

Circuit Breaker for Equipment thermal, Rocker actuation, 2 pole



illuminated
Green transparent
White, lettered



Non-illuminated
white



illuminated
Red transparent

See below:

[Approvals and Compliances](#)

Description

- Thermal circuit breaker
- 2-pole
- Snap-in version
- Positively trip-free release
- Method of operation acc. to IEC: S-type
- Different rocker colours
- Wide current range

Unique Selling Proposition

- Unique UL rating of 277 VAC
- Finely graded rated currents
- High configurability (rocker colours, lettering, illumination)
- IP65 with optional cover

Applications

- Power tools
- Medical and laboratory equipment
- Industrial appliances
- Equipment for construction
- Cleaning equipment
- Commercial and household kitchen appliances
- Industrial Power
- Industrial lighting arrays

Other versions on request

- White front cover

Weblinks

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

Technical Data

Rated Voltage AC	IEC: 240 VAC UL/CSA : 277 VAC
Rated Voltage DC	60 VDC
Rated current range AC	0.05 - 20 A
Conditional short circuit capacity Inc	IEC 60934: 0.05...20 A: 2 kA, SC (C1) @ 240 VAC
Degree of Protection	front side IP40 acc. to IEC 60529
Dielectric Strength	50Hz: > 2.5 kV Impulse 1.2/50 µs: > 4 kV
Insulation Resistance	500 VDC > 100 MΩ
Lifetime	mechanical: 50'000 switching cycles AC: 1 x I _r , cos φ 0.6: 50'000 switching cycles DC: 1 x I _r , L/R = 2 - 3 ms: 50'000 switching cycles

Overload	IEC: min. 40 trips @ 6 x I _r , cos φ 0.6 UL / CSA: min. 50 trips @ 1.5 x I _r , cos φ 0.75
Allowable Operation Temp.	-30°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 / 18 ms acc. to IEC 60068-2-27, test Ea
Tripping Type	Thermal
Actuation Type	Rocker
Weight	29.0 - 31.5 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
	UL Approvals	UL	UL File Number: E71572
	CCC Approvals	CCC	CCC Certificate Number: 2020970307001846


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 No. 235	Supplementary Protectors
	Designed according to	GB 17701	Circuit-breaker for equipment






Application standards

Application standards where the product can be used

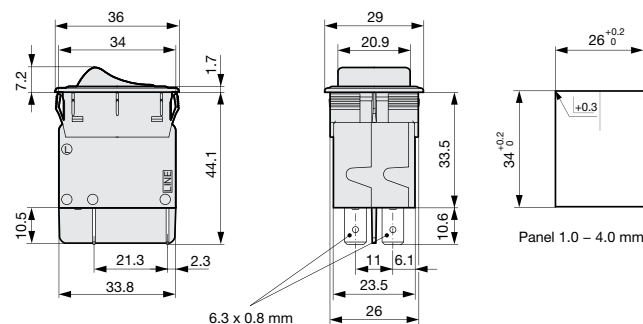
Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

Compliances

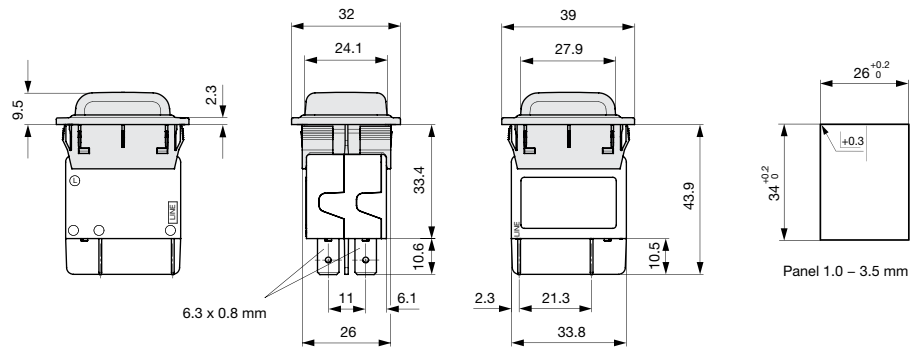
The product complies with following Guide Lines

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.
	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	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	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.

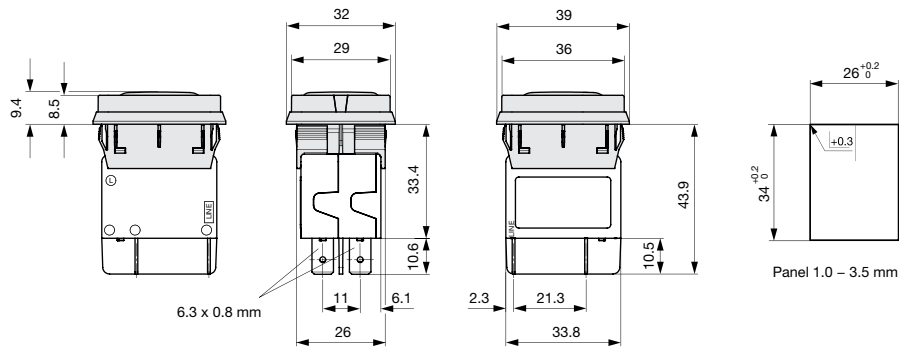
Dimension [mm]



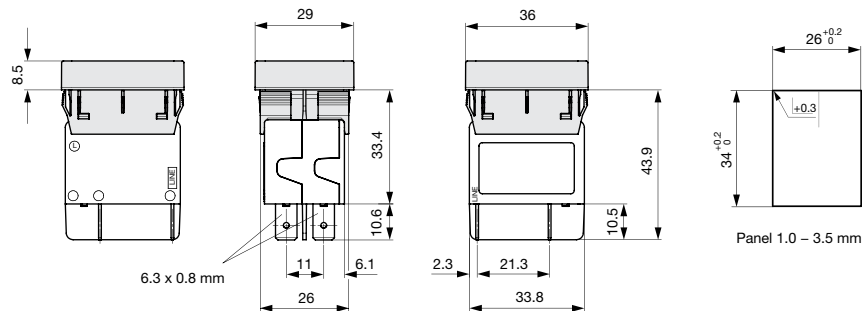
TA35 without protection cover



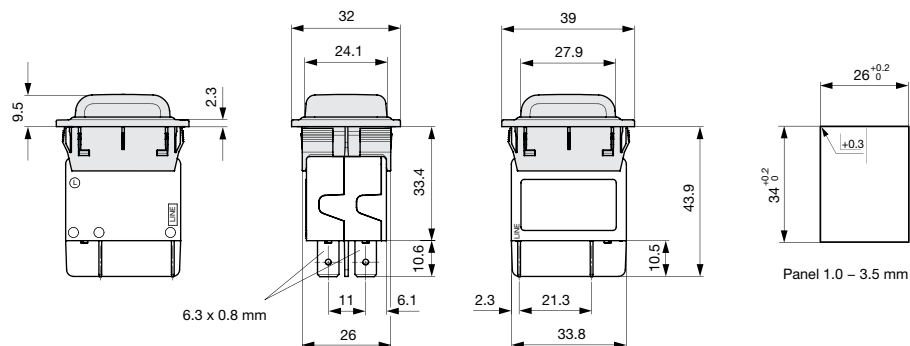
TA35 with factory mounted transparent protection cover CZM21, IP65



TA35 with factory mounted transparent protection cover and raised collar CZM23, IP65



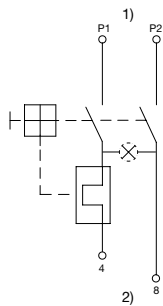
TA35 with factory mounted raised collar CZM24, IP40



TA35 with factory mounted transparent antibacterial protection cover CZM25, IP65

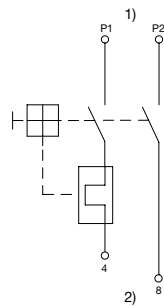
Diagrams

2-pole, 1 bimetal, illuminated



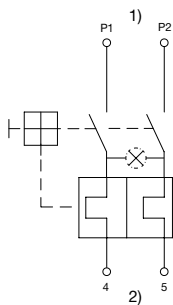
1) Line, 2) Load
Codepos AAA = C12, C14, C17, C18, C19

2-pole, 1 bimetal, non illuminated



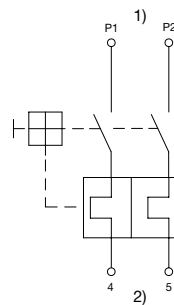
1) Line, 2) Load

2-pole, 2 bimetal, illuminated







1) Line, 2) Load
Codepos AAA = C32, C34, C37, C38, C39

2-pole, 2 bimetal, non illuminated



1) Line, 2) Load

The keys / codepos are listed in the key table of the basic function for selection.

Approval		Rated current	Rated Voltage AC	Rated Voltage DC
 US	UL 1077	0.05...20 A	277 V	32/60 V
 US	CSA C22.2 235	0.05...20 A	277 V	32/60 V
	IEC 60934	0.05...20 A	240 V	32/60 V
	GB 17701	0.05...20 A	240 V	60 V

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

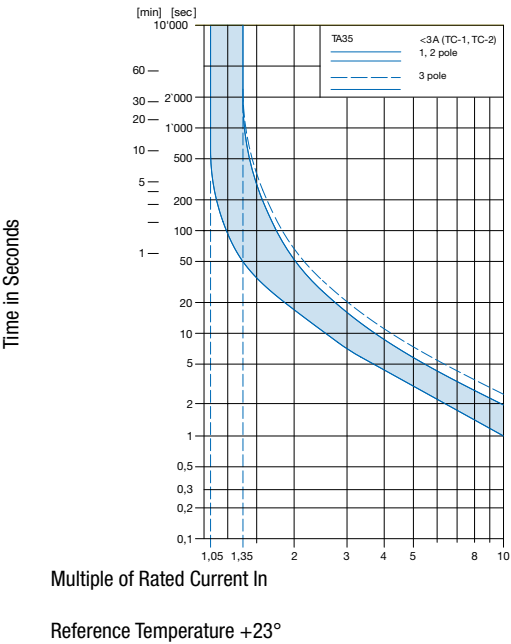
The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

Ambient Temperature [°C]	Correction factor
-30	0.76
-20	0.81
0	0.90
+23	1.00
+40	1.03
+50	1.04
+60	1.06

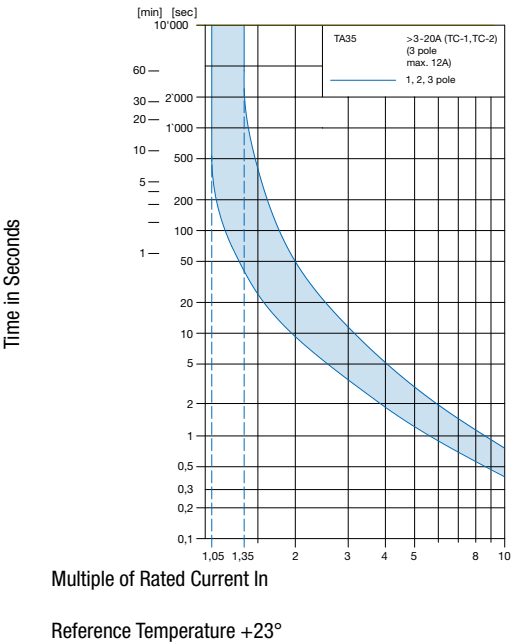
Example: Rated current = 5 A, Environmental temperature = 50 °C --> Correction factor = 1.04, Resulting current = 5.2 A --> Fount to next higher rated current: 6 A



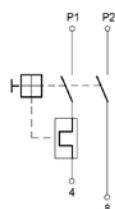
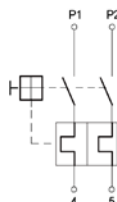
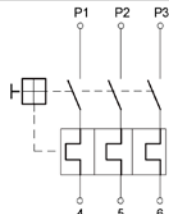

Time-Current-Curves


Tripping Characteristics $I_n < 3\text{ A}$



Tripping Characteristics $I_n 3 - 20\text{ A}$



Basic function					
Poles		1	2		3
Thermal overload protection					
Illumination					
Rocker					
Without illumination		CFT	CBT	CBD	CKD
	380...400 V	-	-	-	CD1
	220...240 V	C2F	C12	C32	-
	110...120 V	C4F	C14	C34	-
	20...26 V	C7F	C17	C37	-
	10...13 V	C8F	C18	C38	-
	4...7 V	C9F	C19	C39	-
Momentary					
Without illumination		CGT	CET	CED	CLD

Front- & Actuation color						2
Front Bezel	Rocker without illumination		Rocker with illumination			
black	-	clear transparent	=	1		
black	-	red transparent	=	3		
black	-	green transparent	=	4		
black	-	orange transparent	=	6		
black	black	-	=	B		
black	green	-	=	G		
black	red	-	=	R		
black	white	-	=	W		
black	orange	-	=	X		
black	yellow	-	=	Y		

Special marking			6
Standard	=	000	
Special marking (XXX = placeholder)	=	XXX	

 7

All Variants

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
2-pole, 2 bimetal, without illumination	White	embossed	3.0 A	Without cover	TA35-CBDWF030C0-000	4435.0022
2-pole, 2 bimetal, without illumination	White	black printed	3.0 A	Without cover	TA35-CBDWM030C0-000	4435.0374
2-pole, 2 bimetal, without illumination	Black	white printed	4.0 A	Without cover	TA35-CBDBH040C0-000	4435.0276
2-pole, 2 bimetal, without illumination	White	embossed	5.0 A	Without cover	TA35-CBDWF050C0-000	4435.0039
2-pole, 1 bimetal, without illumination	White	embossed	6.0 A	Without cover	TA35-CBTWF060C0-000	4435.0042
2-pole, 2 bimetal, illuminated 240 V	Green transparent	white printed	6.0 A	Without cover	TA35-C324H060C0-000	4435.0265
2-pole, 1 bimetal, without illumination	White	embossed	8.0 A	Without cover	TA35-CBTWF080C0-000	4435.0046
2-pole, 1 bimetal, without illumination	Black	white printed	8.0 A	Without cover	TA35-CBTBL080C0-000	4435.0067
2-pole, 2 bimetal, illuminated 240 V	Blue transparent	white printed	8.0 A	Transparent cover, IP65	TA35-C327L080C0-000-CZM21	4435.0483
2-pole, 1 bimetal, without illumination	Black	white printed	10.0 A	Without cover	TA35-CBTBL100C0-000	4435.0012
2-pole, 1 bimetal, without illumination	White	embossed	10.0 A	Without cover	TA35-CBTWF100C0-000	4435.0047
2-pole, 2 bimetal, without illumination	White	black printed	10.0 A	Without cover	TA35-CBDWM100C0-000	4435.0091
2-pole, 1 bimetal, illuminated 240 V	Green transparent	embossed	10.0 A	Without cover	TA35-C124F100C0-000	4435.0187
2-pole, 2 bimetal, without illumination	White	embossed	10.0 A	Without cover	TA35-CBDWF100C0-000	4435.0195
2-pole, 2 bimetal, without illumination	White	embossed	12.0 A	Without cover	TA35-CBDWF120C0-000	4435.0304
2-pole, 2 bimetal, without illumination	Black	embossed	15.0 A	Without cover	TA35-CBDBF150C0-000	4435.0347
2-pole, 2 bimetal, without illumination	White	black printed	15.0 A	Raised collar with transparent cover, IP65	TA35-CBDWM150C0-000-CZM23	4435.0423
2-pole, 1 bimetal, without illumination	White	embossed	20.0 A	Without cover	TA35-CBTWF200C0-000	4435.0002
2-pole, 2 bimetal, without illumination	White	embossed	20.0 A	Without cover	TA35-CBDWF200C0-000	4435.0013
2-pole, 2 bimetal, without illumination	Black	white printed	20.0 A	Without cover	TA35-CBDBL200C0-000	4435.0321

Most Popular.

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

Packaging Unit

10 Pcs

Accessories

Description



[DIN Plug/Socket](#)
Screw-on collar with cover, IP65



[TA35 Accessories](#)
Screw-on collar with cover, IP65

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

4435.0002	4435.0008	4435.0009	4435.0011	4435.0012	4435.0013	4435.0014	4435.0022	4435.0023	4435.0024
4435.0031	4435.0032	4435.0033	4435.0038	4435.0039	4435.0041	4435.0042	4435.0046	4435.0047	4435.0051
4435.0055	4435.0057	4435.0067	4435.0076	4435.0077	4435.0078	4435.0088	4435.0089	4435.0090	4435.0091
4435.0092	4435.0093	4435.0094	4435.0104	4435.0105	4435.0106	4435.0107	4435.0108	4435.0112	4435.0114
4435.0115	4435.0116	4435.0117	4435.0118	4435.0126	4435.0189	4435.0238	4435.0239	4435.0262	4435.0266
CZZ31	4435.0141	4435.0273	4435.0275	4435.0276	4435.0277	4435.0289	4435.0307	4435.0314	4435.0316
4435.0321	4435.0355	4435.0362	4435.0363	4435.0364	4435.0365	4435.0366	4435.0371	4435.0377	4435.0379
4435.0384	4435.0195	4435.0279	4435.0331	4435.0332	4435.0333	4435.0334	4435.0335	4435.0336	4435.0337
4435.0391	4435.0392	4435.0393	4435.0395	4435.0398	4435.0399	4435.0401	4435.0404	4435.0405	4435.0121
4435.0125	4435.0127	4435.0128	4435.0129	4435.0131	4435.0139	4435.0143	4435.0144	4435.0145	4435.0147