AS168XDC1

Circuit Breaker for Equipment thermal-magnetic, 1 pole



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

Standards
- Approval Reference Type: AS168X
- IEC 60934
- UL 1077
- CSA C22.2

Applications
- Industrial appliances

Weblinks
pdf-datasheet, html-datasheet, General Product Information, Approvals, CE declaration of conformity, RoHS, CHINA-RoHS, REACH, Distributor-Stock-Check, Detailed request for product, Product News

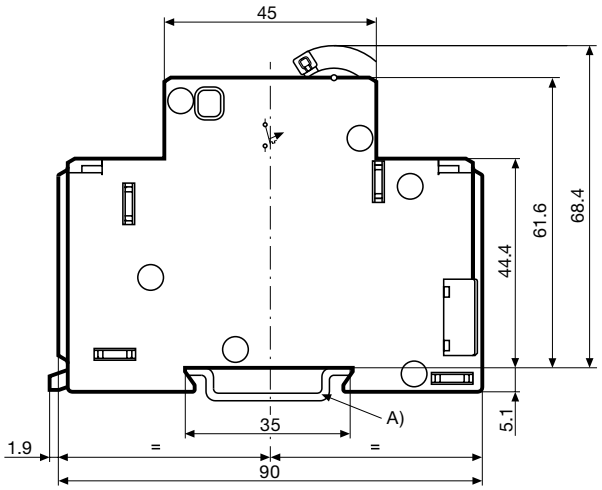
Technical Data

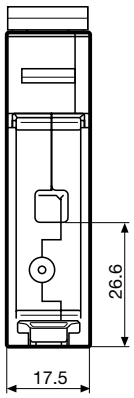
General data	
Rated Voltage DC	IEC 180 V UL/CSA 120/180 V
Rated current	0.5 - 50 A , see approbations
Conditional short circuit capacity IEC 60934	Icn: DC 180 V: 4.5 kA (no fuse)
Conditional short circuit capacity UL 1077	Icn: DC 120 V; DF/DG: 0.5A-40A: 10 kA (no fuse) Icn: DC 120 V; DH: 0.5A-40A: 5 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	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 / 18 ms 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 mm² / 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

Dimension

AS168X 1 pole



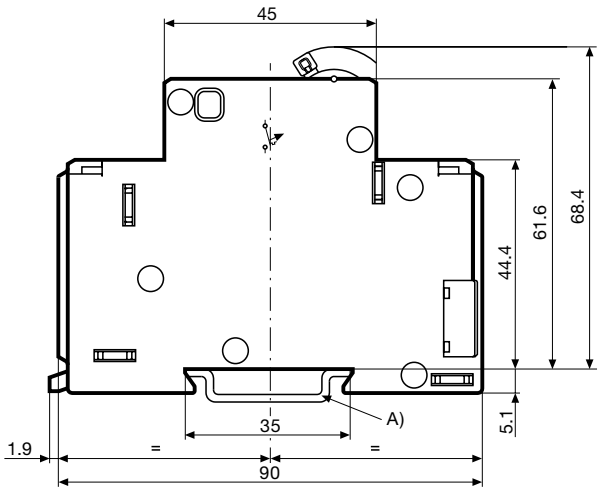


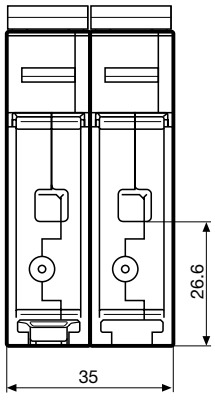
A) 35 mm DIN rail EN 50022

B) Max. torque

Wire crosssection	Max. torque
1.5 ... 10 mm²	2.5 Nm
16 ... 25 mm²	3.1 Nm
AWG #16 ... 8	20 ... 22 lb–in
AWG #6 ... 4	26 ... 28 lb–in

AS168X 1 pole and switched neutral pole





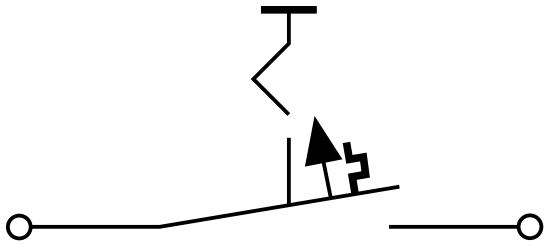
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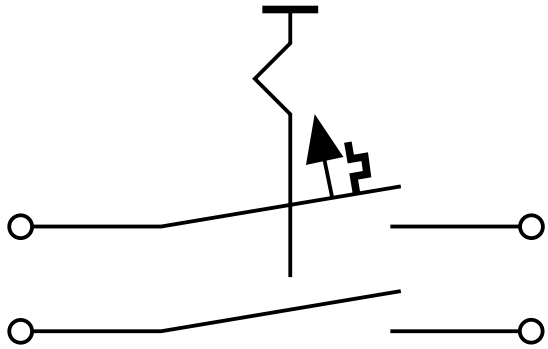
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Diagrams

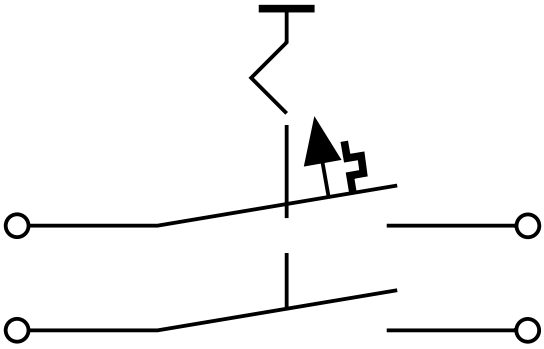
AS168X-CB1...



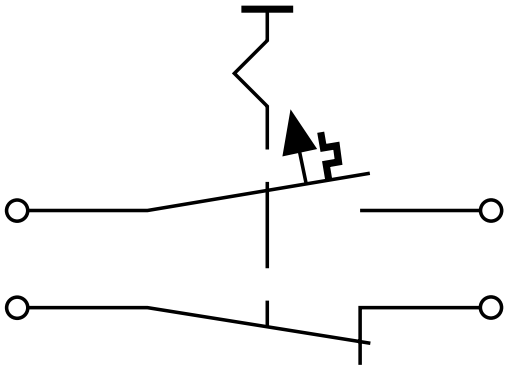
AS168X-CB1...N



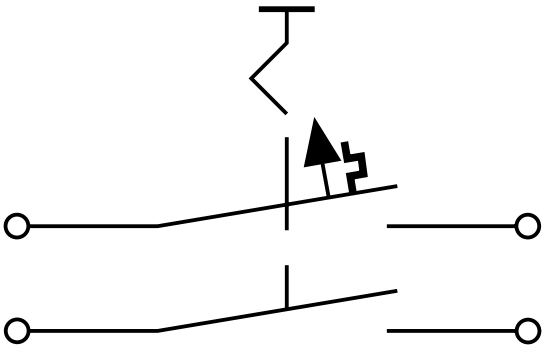
AS168X-CB1... / AS168X-ACBH1



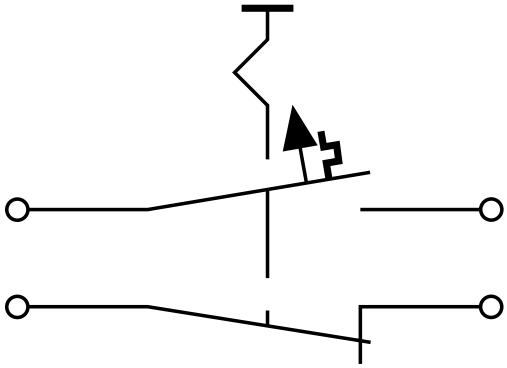
AS168X-CB1... / AS168X-ACBH2



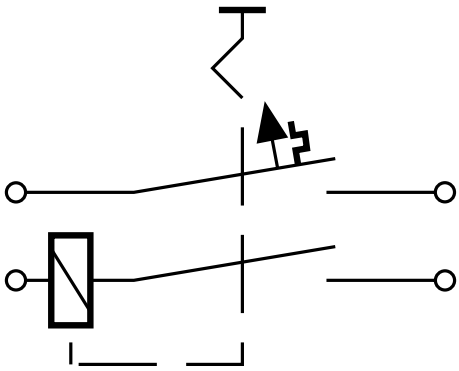
AS168X-CB1... / AS168X-ACBS1



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

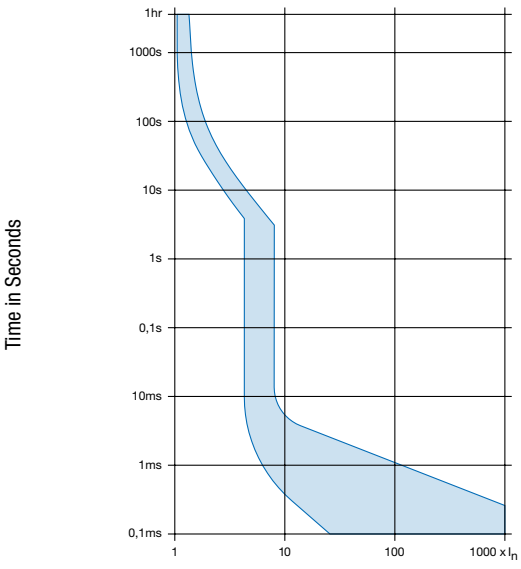
AC-breaker are calibrated for an ambient temperature of +40°C, DC-breakers for +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table below:

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

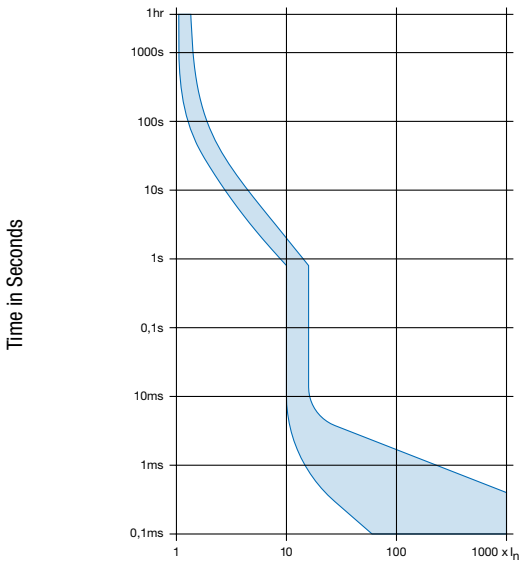
Time-Current-Curves

Version DF / Magnetic 4.5-8 xI_n



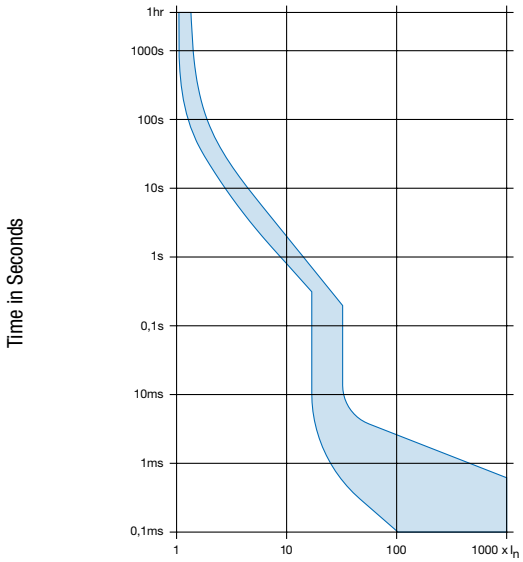
Reference Temperature +23°

Version DG / Magnetic 9-16 xI_n



Reference Temperature +23°

Version DH / Magnetic 18-32 xI_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

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
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:http://www.schurter.com/Stock-Check/Stock-Check-SCHURTER

Packaging Unit 1 Pcs

13.10.2016

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.