

Circuit Breaker for Equipment thermal-magnetic, 1 pole



See below:

Approvals and Compliances

Description

- Thermal-magnetic circuit breaker
- High short circuit performance
- Availability of AC and DC in the same frame size
- DIN-Rail Mounting

Applications

- Industrial appliances

References

Last order possibility: 31.08.2018
Last delivery date: 30.09.2018

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

Technical Data

General data

Rated Voltage DC	IEC 180 V UL/CSA 120/180 V
Rated current	0.5 - 50 A , see approvals
Conditional short circuit capacity IEC 60934	Icn: DC 180 V: 4.5 kA (no fuse)
Conditional short circuit capacity UL 1077	Icn: DC 120 V; DF/DG: 0.5A-40A: 10 kA (no fuse) Icn: DC 120 V; DH: 0.5A-40A: 5 kA (no fuse) Icn: DC 180 V; 0.5A-50A: 2 kA (no fuse)
Degree of Protection	from front side IP 40 acc. to IEC 60529
Lifetime	1 x Ir 6000 switching cycles
Dielectric Strength	50Hz: > 2kV Impulse 1.2/50 µs
Vibration Resistance	± 0.75 mm @ 5 - 60 Hz acc. to IEC 60068-2-6, test Fc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Fc
Insulation Resistance	250/440 VAC > 5 MΩ
Shock Resistance	30 G / 18ms acc. to IEC 60068-2-27, test Ea
Ambient temperature	-10 °C to 55 °C
Weight	100 - 130 g

Tripping Type	Positively trip free
Actuation Type	Manual ON/OFF
Permissible wire cross section	1.5 - 25 mm ² / 16 - 4 AWG

Switched neutral

Rated Voltage	AC 277 V
Rated current	AC/DC 65 A
Function	The switched neutral closes with manual closure of the poles and opens automatically with thermal magnetic tripping of the poles.

Add-on modules

Add-on modules	Technical data for the additional module see separate data sheet
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Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: AS168X

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40005743
	UL Approvals	UL	UL File Number: E216629 / E71572
	UL Approvals	UL	UL File Number: E216629 / E71572
	CQC Approvals	CQC	CCC Certificate Number: 2013010307594187

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
	Designed according to	UL 1077	Standard for Supplementary Protectors for Use in Electrical Equipment
	Designed according to	CSA C22.2	Supplementary Protectors

Application standards

Application standards where the product can be used

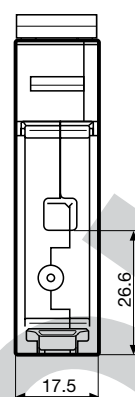
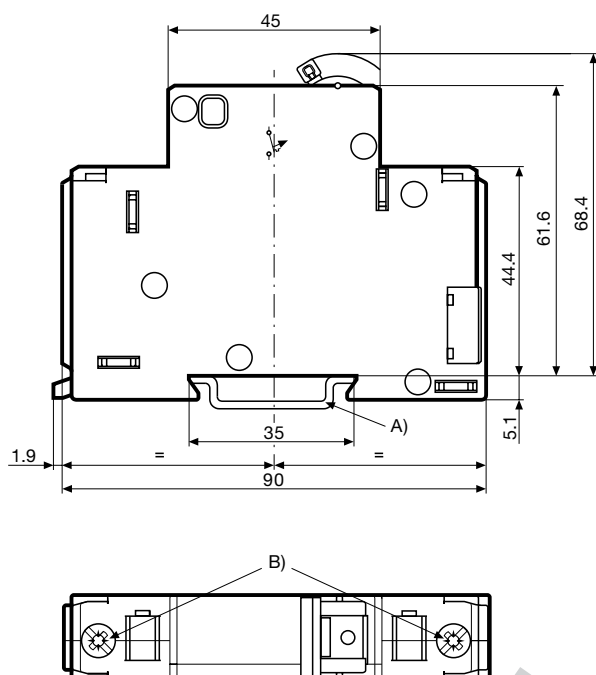
Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]
AS168X 1 pole

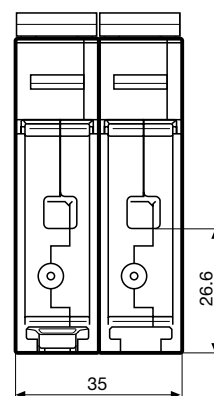
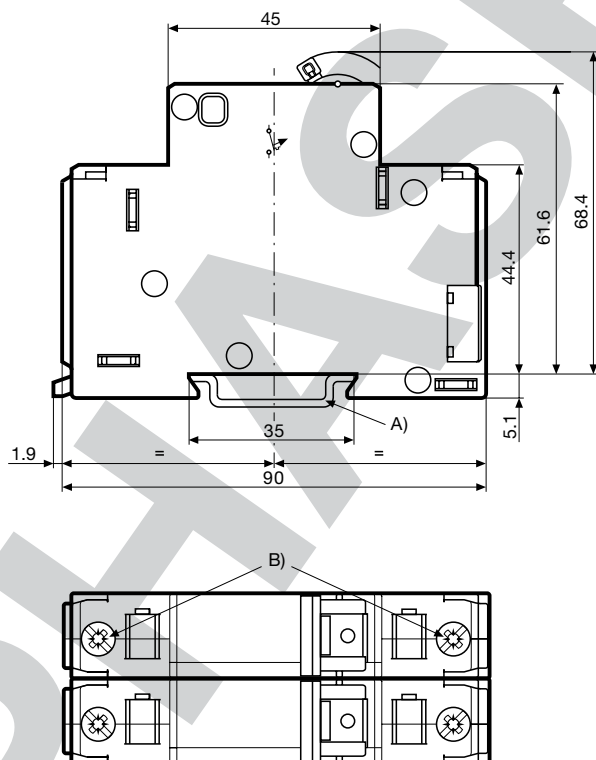


A) 35 mm DIN rail EN 50022

B) Max. torque

Wire crossection	Max. torque
1.5 ... 10 mm ²	2.5 Nm
16 ... 25 mm ²	3.1 Nm
AWG #16 ... 8	20 ... 22 lb-in
AWG #6 ... 4	26 ... 28 lb-in

AS168X 1 pole and switched neutral pole



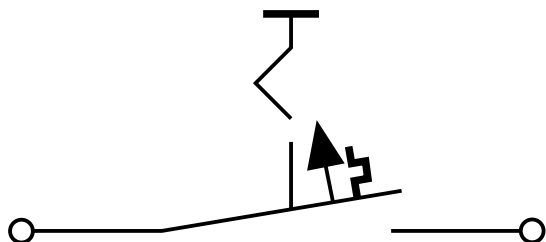
A) 35 mm DIN rail EN 50022

B) Max. torque

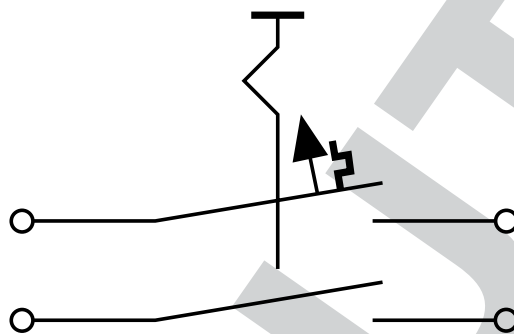
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Diagrams

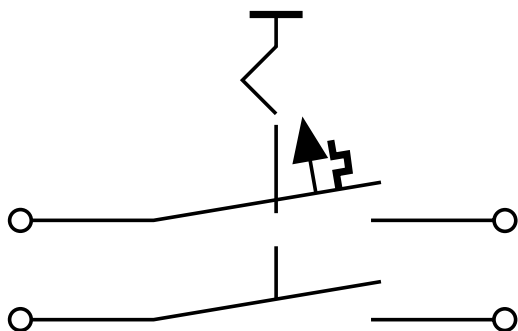
AS168X-CB1...



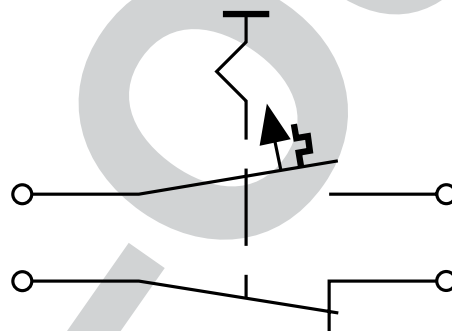
AS168X-CB1...N



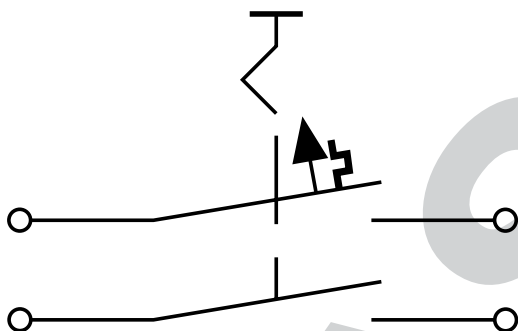
AS168X-CB1... / AS168X-ACBH1



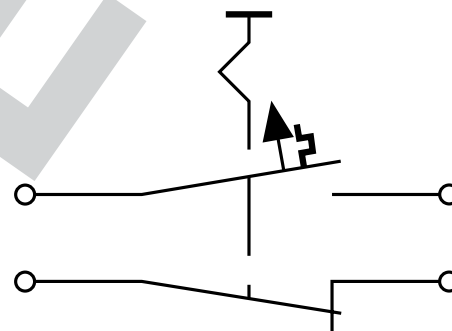
AS168X-CB1... / AS168X-ACBH2



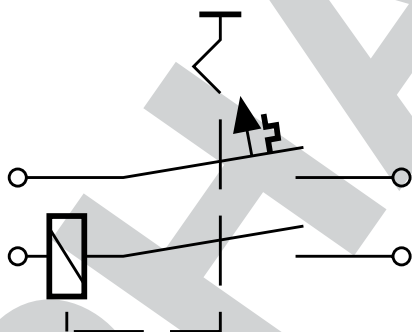
AS168X-CB1... / AS168X-ACBS1



AS168X-CB1... / AS168X-ACBS2



AS168X-CB1... / AS168X-ACBA



Symbol	Standard	Rated current	Rated voltage DC	Conditional short circuit capacity Icn
	UL 508 CSA C22.2 no. 14	-	-	-
	UL 1077	0.5 - 40 A	120 V	10 kA
	CSA C22.2 no. 235	0.5 - 50 A	180 V	2 kA
	EN 60934	0.5 - 50 A	180 V	4.5 kV
	GB 17701	nur Art.-Nr. 4420.0386 (30 A) 4420.0526 (40 A) 4420.0897 (50 A)	120 V	3 kA

Effect of ambient temperature

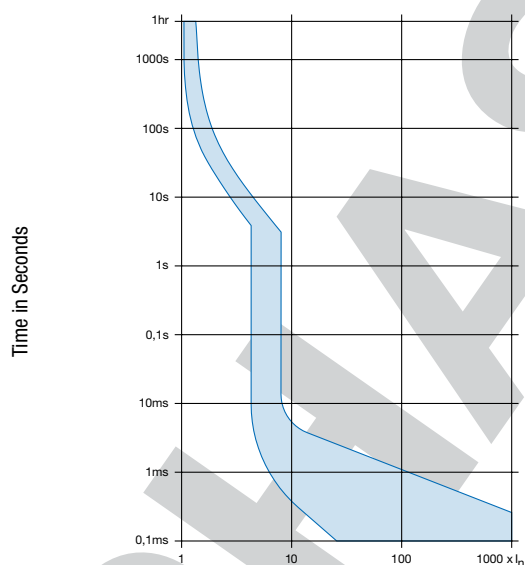
AC-breaker are calibrated for an ambient temperature of +40°C, DC-breakers for +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table below:

Ambient temperature [°C]	Correction factor AC version	Correction factor DC version
-20	0.78	0.80
-5	0.82	0.87
0	0.83	0.90
+10	0.87	0.95
+23	0.91	1.00
+30	0.95	1.05
+40	1.00	1.10
+50	1.05	1.20
+60	1.11	1.30

Example DC version: Rated current = 10 A; Environmental temperature = 50 °C; --> Correction factor = 1.2; Resulting current = 12 A

Time-Current-Curves

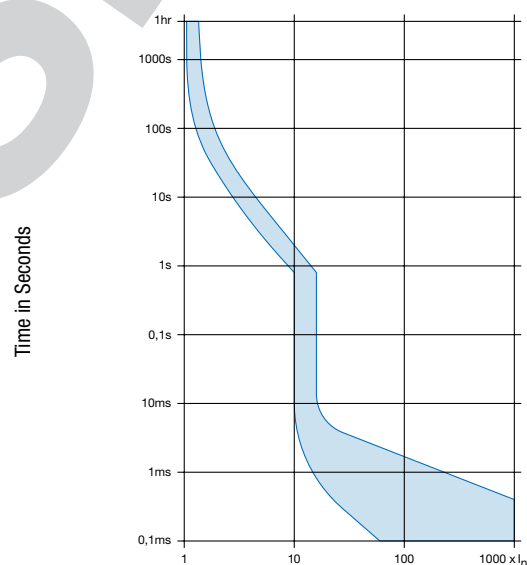
Version DF / Magnetic 4.5-8 xI_n



Multiple of Rated Current In

Reference Temperature +23°

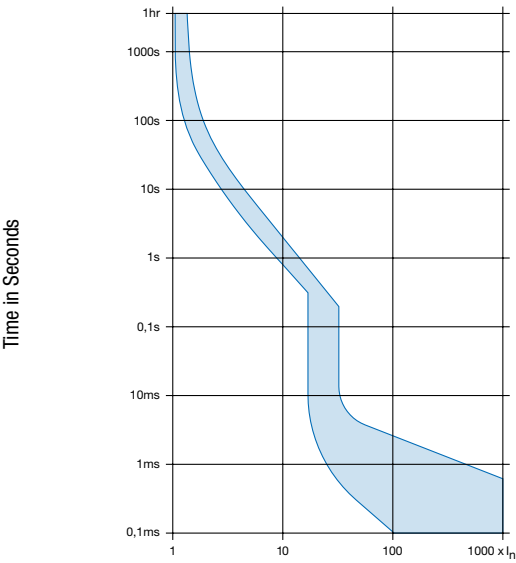
Version DG / Magnetic 9-16 xI_n



Multiple of Rated Current In

Reference Temperature +23°

Version DH / Magnetic 18-32 xI_n



Multiple of Rated Current In

Reference Temperature +23°

Config. Code

AS168X-CB 1 DG 200 N

The characters are placeholders for the correspondingly keys of selections from the key tables.

AS168X-CB 1 DG 200 N = Number of Poles

Number of Poles	Configuration key
1-pole	1

AS168X-CB 1 DG 200 N = Tripping characteristics

Tripping characteristics	Configuration key
1.05-1.35xIn / 4.5-8xIn / 0.5-50 A	DF
1.05-1.35xIn / 9-16xIn / 0.5-50 A	DG
1.05-1.35xIn / 18-32xIn / 6.0-50 A	DH

AS168X-CB 1 DG 200 N = Rated current

Rated current	Configuration key
0.05 A	005
1.0 A	010
1.5 A	015
2.0 A	020
3.0 A	030
4.0 A	040
5.0 A	050
6.0 A	060
7.0 A	070

Other rated currents on request

Rated current	Configuration key
8.0 A	080
9.0 A	090
10.0 A	100
12.0 A	120
15.0 A	150
16.0 A	160
18.0 A	180
20.0 A	200
23.0 A	230
25.0 A	250
27.0 A	270
30.0 A	300
32.0 A	320
35.0 A	350
40.0 A	400
45.0 A	450
50.0 A	500

Other rated currents on request

AS168X-CB 1 DG 200 N = Switched neutral

Switched neutral	Configuration key
Switched neutral pole	N

Variants

Tripping characteristics	Rated current	Switched neutral	Config. Code	Order Number
1.05-1.35xIn / 9-16xIn / 0.5-50 A	0.05 A		AS168X-CB1DG005	4420.0460
1.05-1.35xIn / 9-16xIn / 0.5-50 A	1.0 A		AS168X-CB1DG010	4420.0625
1.05-1.35xIn / 9-16xIn / 0.5-50 A	5.0 A		AS168X-CB1DG050	4420.0354
1.05-1.35xIn / 9-16xIn / 0.5-50 A	10.0 A		AS168X-CB1DG100	4420.0324
1.05-1.35xIn / 9-16xIn / 0.5-50 A	20.0 A		AS168X-CB1DG200	4420.0332
1.05-1.35xIn / 9-16xIn / 0.5-50 A	20.0 A	Switched neutral pole	AS168X-CB1DG200N	4420.0823
1.05-1.35xIn / 9-16xIn / 0.5-50 A	40.0 A		AS168X-CB1DG400	4420.0530

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Packaging Unit 1 Pcs



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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