Circuit Breaker for Equipment thermal-magnetic, 4 poles

AS168XDC4



Description

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

See below:

Approvals and Compliances

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 360 V
Rated current	0.5 - 50 A, see approbations
Conditional short circuit capa- city IEC 60934	Icn: DC 360 V: 4.5 kA (no fuse)
Degree of Protection	from front side IP 40 acc. to IEC 60529
Dielectric Strength	50 Hz: > 2 kV 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 - 130g

Tripping Type			
Positively trip free			
Actuation Type Manual ON/OFF			
Permissible wire cross section	1.5 - 25 mm² / 16 - 4 AWG		
Switched neutral			
Rated Voltage	AC 277 V		
Rated current	AC/DC 65 A		
Function The switched neutral closes with ma- nual 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		

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

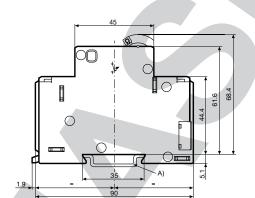
Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40005743
c UL us	UL Approvals	UL	UL File Number: E216629 / E71572
c FU us	UL Approvals	UL	UL File Number: E216629 / E71572

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Product standa	rds		
Product standards	s that are referenced		
Organization	Design	Standard	Description
IEC	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
(h)	Designed according to	UL 1077	Standard for Supplementary Protectors for Use in Electrical Equipment
GE Group	Designed according to	CSA C22.2	Supplementary Protectors
Application star	ndards		
Application standa	ards where the product can be used		
Organization	Design	Standard	Description
IEC	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technologyequipment.
Compliances			
The product comp	blies with following Guide Lines		
Identification	Details	Initiator	Description
CE	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.
Rolls	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	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 4 pole



B)

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EX)

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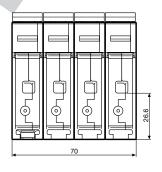
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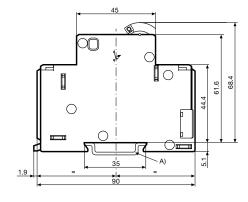
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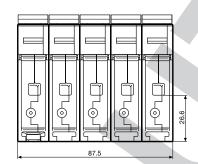
A) 35 mm DIN rail EN 50022

B)	Max. torque	
	Wire crosssection	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 4 pole and switched neutral pole



B)	



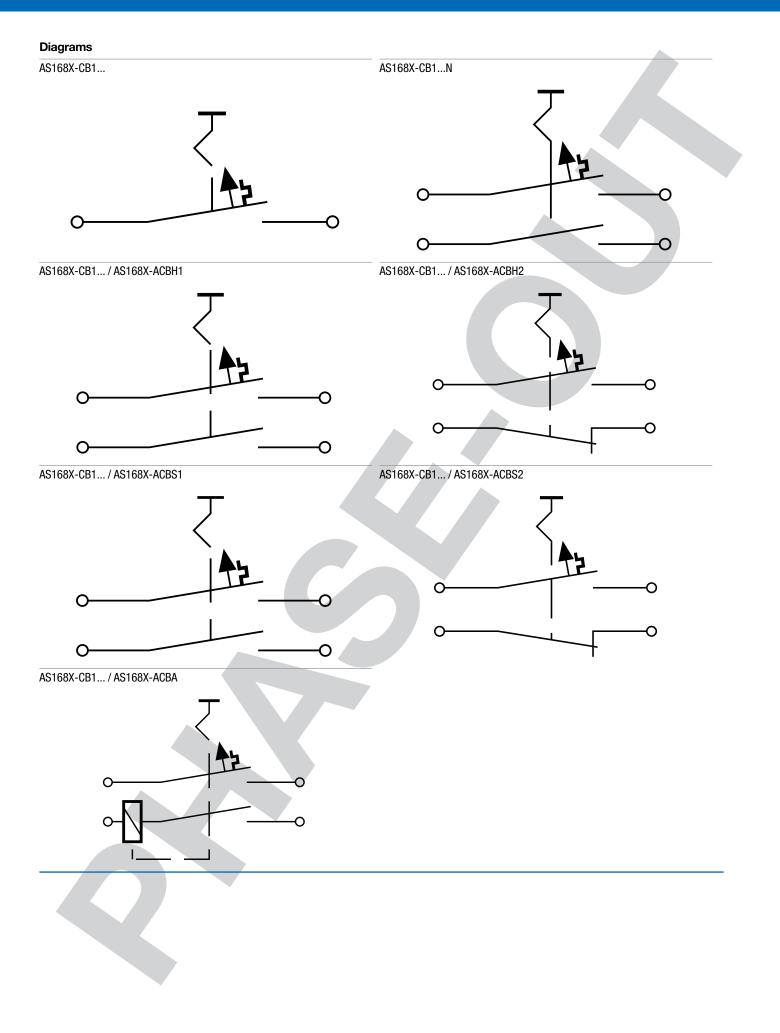
A) 35 mm DIN rail EN 50022

- B) Max. torque
 - Wire crosssection 1.5 ... 10 mm² 16 ... 25 mm² AWG #16 ... 8 AWG #6 ... 4

Max. torque 2.5 Nm 3.1 Nm 20 ... 22 lb-in 26 ... 28 lb-in

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Symbol	Standard	Rated current	Rated voltage DC	Conditional short circuit capacity Icn
cULus	UL 508 CSA C22.2 no. 14	-	-	-
c FL us	UL 1077	-	-	-
	CSA C22.2 no. 235	-	-	-
	EN 60934	0.5 - 50 A	360 V	4.5 kA
	GB 17701	-	-	-

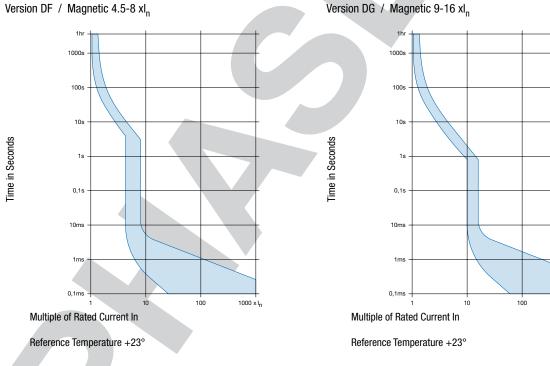
Effect of ambient temperature

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

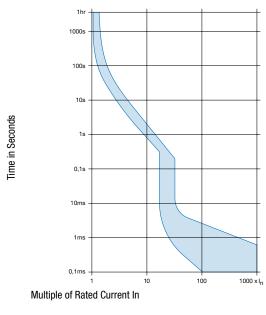
Example DC version: Rated current = 10 A; Environmental temperature = 50 °C; --> Correction factor = 1.2; Resulting current = 12 A

Time-Current-Curves



1000 x I_n

Version DH / Magnetic 18-32 xl_n



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		Rated current	Configuration key
Number of Poles	Configuration	8.0 A	080
	key	9.0 A	090
4-pole	4	10.0 A	100
		12.0 A	120
AS168X-CB 1 DG 200 N = Tripping characteristics	S	15.0 A	150
		16.0 A	160
Tripping characteristics	Configuration key	18.0 A	180
1.05-1.35xln / 4.5-8xln / 0.5-50 A	DF	20.0 A	200
1.05-1.35xln / 9-16xln / 0.5-50 A	DG	23.0 A	230
1.05-1.35xln / 18-32xln / 6.0-50 A	DH	25.0 A	250
		27.0 A	270
		30.0 A	300
AS168X-CB 1 DG 200 N = Rated current		32.0 A	320
Rated current	Configuration	35.0 A	350
	key	40.0 A	400
0.05 A	005	45.0 A	450
1.0 A	010	50.0 A	500

015

020

030

040

050

060

070

AS168X-CB 1 DG 200 N = Switched neutral

Switched neutral	Configuration key
Switched neutral pole	Ν

Other rated currents on request

1.5 A

2.0 A

3.0 A

4.0 A

5.0 A

6.0 A

7.0 A

Packaging Unit 1 Pcs



The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.