 2/385	**34865**
					60	30	U71C T260 2/385	**34881**
				3P	10	5	U71C T210 3/385	**34836**
					20	10	U71C T220 3/385	**34853**
					40	20	U71C T240 3/385	**34869**
					60	30	U71C T260 3/385	**34885**
				3P+N	10	5	U71C T210 3N/385	**38101**
					20	10	U71C T220 3N/385	**38109**
					40	20	U71C T240 3N/385	**38117**
					60	30	U71C T260 3N/385	**38125**
				4P	10	5	U71C T210 4/385	**34841**
					20	10	U71C T220 4/385	**34857**
					40	20	U71C T240 4/385	**34873**
					60	30	U71C T260 4/385	**34889**
		420	with	1P	10	5	U71C T210 1/420	**34827**
					20	10	U71C T220 1/420	**34846**
					40	20	U71C T240 1/420	**34862**
					60	30	U71C T260 1/420	**34878**
				1P+N	10	5	U71C T210 1N/420	**38097**
					20	10	U71C T220 1N/420	**38106**
					40	20	U71C T240 1N/420	**38114**
					60	30	U71C T260 1N/420	**38122**
				2P	10	5	U71C T210 2/420	**34832**
					20	10	U71C T220 2/420	**34850**
					40	20	U71C T240 2/420	**34866**
					60	30	U71C T260 2/420	**34882**
				3P	10	5	U71C T210 3/420	**34837**
					20	10	U71C T220 3/420	**34854**
					40	20	U71C T240 3/420	**34870**
					60	30	U71C T260 3/420	**34886**
				3P+N	10	5	U71C T210 3N/420	**38102**
					20	10	U71C T220 3N/420	**38110**
					40	20	U71C T240 3N/420	**38118**
					60	30	U71C T260 3N/420	**38126**
				4P	10	5	U71C T210 4/420	**34842**
					20	10	U71C T220 4/420	**34858**
					40	20	U71C T240 4/420	**34874**
					60	30	U71C T260 4/420	**34890**

Functions

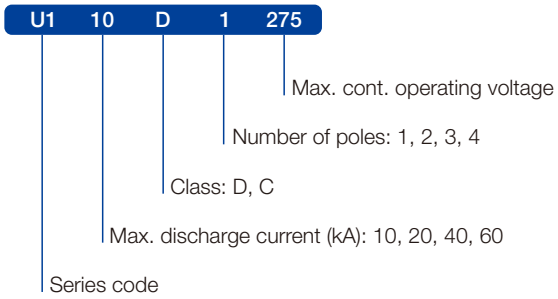
- Types 2 surge arresters
- Handling energy from distant / indirect lightning strikes or from switching operations
- Feature lower protection level (Up)
- Recommended at the incoming of installation for locations with no exposure to direct lightning impulses
- 3SU1 DC provide protection for equipment on photovoltaic connected system, against transient overvoltages that occur on the electrical network



Technical specifications

- Standard: IEC 61643-1
- Type / test class: 2 / II
- Number of poles: 1P, 1P+N, 2P, 2P+N, 3P, 3P+N, 4P
- Type of current: AC
- Frequency (Hz): 50/60
- Rated voltage Un (V): 230/400
- Max. Cont. operating voltage U (V): 400
- Max. discharge current Imax (8/20) per pole (kA): 10, 20, 40, 60
- Norminal discharge current In (8/20) per pole (kA): 5, 10, 15, 20
- Voltage protection level Up (kV): 1.0, 1.2, 1.2, 1.5
- Tov (Temporary overvoltage) withstand UT (5 s.) (V): 440
- Continuous operating current Ic (mA): <1
- Degree of protection: P20, with connected conductors
- Pluggable cartridge: Yes
- State indicator: Yes
- Integrated auxiliary contact: Yes
- Conductor cross-sections
- Solid and stranded (mm^2): 2-35
- Finely stranded with end sleeve (mm^2): 2-25
- Terminal tightening torque (N · m): 2.8
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75
- Connection Capacity (mm^2): 1-25

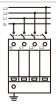
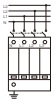
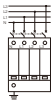
Instruction of type code



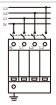
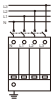
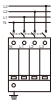
Technical specification of the integrated auxiliary contact

- Contact complement: 1 NO +1 NC
- Min. load: 24 V DC - 10 mA
- Max. load: 240 V AC - 1 A

Selection and ordering data

		Auxiliary contact	Number of poles	Max. Cont. operating voltage Uc (V)	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Voltage protection level Up (kV)	Type code	Order code
		without	1P	275	10	5	1	U1 10D1/275	**29039**
					20	10	1.2	U1 20D1/275	**29053**
					40	20	1.2	U1 40C1/275	**29067**
					60	30	1.5	U1 60C1/275	**29074**
		without	1P+N	275	10	5	1	U1 10D1N/275	**29043**
					20	10	1.2	U1 20D1N/275	**29057**
					40	20	1.2	U1 40C1N/275	**29071**
					60	30	1.5	U1 60C1N/275	**29078**
		with	1P	275	10	5	1	U1C 10D1/275	**32683**
					20	10	1.2	U1C 20D1/275	**32687**
					40	20	1.2	U1C 40C1/275	**32691**
					60	30	1.5	U1C 60C1/275	**32695**
		without	2P	275	10	5	1	U1 10D2/275	**29040**
					20	10	1.2	U1 20D2/275	**29054**
					40	20	1.2	U1 40C2/275	**29068**
					60	30	1.5	U1 60C2/275	**29075**
		with	2P	275	10	5	1	U1C 10D2/275	**32684**
					20	10	1.2	U1C 20D2/275	**32688**
					40	20	1.2	U1C 40C2/275	**32692**
					60	30	1.5	U1C 60C2/275	**32696**
		without	3P	275	10	5	1	U1 10D3/275	**29041**
					20	10	1.2	U1 20D3/275	**29055**
					40	20	1.2	U1 40C3/275	**29069**
					60	30	1.5	U1 60C3/275	**29076**
		without	3P+N	275	10	5	1	U1 10D3N/275	**29045**
					20	10	1.2	U1 20D3N/275	**29059**
					40	20	1.2	U1 40C3N/275	**29073**
					60	30	1.5	U1 60C3N/275	**29080**
		with	3P	275	10	5	1	U1C 10D3/275	**32685**
					20	10	1.2	U1C 20D3/275	**32689**
					40	20	1.2	U1C 40C3/275	**32693**
					60	30	1.5	U1C 60C3/275	**32697**
		without	4P	275	10	5	1	U1 10D4/275	**29042**
					20	10	1.2	U1 20D4/275	**29056**
					40	20	1.2	U1 40C4/275	**29070**
					60	30	1.5	U1 60C4/275	**29077**
		with	4P	275	10	5	1	U1C 10D4/275	**32686**
					20	10	1.2	U1C 20D4/275	**32690**
					40	20	1.2	U1C 40C4/275	**32694**
					60	30	1.5	U1C 60C4/275	**32698**

Selection and ordering data

		Auxiliary contact	Number of poles	Max. Cont. operating voltage Uc (V)	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Voltage protection level Up (kV)	Type code	Order code
		without	1P	400	10	5	1	U1 10D1/400	**29312**
					20	10	1.2	U1 20D1/400	**29326**
					40	20	1.2	U1 40C1/400	**29340**
					60	30	1.5	U1 60C1/400	**29347**
		without	1P+N	400	10	5	1	U1 10D1N/400	**29316**
					20	10	1.2	U1 20D1N/400	**29330**
					40	20	1.2	U1 40C1N/400	**29344**
					60	30	1.5	U1 60C1N/400	**29351**
		with	1P	400	10	5	1	U1C 10D1/400	**32699**
					20	10	1.2	U1C 20D1/400	**32703**
					40	20	1.2	U1C 40C1/400	**32707**
					60	30	1.5	U1C 60C1/400	**32711**
		without	2P	400	10	5	1	U1 10D2/400	**29313**
					20	10	1.2	U1 20D2/400	**29327**
					40	20	1.2	U1 40C2/400	**29341**
					60	30	1.5	U1 60C2/400	**29348**
		with	2P	400	10	5	1	U1C 10D2/400	**32700**
					20	10	1.2	U1C 20D2/400	**32704**
					40	20	1.2	U1C 40C2/400	**32708**
					60	30	1.5	U1C 60C2/400	**32712**
		without	3P	400	10	5	1	U1 10D3/400	**29314**
					20	10	1.2	U1 20D3/400	**29328**
					40	20	1.2	U1 40C3/400	**29342**
					60	30	1.5	U1 60C3/400	**29349**
		without	3P+N	400	10	5	1	U1 10D3N/400	**29318**
					20	10	1.2	U1 20D3N/400	**29332**
					40	20	1.2	U1 40C3N/400	**29346**
					60	30	1.5	U1 60C3N/400	**29353**
		with	3P	400	10	5	1	U1C 10D3/400	**32701**
					20	10	1.2	U1C 20D3/400	**32705**
					40	20	1.2	U1C 40C3/400	**32709**
					60	30	1.5	U1C 60C3/400	**32713**
		without	4P	400	10	5	1	U1 10D4/400	**29315**
					20	10	1.2	U1 20D4/400	**29329**
					40	20	1.2	U1 40C4/400	**29343**
					60	30	1.5	U1 60C4/400	**29350**
		with	4P	400	10	5	1	U1C 10D4/400	**32702**
					20	10	1.2	U1C 20D4/400	**32706**
					40	20	1.2	U1C 40C4/400	**32710**
					60	30	1.5	U1C 60C4/400	**32714**

Selection and ordering data

Replacement cartridges for surge protective devices type 2





Number of poles	Max. Cont. operating voltage Uc (V)	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Voltage protection level Up (kV)	Type code	Order code
1P	275	10	5	1	U1RP 27510	**32962**
		20	10	1.2	U1RP 27520	**32963**
		40	20	1.2	U1RP 27540	**32964**
		60	30	1.5	U1RP 27560	**32965**
	320	10	5	1	U1RP 32010	**32966**
		20	10	1.2	U1RP 32020	**32967**
		40	20	1.2	U1RP 32040	**32968**
		60	30	1.5	U1RP 32060	**32969**
	385	10	5	1	U1RP 38510	**32970**
		20	10	1.2	U1RP 38520	**32971**
		40	20	1.2	U1RP 38540	**32972**
		60	30	1.5	U1RP 38560	**32973**
	400	10	5	1	U1RP 40010	**32974**
		20	10	1.2	U1RP 40020	**32975**
		40	20	1.2	U1RP 40040	**32976**
		60	30	1.5	U1RP 40060	**32977**
	440	10	5	1	U1RP 44010	**32978**
		20	10	1.2	U1RP 44020	**32979**
		40	20	1.2	U1RP 44040	**32980**
		60	30	1.5	U1RP 44060	**32981**

2

Functions

- Types 2 surge arresters
- Handling energy from distant / indirect lightning strikes or from switching operations
- Feature lower protection level (Up)
- Recommended at the incoming of installation for locations with no exposure to direct lightning impulses



Technical specifications

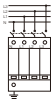
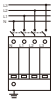
Type		3SU6-20				3SU6-40				3SU6-60		3SU6-80	
Standard		IEC/EN 61643-11											
Type/Test class		2 / II											
Number of poles		1P, 2P, 3P, 4P, 1P+N, 3P+N											
Type of current		AC											
Frequency	Hz	50/60											
Max. discharge current (8/20μs) Imax	kA	10	10	10	10	20	20	20	20	30	30	40	40
Norminal discharge current (8/20μs) In	kA	20	20	20	20	40	40	40	40	60	60	80	80
Max. Cont. operating voltage Uc	V AC	275	320	385	440	275	320	385	440	385	440	385	440
Voltage protection level [L-PE] Up	kV	1.3	1.4	1.6	1.8	1.4	1.5	1.8	2.2	2.2	2.5	2.5	3.0
Response time	ns	< 25											
Degree of protection		IP20											
Pluggable cartridge		√											
State indicator		√											
Remote signal contact		√											
Remote communication connection		14 11: NO, 11 12: NC											
Mounting DIN rail		35 mm											
Solid and stranded	mm^2	2 ... 35											
Finely stranded with end sleeve	mm^2	2 ... 25											
Terminal tightening torque	N·m	2.8											
Flame retardant grade		V0											
Ambient temperature	°C	-25 ~ 70, max. 95% humidity											
Storage temperature	°C	-40 ~ 75											

Selection and ordering data

	Auxiliary contact	Number of poles	Max. Cont. operating voltage Uc (V)	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Voltage protection level Up (kV)	Type code	Order code
	without	1P	275	20	10	1.3	U6 10D1/275	
				40	20	1.4	U6 20D1/275	
			320	20	10	1.4	U6 10D1/320	
				40	20	1.5	U6 20D1/320	
			385	20	10	1.6	U6 10D1/385	
				40	20	1.8	U6 20D1/385	
				60	30	2.2	U6 30C1/385	
				80	40	2.5	U6 40C1/385	
			440	20	10	1.8	U6 10D1/440	
				40	20	2.2	U6 20D1/440	
				60	30	2.5	U6 30C1/440	
				80	40	2.5	U6 40C1/440	
	with	1P	275	20	10	1.3	U6C 10D1/275	
				40	20	1.4	U6C 20D1/275	
			320	20	10	1.4	U6C 10D1/320	
				40	20	1.5	U6C 20D1/320	
			385	20	10	1.6	U6C 10D1/385	
				40	20	1.8	U6C 20D1/385	
				60	30	2.2	U6C 30C1/385	
				80	40	2.5	U6C 40C1/385	
			440	20	10	1.6	U6C 10D1/440	
				40	20	1.8	U6C 20D1/440	
				60	30	2.2	U6C 30C1/440	
				80	40	3.0	U6C 40C1/440	
	without	1+NPE	275	20	10	1.3	U6 10D1N/275	
				40	20	1.4	U6 20D1N/275	
			320	20	10	1.4	U6 10D1N/320	
				40	20	1.5	U6 20D1N/320	
			385	20	10	1.6	U6 10D1N/385	
				40	20	1.8	U6 20D1N/385	
				60	30	2.2	U6 30C1N/385	
				80	40	2.5	U6 40C1N/385	
			440	20	10	1.6	U6 10D1N/440	
				40	20	1.8	U6 20D1N/440	
				60	30	2.2	U6 30C1N/440	
				80	40	3.0	U6 40C1N/440	
	without	2P	275	20	10	1.3	U6 10D2/275	
				40	20	1.4	U6 20D2/275	
			320	20	10	1.4	U6 10D2/320	
				40	20	1.5	U6 20D2/320	
			385	20	10	1.6	U6 10D2/385	
				40	20	1.8	U6 20D2/385	
				60	30	2.2	U6 30C2/385	
				80	40	2.5	U6 40C2/385	
			440	20	10	1.6	U6 10D2/440	
				40	20	1.8	U6 20D2/440	
				60	30	2.2	U6 30C2/440	
				80	40	3.0	U6 40C2/440	
	with	2P	275	20	10	1.3	U6C 10D2/275	
				40	20	1.4	U6C 20D2/275	
			320	20	10	1.4	U6C 10D2/320	
				40	20	1.5	U6C 20D2/320	
			385	20	10	1.6	U6C 10D2/385	
				40	20	1.8	U6C 20D2/385	
				60	30	2.2	U6C 30C2/385	
				80	40	2.5	U6C 40C2/385	
			440	20	10	1.6	U6C 10D2/440	
				40	20	1.8	U6C 20D2/440	
				60	30	2.2	U6C 30C2/440	
				80	40	3.0	U6C 40C2/440	

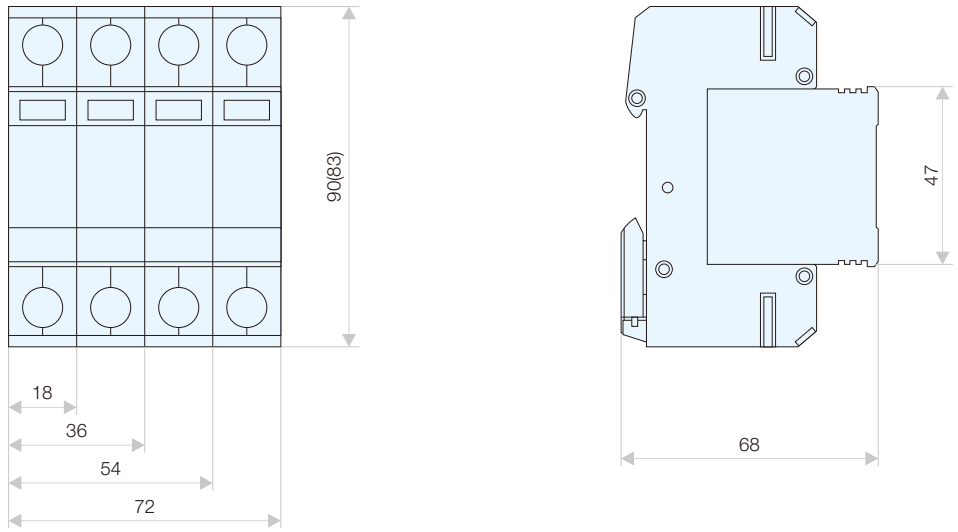
2

Selection and ordering data

Auxiliary contact	Number of poles	Max. Cont. operating voltage Uc (V)	Max. discharge current Imax (8/20) per pole (kA)	Nominal discharge current In (8/20) per pole (kA)	Voltage protection level Up (kV)	Type code	Order code
without	3P	275	20	10	1.3	U6 10D3/275	
			40	20	1.4	U6 20D3/275	
		320	20	10	1.4	U6 10D3/320	
			40	20	1.5	U6 20D3/320	
		385	20	10	1.6	U6 10D3/385	
			40	20	1.8	U6 20D3/385	
			60	30	2.2	U6 30C3/385	
			80	40	2.5	U6 40C3/385	
		440	20	10	1.6	U6 10D3/440	
			40	20	1.8	U6 20D3/440	
			60	30	2.2	U6 30C3/440	
			80	40	3.0	U6 40C3/440	
with	3P	275	20	10	1.3	U6C 10D3/275	
			40	20	1.4	U6C 20D3/275	
		320	20	10	1.4	U6C 10D3/320	
			40	20	1.5	U6C 20D3/320	
		385	20	10	1.6	U6C 10D3/385	
			40	20	1.8	U6C 20D3/385	
			60	30	2.2	U6C 30C3/385	
			80	40	2.5	U6C 40C3/385	
		440	20	10	1.6	U6C 10D3/440	
			40	20	1.8	U6C 20D3/440	
			60	30	2.2	U6C 30C3/440	
			80	40	3.0	U6C 40C3/440	
without	3+NPE	275	20	10	1.3	U6 10D3N/275	
			40	20	1.4	U6 20D3N/275	
		320	20	10	1.4	U6 10D3N/320	
			40	20	1.5	U6 20D3N/320	
		385	20	10	1.6	U6 10D3N/385	
			40	20	1.8	U6 20D3N/385	
			60	30	2.2	U6 30C3N/385	
			80	40	2.5	U6 40C3N/385	
		440	20	10	1.6	U6 10D3N/440	
			40	20	1.8	U6 20D3N/440	
			60	30	2.2	U6 30C3N/440	
			80	40	3.0	U6 40C3N/440	
without	4P	275	20	10	1.3	U6 10D4/275	
			40	20	1.4	U6 20D4/275	
		320	20	10	1.4	U6 10D4/320	
			40	20	1.5	U6 20D4/320	
		385	20	10	1.6	U6 10D4/385	
			40	20	1.8	U6 20D4/385	
			60	30	2.2	U6 30C4/385	
			80	40	2.5	U6 40C4/385	
		440	20	10	1.6	U6 10D4/440	
			40	20	1.8	U6 20D4/440	
			60	30	2.2	U6 30C4/440	
			80	40	3.0	U6 40C4/440	
with	4P	275	20	10	1.3	U6C 10D4275	
			40	20	1.4	U6C 20D4/275	
		320	20	10	1.4	U6C 10D4320	
			40	20	1.5	U6C 20D4/320	
		385	20	10	1.6	U6C 10D4/385	
			40	20	1.8	U6C 20D4/385	
			60	30	2.2	U6C 30C4/385	
			80	40	2.5	U6C 40C4/385	
		440	20	10	1.6	U6C 10D4/440	
			40	20	1.8	U6C 20D4/440	
			60	30	2.2	U6C 30C4/440	
			80	40	3.0	U6C 40C4/440	

Outline and installation dimensions

unit in mm



Surge Protective Devices
Series PSC61, compact, type 2

Functions

- Types 2 surge arresters
- Handling energy from distant / indirect lightning strikes or from switching operations
- Feature lower protection level
- Recommended to be installed at the incoming of installation for locations with no exposure to direct lightning impulses



Technical specifications

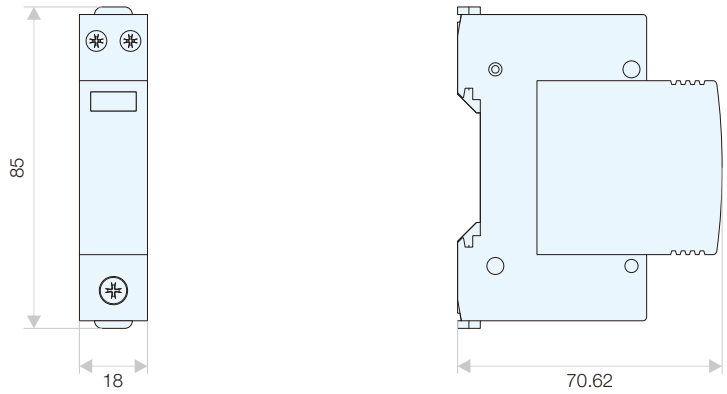
- Standard: IEC 61643-1
- Type / test class: 2 / II
- Number of poles: 1P+N
- Type of current: AC
- Frequency (Hz): 50/60
- Rated voltage Un (V): 230
- Max. Cont. operating voltage U (V): 275
- Max. discharge current Imax (8/20) per pole (kA): 15, 30, 40
- Norminal discharge current In (8/20) per pole (kA): 5, 15, 20
- Voltage protection level Up (kV): 1.3
- Continuous operating current Ic (mA): < 1
- Degree of protection: IP20, with connected conductors
- Pluggable cartridge: Yes
- State indicator: Yes
- Conductor cross-sections, Solid and stranded and finely stranded with end sleeve (mm^2): 2-16

Selection and ordering data

Protected lines	Width (mm)	Imax (8/20) (kA)	In (8/20) (kA)	Up at In (kV)	Un (V)	Uc (V)	Type code
Without remote signal contact							
1+1	18	15	5	1.1	230	275	PSC61-T2-15-275
		30	15	1.3	230	275	PSC61-T2-30-275
		40	20	1.3	230	275	PSC61-T2-40-275
With remote signal contact							
1+1	18	15	5	1.1	230	275	PSC61-T2-15-275R
		30	15	1.3	230	275	PSC61-T2-30-275R
		40	20	1.3	230	275	PSC61-T2-40-275R
Replacement pluggable module							
1+1	18	15	5	1.1	230	275	PSC61-T2-15-275P
		30	15	1.3	230	275	PSC61-T2-30-275P
		40	20	1.3	230	275	PSC61-T2-40-275P

Outline and installation dimensions

unit in mm



Functions

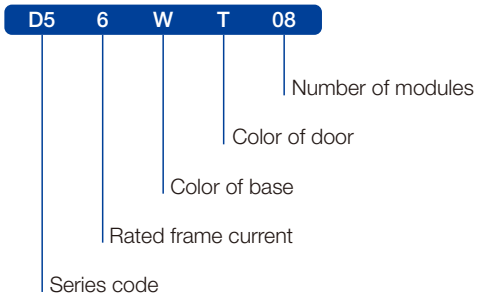
- Equipped with various modular electric for the function of terminal power distribution .
- Suited for the installation of all Sassin individual modular devices. (RCDs, MCBs, RCBO's, switch disconnectors etc).
- Used in residential building, non-residential building, industry.

Technical specifications

- Standard: IEC 61439-3
- Modules (No.): 4, 6, 8, 12, 18, 24, 36
- Row :
  - Single row for 4, 6, 8, 12, 18 modules
  - 2 rows for 24 modules
  - 3 rows for 36 modules
- Rated frame current In (A): 63, 100
- Color: White RAL 9003 and grey RAL 7035
- The color of door: Transparent, non transparent
- Mounting type: Surface, Flush.
- Degree of protection: IP30
- Material:
  - HIPS for body
  - SAN for door (4-18 modules)
  - PC for door (24 & 36 modules)
- Fire resistence: 650 °C / 30 s
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75

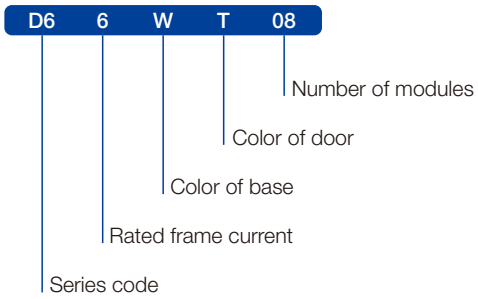


Instruction of type code





Instruction of type code



Selection and ordering data

Flush mounting 3SD5











Rated current In (A)	Color of base	Color of door	Number of module	Type code	Order code
63	White	White	4	D506WW04	**23157**
			6	D506WW06	**23163**
			8	D506WW08	**23169**
			12	D506WW12	**23137**
			18	D506WW18	**23143**
			24	D506WW24	**23149**
			36	D506WW36	**23153**
		Transparent	4	D506WT04	**23159**
			6	D506WT06	**23165**
			8	D506WT08	**23171**
			12	D506WT12	**23139**
			18	D506WT18	**23145**
			24	D506WT24	**23150**
			36	D506WT36	**23154**
	Grey	Grey	4	D506GG04	**24555**
			6	D506GG06	**24557**
			8	D506GG08	**24559**
			12	D506GG12	**24563**
			18	D506GG18	**24565**
			24	D506GG24	**24567**
			36	D506GG36	**24569**
		Transparent	4	D506GT04	**24556**
			6	D506GT06	**24558**
			8	D506GT08	**24560**
			12	D506GT12	**24564**
			18	D506GT18	**24566**
			24	D506GT24	**24568**
			36	D506GT36	**24570**
100	White	White	4	D510WW04	**30655**
			6	D510WW06	**30657**
			8	D510WW08	**30659**
			12	D510WW12	**30663**
			18	D510WW18	**30665**
			24	D510WW24	**30667**
			36	D510WW36	**30669**
		Transparent	4	D510WT04	**30656**
			6	D510WT06	**30658**
			8	D510WT08	**30660**
			12	D510WT12	**30664**
			18	D510WT18	**30666**
			24	D510WT24	**30668**
			36	D510WT36	**30670**
	Grey	Grey	4	D510GG04	**30697**
			6	D510GG06	**30699**
			8	D510GG08	**30701**
			12	D510GG12	**30705**
			18	D510GG18	**30707**
			24	D510GG24	**30709**
			36	D510GG36	**30711**
		Transparent	4	D510GT04	**30698**
			6	D510GT06	**30700**
			8	D510GT08	**30702**
			12	D510GT12	**30706**
			18	D510GT18	**30708**
			24	D510GT24	**30710**
			36	D510GT36	**30712**

Selection and ordering data

Surface mounting 3SD6











Rated current In (A)	Color of base	Color of door	Number of module	Type code	Order code
63	White	White	4	D606WW04	**23161**
			6	D606WW06	**23167**
			8	D606WW08	**23173**
			12	D606WW12	**23141**
			18	D606WW18	**23147**
			24	D606WW24	**23151**
			36	D606WW36	**23155**
		Transparent	4	D606WT04	**23162**
			6	D606WT06	**23168**
			8	D606WT08	**23174**
			12	D606WT12	**23142**
			18	D606WT18	**23148**
			24	D606WT24	**23152**
			36	D606WT36	**23156**
	Grey	Grey	4	D606GG04	**24571**
			6	D606GG06	**24573**
			8	D606GG08	**24575**
			12	D606GG12	**24579**
			18	D606GG18	**24581**
			24	D606GG24	**24583**
			36	D606GG36	**24585**
		Transparent	4	D606GT04	**24572**
			6	D606GT06	**24574**
			8	D606GT08	**24576**
			12	D606GT12	**24580**
			18	D606GT18	**24582**
			24	D606GT24	**24584**
			36	D606GT36	**24586**
100	White	White	4	D610WW04	**30671**
			6	D610WW06	**30673**
			8	D610WW08	**30675**
			12	D610WW12	**30679**
			18	D610WW18	**30681**
			24	D610WW24	**30683**
			36	D610WW36	**30685**
		Transparent	4	D610WT04	**30672**
			6	D610WT06	**30674**
			8	D610WT08	**30676**
			12	D610WT12	**30680**
			18	D610WT18	**30682**
			24	D610WT24	**30684**
			36	D610WT36	**30686**
	Grey	Grey	4	D610GG04	**30713**
			6	D610GG06	**30715**
			8	D610GG08	**30717**
			12	D610GG12	**30721**
			18	D610GG18	**30723**
			24	D610GG24	**30725**
			36	D610GG36	**30727**
		Transparent	4	D610GT04	**30714**
			6	D610GT06	**30716**
			8	D610GT08	**30718**
			12	D610GT12	**30722**
			18	D610GT18	**30724**
			24	D610GT24	**30726**
			36	D610GT36	**30728**

2

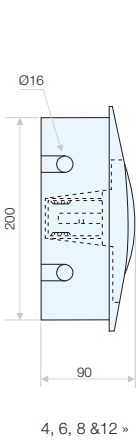
Fitting inside of the enclosure

Attached with sticky label for marking on wire front panel; ready equipped with zero line and earth terminal bar and attached with zero bar, earth bar marks and alarm mark; users can select to connect with wire or insulating busbar method.

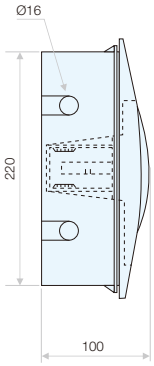
Neutral	Neutral bar length (mm)	Neutral bar holes (piece)	Earth bar length (mm)	Earth bar holes (piece)	Width (mm)	Height (mm)
4	37	4M4x7+M4x7	29.5	3M4x7+M4x7	6	8
6	52	6M4x7+M4x7	29.5	3M4x7+M4x7	6	8
8	67	8M4x7+M4x7	37	4M4x7+M4x7	6	8
12	37+52	10M4x7+2M4x7	52	6M4x7+M4x7	6	8
18	74.5+37	13M4x7+2M4x7	74.5	9M4x7+M4x7	6	8
24	60+60+28+28	20M4x7+4M4x7	28+28	6M4x7+2M4x7	6	8
36	60+60+60+28	24M4x7+4M4x7	60+28	10M4x7+2M4x7	6	8

Outline and installation dimensions (3SD5)

unit in mm



4, 6, 8 &12 »



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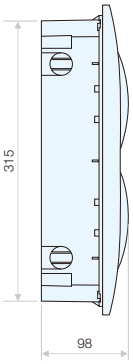

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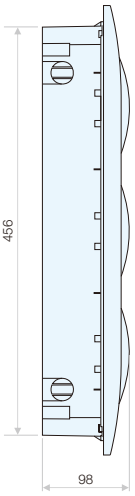

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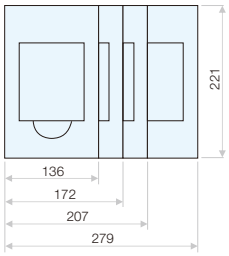

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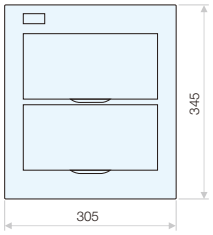

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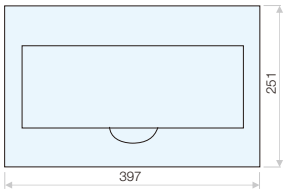

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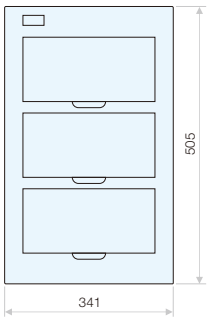

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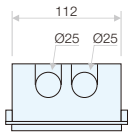

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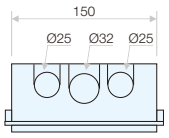

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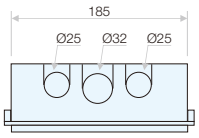

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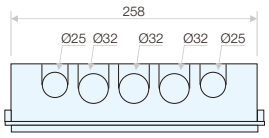

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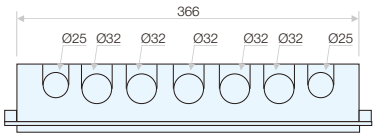

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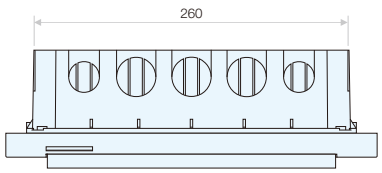

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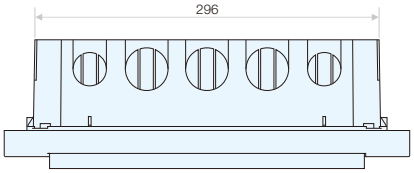
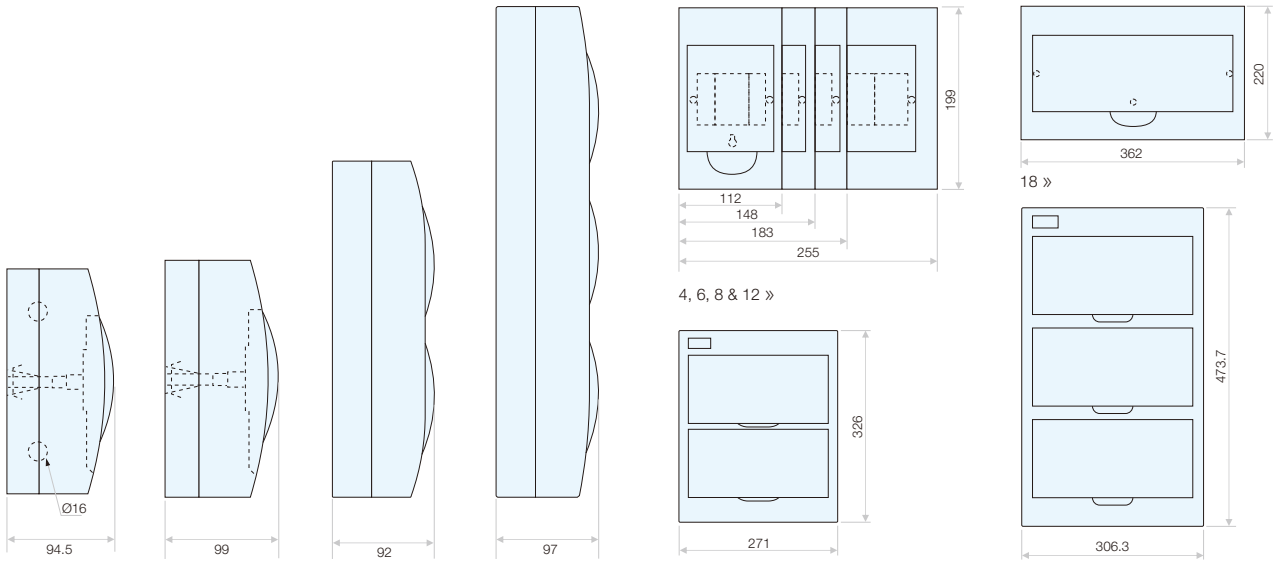
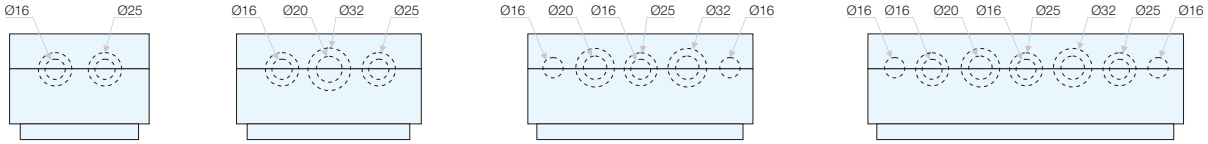


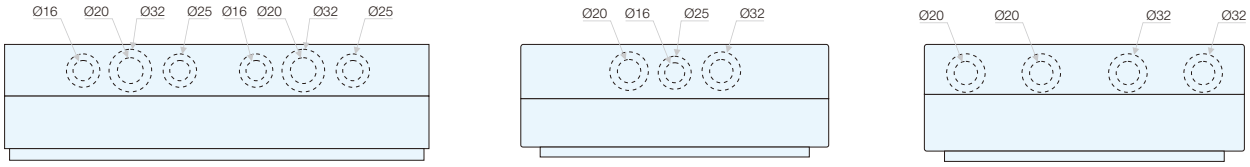
36 »

Outline and installation dimensions (3SD6)

unit in mm







Series 3SD5T (Metal Base)

Functions

- Equipped with various modular electric for the function of the terminal power distribution
- Suited for the installation of all the Sassin individual modular device (RCDs, MCBs, RCBOs, switch disconnectors etc.)
- Used in the residential buildings, non-residential buildings and industry
- Lifting installation rail, easy for installation



Technical specifications

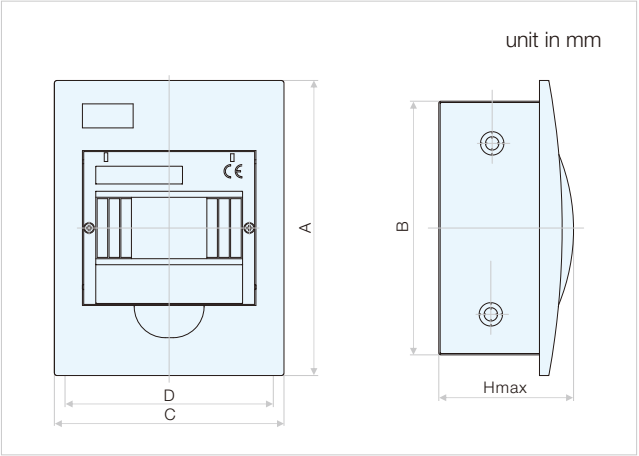
- Standard: IEC 61439-3
- Modules: 4, 6, 8, 12, 18
- Row: Single
- Rated frame current In (A): 63
- Color: White RAL 9003, Grey RAL7035
- The color of the door: Transparent, non transparent
- Mounting type: Flush
- Degree of the protection: IP40
- Material:
  - HIPS for the body
  - SAN for the door
  - Metal for the base
- Fire resistence: 650 ºC / 30 s
- Ambient temperature (ºC): -5 ~ +40, 50% humidity permitted under max +40 ºC
- Storage temperature (ºC): -40 ~ +75

Selection and ordering data

Flush mounting 3SD5T

	Rated current In (A)	Color of base	Color of door	Number of module	Type code	Order code
	63	Grey	Transparent	4	D5T06GT04	**23160**
				6	D5T06GT06	**23166**
				8	D5T06GT08	**23172**
				12	D5T06GT12	**23140**
				18	D5T06GT18	**23146**
			Grey	4	D5T06GG04	**23158**
				6	D5T06GG06	**23164**
				8	D5T06GG08	**23170**
				12	D5T06GG12	**23138**
				18	D5T06GG18	**23144**

Outline and installation dimensions



Type	A (mm)	B (mm)	C (mm)	D (mm)	H max (mm)
3SD5T-04	221	190.5	136	108.5	102
3SD5T-06	221	190.5	172	142.5	102
3SD5T-08	221	190.5	207	180.5	102
3SD5T-12	221	190.5	279	252.5	102
3SD5T-18	251	223.5	397	360.5	103



Functions

- Equipped with various modular electric for the function of terminal power distribution.
- Suited for the installation of all Sassin individual modular devices. (RCDs, MCBs, RCBO's, Isolators etc).
- Used in residential building, non-residential building, industry.

Technical specifications

- Standard: IEC 60439-3
- Number of modules: 5, 8, 12, 15, 18, 24 for 3SHT
  4, 8, 12, 24 for 3SHA
- Row: Single for 5, 8, 12, 15, 18 modules
  Two for 24 modules
- Rated current In (A): 63
- Color: White
- The color of door: Transparent
- Mounting type: Surface
- Degree of protection: IP65
- Material: ABS for body
  PC for door
- Fire resistence: 650 °C / 30 s
- Ambient temperature (°C): -5 ~ +40, max. 95 % humidity
- Storage temperature (°C): -40 ~ +75

Selection and ordering data

3SHT surface mounting



Rated current In (A)	Color of base	Color of door	Degree of protection	Number of module	Type code	Order code
63	White	Transparent	IP65	5	HT05	**24605**
				8	HT08	**24606**
				12	HT12	**24607**
				15	HT15	**24608**
				18	HT18	**24609**
				24	HT24	**24610**

3SHA surface mounting

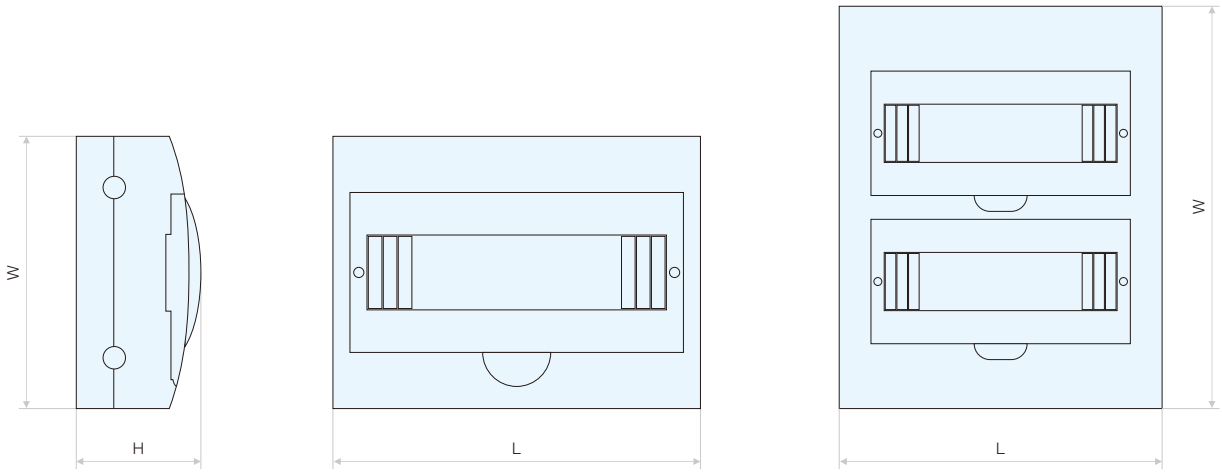


Rated current In (A)	Color of base	Color of door	Degree of protection	Number of module	Type code	Order code
63	White	Transparent	IP65	4	HA04	**30729**
				8	HA08	**30730**
				12	HA12	**30731**
				18	HA18	**30732**
				24	HA24	**30733**

2

Outline and installation dimensions

unit in mm



Type	L (mm)	W (mm)	H (mm)	Weight (g)
HT-2	55	120	90	135
HT-3	80	165	95	248.5
HT-5	120	160	95	307.1
HT-8	200	155	95	465
HT-12	255	195	110	783
HT-15	310	200	110	918.5
HT-18	365	200	110	1064.5
HT-24	275	355	110	1373.7

Type	L (mm)	W (mm)	H (mm)	Weight (g)
HA-4	140	210	100	452
HA-8	215	210	100	710.5
HA-12	300	260	140	1215
HA-18	410	280	140	1763.3
HA-24	300	415	140	2014.5

Functions

VD51MS series distribution boxes are fit for AC 50/60 Hz, rated voltage 400 V, rated current to 100 A in the home and similar field circuit, for the redistribution of electrical energy, offering overload and short-circuit protection through the switch.



Technical specifications

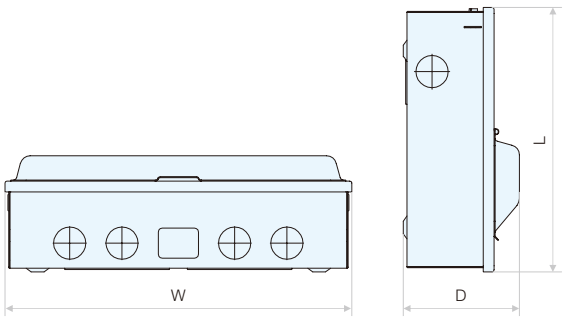
- Standard: IEC/EN 61439-3
- The base, top and buckle cover are made of metal alloy.
- Rated operational voltage Un (Ue) (V): 220/400
- Rated operational current In (Ie) (A): 100, 80, 63 and below
- Rated impulse withstand voltage Uimp (kA): 6
- Mounting type: surface
- Degree of protection: IP 2XC

Selection and ordering data

	Rated current In (A)	Color of base	Color of door	Number of module	Type code	Order code
	100	Grey	Grey	4	VD51MS04	**17586**
				8	VD51MS08	**17587**
				12	VD51MS12	**17588**
				16	VD51MS16	**17589**
				18	VD51MS18	**17590**
				22	VD51MS22	**17591**

Outline and installation dimensions

unit in mm



Type	L (mm)	W (mm)	D (mm)
VD51MS04	235	128	105
VD51MS08	264	202	115.3
VD51MS12	264	273	115.3
VD51MS16	264	345	115.3
VD51MS18	264	380	115.3
VD51MS22	264	454	115.3

2

Functions

Suitable for in door and outdoor electric, communication, fire fighting apparatus, iron and steel smelting, petrochemical industry, electron, power system, railway, building ,air and sea port ,hotel and so on. Protect circuit breakers, with impact resistance, temperature resistance, and chemical corrosion resistance.



Technical specifications

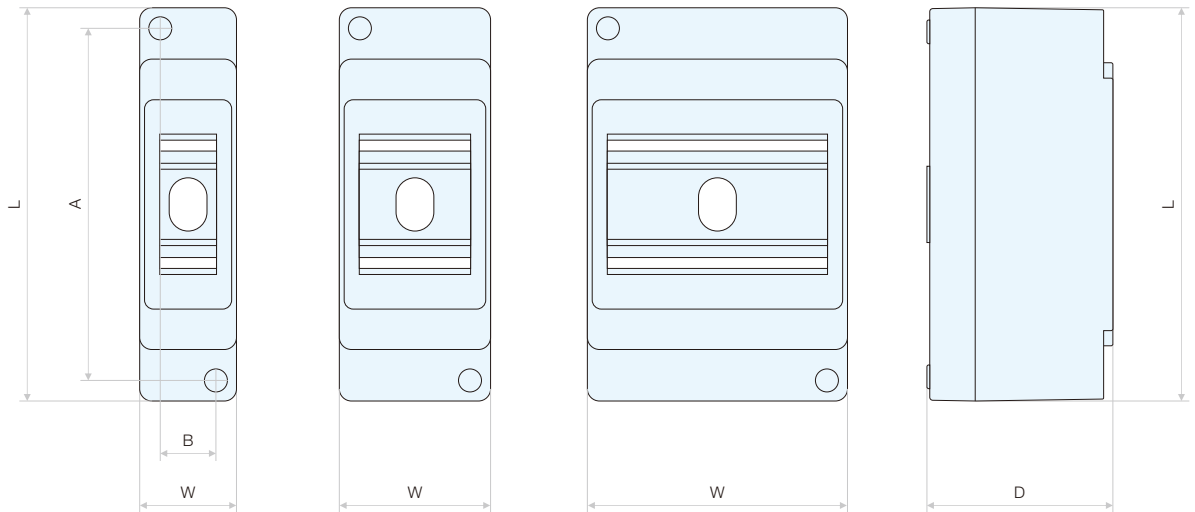
- Standard: IEC 60529
- Modules: 1, 2, 4
- Mounting type: Surface
- Color: White
- Degree of protection: IP30
- Material: ABS
- Fire resistance: 650 °C/30s
- Ambient temperature: -5 ~ 40, max 95% humidity
- Storage temperature: -40 ~ 75

Selection and ordering data

Rated current In (A)	Number of module	Type code	Order code
63	1	D8N1	
	2	D8N2	
	4	D8N4	

Outline and installation dimensions

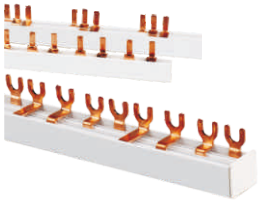
unit in mm



Type	L (mm)	W (mm)	D (mm)	A (mm)	B (mm)
3SD8N1	130	32	61.6	114	18
3SD8N2	130	50	61.2	114	36
3SD8N4	130	86	61.2	114	72

Selection and ordering data

Busbar systems
Suitable for cutting



Connection type	Phases	Rated current (A)	Length (cm)	Type code	Order code
PIN type	1×54	63	100	SA-BB101	**24760**
	2×27	63	100	SA-BB201	**24762**
	3×18	63	100	SA-BB301	**24764**
	4×14	63	100	SA-BB401	**24766**
Fork type	1×54	63	100	SA-BB102	**24761**
	2×27	63	100	SA-BB202	**24763**
	3×18	63	100	SA-BB302	**24765**
	4×14	63	100	SA-BB402	**24767**

End caps



			Type code	Order code
For 1P	100	SA-BBEC1	**32676**
For 2P	100	SA-BBEC2	**32677**
For 3P	100	SA-BBEC3	**32678**
For 4P	100	SA-BBEC4	**32679**

Shock-protection caps



Description	Phases	Type code	Order code
Yellow	5 parts	SA-BBSCY5	**32680**

Feeder terminals



Description	Type code	Order code
Connection capacity: 6-25 mm^2 Max. electrical load: 63 A Max. tightening torque 2 N·m	FT1B	**32929**
Connection capacity: 6-25 mm^2 Max. electrical load: 63 A Max. tightening torque 2 N·m	FT2G	**32930**

DIN Rails



Description	Type code	Order code
Aluminum, 100 cm	DR1	**32931**
Iron plated zinc, 100 cm	DR2	**32932**

Selection and ordering data

Terminal bars with screws



Rated current (A)	Cross section of brass (mm)	Way	Screw size	Type code	Order code
63	6×8	3+1	M4×7	TBS0631	**32933**
	6×8	4+1	M4×7	TBS0641	**32934**
	6×8	6+1	M4×7	TBS0661	**32935**
	6×8	6+2	M4×7	TBS0662	**32936**
	6×8	8+1	M4×7	TBS0681	**32937**
	6×8	9+1	M4×7	TBS0691	**32938**
	6×8	10+2	M4×7	TBS06102	**32939**
	6×8	13+2	M4×7	TBS06132	**32940**
	6×8	20+4	M4×7	TBS06204	**32941**
100	6×9	3+1	M4×7	TBS1031	**32942**
	6×9	4+1	M4×7	TBS1041	**32943**
	6×9	6+1	M4×7	TBS1061	**32944**
	6×9	6+2	M4×7	TBS1062	**32945**
	6×9	8+1	M4×7	TBS1081	**32946**
	6×9	9+1	M4×7	TBS1091	**32947**
	6×9	10+2	M4×7	TBS10102	**32948**
	6×9	13+2	M4×7	TBS10132	**32949**
	6×9	20+4	M4×7	TBS10204	**32950**

Selection and ordering data

Terminal blocks

Terminals with insulation holder for quick fastening onto DIN rails



Way	Rated current (A)	Installation size (mm)	Dimension (mm)	Screw size	Cross section of brass (mm)	Type code	Order code
7	100	35×7.5	50×21	M5×8	6×9	TBS1007	**32951**
8	100	35×7.5	57×21	M5×8	6×9	TBS1008	**32952**
10	100	35×7.5	70×21	M5×8	6×9	TBS1010	**32953**
12	100	35×7.5	84×21	M5×8	6×9	TBS1012	**32954**
13	100	35×7.5	91×21	M5×8	6×9	TBS1013	**32955**
15	100	35×7.5	104×21	M5×8	6×9	TBS1015	**32956**

Blanking plates

Matched with distribution boxes for device covers



Description	Type code	Order code
width: 1 module = 17.5 mm, White	MBP1	**32957**
width: 0.5 module = 9 mm, White	MBP2	**32958**