#### Thermal-magnetic (TM and AS-line) https://www.schurter.com /PG20

# AS168X Add-on modules

### Manual Motor Controller / Circuit Breaker for Equipment thermal-magnetic



Auxiliary contact

Description

- DIN-Rail Mounting

- Auxiliary contact module

open or normally closed

- Signal contact module



Signal contact



Relay trip module

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

Signal contact modules are linked internally with the protected poles but not linked at the handles. Contacts are actuated by a fault condition at the protected poles, not by manual operation of the CBE - Relay trip module

Each auxiliary contact module contains one contact, either normally

The relay trip module can be used for remote tripping of the adjacent poles by applying a voltage to the module's terminal

#### **Technical Data**

Ratings	AC 277 V / 6 A (50/60 Hz)
	DC 125 V / 1 A
	DC 50 V / 6 A
Conditional short circuit ca-	IEC: Inc, PC1, AC 277 V: 1 kA
pacity	
Dielectric Strength	50Hz: > 2kV
	Impulse 1.2/50 µs
Insulation Resistance	> 5 MΩ
Endurance typical	mechanical: 50000 switching cycles
	IEC 60947-5-1
	AC : 10 x lr , p.f. = 0.3 :
	DC : 1 x lr , L/R = 0.3 s :
	6050 switching cycles
	$AC \cdot 26 A / 2 6 A \text{ nf} = 0.35$

AC : 26 A / 2.6 A , p.f. = 0.35 : DC : 1.1 A / 1.1 A , L/R = 0.3 s : 6000 switching cycles

#### Overload AC: min. 10 trips @ 10 x lr, p.f. = 0.3 DC: min. 50 trips @ 1.1 x lr, L/R = 0.3 s -20 °C to 60 °C Ambient temperature Vibration Resistance ± 0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Fc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Fc Shock Resistance 30 G / 18ms acc. to IEC 60068-2-27, test Ea Degree of Protection from front side IP 20 acc. to IEC 60529 Weight 22 - 49g

#### **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: 40021845
	UL Approvals	UL	UL File Number: E216629 / E71572
c <b>FL</b> <sup>°</sup> us	UL Approvals	UL	UL File Number: E216629 / E71572

#### **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60947-5-1	Circuit-breakers for equipment (CBE)
<b>(h)</b>	Designed according to	UL 508	Standard for Supplementary Protectors for Use in Electrical Equipment
(h)	Designed according to	UL 508	Standard for Industrial Control Equipment
CSA Group	Designed according to	CSA C22.2	Supplementary Protectors

#### **Application standards**

Application standards 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 complies with following Guide Lines

- F F	5		
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.
RoHS	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
<b>(1)</b>	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-ACBH.



AS168X-ACBA.



AS168X-Auxiliary contact



#### Diagrams

AS168X-CB1... / AS168X-ACBH1 AS168X-CB1... / AS168X-ACBH2 О 0 О Ο 0 0 O AS168X-CB1... / AS168X-ACBS1 AS168X-CB1... / AS168X-ACBS2 0 О 0  $\cap$ 0 0 0 О

#### Approvals Relay trip module

Symbol	Standard	Rated voltage AC	Rated voltage DC
cULus	UL 508 CSA C22.2 no. 14	-	-
c <b>SL</b> <sup>®</sup> us	UL 1077	up to 277 V	up to 240 V
	CSA C22.2 no. 235	-	-
	EN 60934	-	-
	GB 17701	-	-

#### **Approvals Auxiliary contact**

Appi Ovais Auxilia	y oontaot				
Symbol	Standard	Rated current AC	Rated voltage AC	Rated current DC	Rated voltage DC
cULus	UL 508 CSA C22.2 no. 14	6 A	277 V	1 A 6 A	125 V 50 V
c <b>FLL</b> us	UL 1077	6 A	277 V	1 A 6 A	125 V 50 V
	CSA C22.2 no. 235	-	-	-	-
	EN 60934	6 A (Ac-15)	277 V	1 A (DC-12) 0.5 A (DC-13) 6 A (DC-12)	125 V 125 V 50 V
	GB 17701	-	-	-	-

#### **Approvals Signal contact**

Approvais Signal	Contact				
Symbol	Standard	Rated current AC	Rated voltage AC	Rated current DC	Rated voltage DC
c UL us	UL 508 CSA C22.2 no. 14	6 A	277 V	1 A 6 A	125 V 50 V
c <b>FN</b> ° us	UL 1077	6 A	277 V	1 A 6 A	125 V 50 V
	CSA C22.2 no. 235	-	-	-	-
	EN 60934	6 A (AC-15)	277 V	1 A (DC-12) 0.5 A (DC-13) 6 A (DC-12)	125 V 125 V 50 V
	GB 17701	-	-	-	-

#### Add-on modules

Functional auxiliary contact	Type H1 assumes the same contact position Type H2 assumes the opposite position			Actuation of the contact is determine by the condition of the handle position of the adjacent poles.
Functional signal contact	Type S1 assumes the same contact position Type S2 assumes the opposite position			The signal contact operates due to a thermal magnetic tripping and must be reset by hand.
Function of relay trip module	Type A1 A2 A3 A4 A5	Voltage range AC/DC 5 - 12 V 10 - 24 V 20 - 48 V 40 - 110 V 90 - 240 V	Impedance at 50 Hz 1.1 Ω 4.7 Ω 16 Ω 63 Ω 395 Ω	When voltage is applied across the terminals, remote tripping takes place by a self interrupting magnetic system. Trip delay time 8 - 16 ms.
Maximum Pole combination	The maximum allowed number of po	les/modules is 6, but in any combinat	ion, only 1 or 2 add-on modules are per	mitted
	1 or 2 add-on modules only 1 add-on module 1 or 2 add-on modules	+ 1 or 2 or 3 pole + 4 pole + 4 pole	+ switched neutral + switched neutral	

The time-current-curves are not relevant for the add-on modules.

### Config. Code

#### AS168X-ACB H1 S2 A3 LOA

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

AS168X-ACB	S2 A3 LOA = Auxilia	ry contact	Relay trip module		Configuration
Auxiliary contact		Configuration			key
		key	Relay trip module AC/DC 5 ·		A1
Auxiliary contact synchro	onized	H1	Relay trip module AC/DC 10		A2
Auxiliary contact opposit	ed	H2	Relay trip module AC/DC 20		A3
			Relay trip module AC/DC 40		A4
AS168X-ACB H1	S2 A3 LOA = Signal	contact	Relay trip module AC/DC 90	) -240 V	A5
Signal contact		Configuration key	AS168X-ACB H1 S	2 A3 LOA = Relay t	rip module
Signal contact synchroni	zed	S1	Accessories		Configuration
Signal contact opposited	l .	S2			key
			Lockout attachment		LOA
	S2 A3 LOA = Relay t	rip module			
AS168X-ACB H1 Variants	S2 <b>A3</b> LOA <b>= Relay t</b>	rip module			
	S2 A3 LOA = Relay t	rip module Relay trip module	Accessories	Config. Code	Order Number
Variants			Accessories	Config. Code	Order Number
Variants	Signal contact		Accessories	Config. Code AS168X-ACBH1	Order Number 4420.0163
Variants Auxiliary contact	Signal contact		Accessories		
Variants Auxiliary contact Auxiliary contact synchro	Signal contact			AS168X-ACBH1	4420.0163
Variants Auxiliary contact Auxiliary contact synchro	Signal contact	Relay trip module	18 V	AS168X-ACBH1 AS168X-ACBH2	4420.0163 4420.0176
Variants Auxiliary contact Auxiliary contact synchro	Signal contact	Relay trip module Relay trip module AC/DC 20 - 4 Relay trip module AC/DC 10 - 2	18 V	AS168X-ACBH1 AS168X-ACBH2 AS168X-ACBA3	4420.0163 4420.0176 4420.0189
Variants Auxiliary contact Auxiliary contact synchro	Signal contact nized	Relay trip module Relay trip module AC/DC 20 - 4 Relay trip module AC/DC 10 - 2	18 V	AS168X-ACBH1 AS168X-ACBH2 AS168X-ACBA3 AS168X-ACBA2	4420.0163 4420.0176 4420.0189 4420.0340

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

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.