TA35 Rotary Switch 3Pol

Circuit Breaker for Equipment thermal, Rotary knob actuation, 3 poles





Thermal circuit breaker Rotary Switch, 3-pole Standard version

See below: Approvals and Compliances

Applications

- Power tools
- Industrial appliances
- Equipment for construction
- Cleaning equipment
- Commercial and household kitchen appliances

References

Available without bezel/knob for customized front panel design

Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Product News

Technical Data

Description

- 3-pole

- Thermal circuit breaker,

- Positively trip-free release

Unique Selling Proposition

- Easy actuation with gloves

- Bezel / knob snap-on

- Supplementary protector for general industrial use

- Method of operation acc. to IEC: S-type

lechnical Data				
Rated Voltage AC	415 Y VAC / 240 VAC	Overload		
Rated current range AC	0.05 - 12 A			
Conditional short circuit capa-	IEC 60934: 0.0512 A: 2 kA @ 415	Allowable Operation		
city Inc	VAC	Storage Temperatu		
Degree of Protection	front side IP40 acc. to IEC 60529	Vibration Resistanc		
Dielectric Strength	50Hz: > 2.5 kV			
	Impulse 1.2/50 μ s: > 4 kV	_		
Insulation Resistance	$500 \text{ VDC} > 100 \text{ M}\Omega$			
Lifetime	mechanical 50'000 switching cycles	Shock Resistance		
	AC: 1 x lr, cos φ 0.6:			
	50'000 switching cycles	Tripping Type		
	DC: 1 x lr,:	Actuation Type		
	50'000 switching cycles	Weight		

Overload	IEC: min. 40 trips@ 6 x Ir, cos φ 0.6					
	: min. 50 trips@ 1.5 x lr, cos φ 0.75					
Allowable Operation Temp.	-30 °C to 60 °C					
Storage Temperature	-40 °C to 60 °C					
Vibration Resistance	± 0.75 mm @ 10 - 60 Hz					
	acc. to IEC 60068-2-6, test Tc					
	10 G @ 60 - 500 Hz					
	acc. to IEC 60068-2-6, test Tc					
Shock Resistance	30 G / 18ms					
	acc. to IEC 60068-2-27, test Ea					
Tripping Type	Thermal					
Actuation Type	Rotary Knob					
Weight	75 g					

Approvals and Compliances

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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: TA35

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	VDE Certificate Number: 40019754
c FL us	UL Approvals	UL	UR File Number: E71572
	CCC Approvals	CCC	CCC Certificate Number: 2020970307001846

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Product standards

Product standards that are referenced

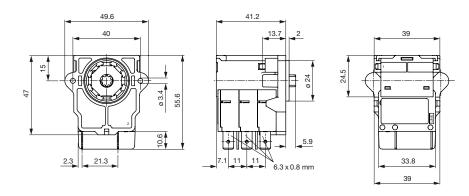
Organization	Design	Standard	Description
IEC	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
(h)	Designed according to	UL 1077	Standard for Supplementary Protectors for Use in Electrical Equipment
CSA Group	Designed according to	CSA C22.2 No. 235	Supplementary Protectors
	Designed according to	GB 17701	Circuit-breaker for equipment

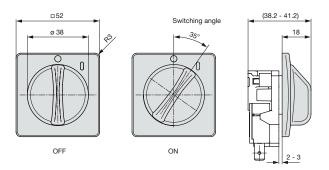
Compliances

The product complies with following Guide Lines

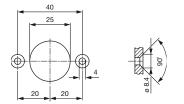
The product complies	with following Guide Lines		
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
ROHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
5	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]





Cut out



Assembly Instructions



Approvals				
Approval		Rated current	Rated Voltage AC	Rated Voltage DC
c FN °us	UL 1077	0.0512 A	415 Y / 240 V	-
c FL us	CSA C22.2 235	0.0512 A	415 Y / 240 V	-
DE	IEC 60934	0.0512 A	415 Y / 240 V	-
	GB 17701	0.0512 A	415 Y / 240 V	-

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Typical internal resistance per pole

Rated Current [A]	Internal Resistance [Ω]
0.05	200.000
0.1	70.000
0.5	2.750
1.0	0.720
1.5	0.340
2.0	0.187
2.5	0.115
2.8	0.089
3.0	0.059
4.0	0.059
5.0	0.044
6.0	0.028
7.0	0.0142
8.0	0.0142
10.0	0.0109
12.0	0.0086
13.0 *	0.0072
14.0 *	0.0072
15.0 *	0.0056
16.0 *	0.0056
18.0 *	0.0052
20.0 *	0.0052
* 3-Pole max. 12 A	

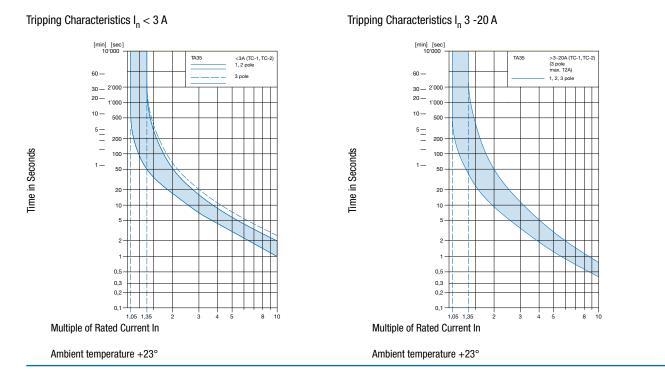
Effect of ambient temperature

The units are calibrated for an ambient temperature of $+23^{\circ}$ C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

Ambient Temperature [°C]	Correction factor
-30	0.76
-20	0.81
0	0.90
+23	1.00
+40	1.06
+50	1.10
+60	1.14

Example: Rated current = 5 A, Environmental temperature = 50 °C, --> Correction factor = 1.10, Resulting current = 5.2 A --> Round to next higher rated current: 6 A

Time-Current-Curves



ТА	3	5	-	E	в	т	т	F	1	2	0	С	0		-	0	0 0
					1		2	3		4			5				6
Basic fu	nction														_	Q	1
Poles				1							2				_	3	
Thermal c protection					P1 			-⊞- - -					°1 		۲Ę		P2 P3
Illuminatio	on				6 4				4	8			6 4	° 5		° 4	°°56
Rotary Ki																	
Without ill		on		EF	т			E	BT			E	BD			EK	D
Front- &	Actuat	tion co	olor													Q	2
Front Bez				ary Kr	nob											•	
black			blac	-										=		Т	
without b	ezel		with	out ki	nob									=		Ν	
Front be Surface	zel leg	end, n	narkiı	ng		Sym	bol									Q,	3
relief rece	hassa					I 0	IDOI							=		F	
no markii							ymb	ol						=		N	
Rated cu	urrent [A]														Q	4
Thermal	overloa	ad prot	ectior	۱													
In		0			In		0			In		C	5			In	Q
0.05 A	=	Z05			.0 A		J10		4.0		=		40		4.0 A'		140
0.10 A	=	J01			.2 A		J12		5.0		=		50		5.0 A'		150
0.20 A	=	J02			.5 A		J15		6.0		=		60		5.0 A'		160
0.30 A	=	J03			.0 A		J20		7.0		=		70		3.0 A'		180
0.40 A 0.50 A	=	J04			.5 A		J25		8.0		=		80	20	0.0 A'	- =	200
0.50 A 0.80 A	=	J05 J08			.0 A .5 A		030 035		10.0 12.0		=		00 20				
				5	.5 A	-	000		12.0		-	'	20				
* 3-Pole ı	max. 12	2 A															
Features	3															Q	5
Standard	l/ no fea	atures												=		C0	
Special r	markin	g														Q	6
Standard														=		000	
Special n	narking	(XXX	= pla	cehoo	der)									=		XXX	

All Variants

Designation	Order Number
TA35 Drehknopf 3Pol, 12 A, Snap-in version, Quick connect terminals 6.3 x 0.8 mm, 415 Y VAC, 3-pole, Circuit Breakers	4435.0075
TA35 Drehknopf 3Pol, 10 A, Snap-in version, Quick connect terminals 6.3 x 0.8 mm, 415 Y VAC, 3-pole, Circuit Breakers	4435.0452

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