#### IEC Appliance Inlet C14 or C18 with Filter, Circuit Breaker TA45



Protection class I with shield



Protection class II without shield

C14	C18
70° C	70° C

#### Description

- Panel mount :
- Screw-on mounting from front side
- 3 Functions :
- Appliance Inlet protection class I or II, circuit breaker type TA45 2-pole . Line filter in standard and medical version
- Quick connect terminals 6.3 x 0.8 mm

#### **Unique Selling Proposition**

- Compact power entry module with circuit breaker
- High configurability
- Easy assembly with prewired modules
- Protection class I or II

#### See below: **Approvals and Compliances**

#### **Characteristics**

- All single elements are already wired
- Unwired versions available on request
- Circuit Breaker non-illuminated or illuminated
- Suitable for use in equipment according to IEC/UL 60950
- Suitable for use in medical equipment according to IEC/UL 60601-1 References

Alternative: version without line filter 6145

### We recommend for new applications DF12

Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Accessories, Detailed request for product, Microsite, Landing Page

Technical Data			
Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz	appliance inlet/-outlet	C14 or C18 acc. to IEC 60320-1,
Ratings UL/CSA	1 - 15 A @ Ta 40 °C / 250 VAC; 60 Hz		UL 498, CSA C22.2 no. 42 (for cold
Leakage Current	standard < 0.5 mA (250 V / 60 Hz) medical < 5 μA (250 V / 60 Hz)		conditions) pin-temperature 70 °C, 10A Protection Class I or II
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)	Circuit Breakers	Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235 2-pole rocker switch, illuminated or non-
Allowable Operation Tempe- rature	-10 °C to 55 °C		illuminated. Optional with undervoltage- or remote trip release
Climatic Category	10/055/21 acc. to IEC 60068-1		Short circuit capacity lcn:
IP-Protection	from front side IP40 acc. to IEC 60529		at ln < 3A/240VAC : 10 x ln at ln ≥ 3A/240VAC : 300A
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140	Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8
Terminal	Quick connect terminals 6.3 x 0.8 mm		Technical Details
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm	MTBF	> 100'000h acc. to MIL-HB-217 F
Material: Housing	Thermoplastic, black, UL 94V-0		

#### **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: 5145

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40035745
c <b>FL</b> us	UL Approvals	UL	UL File Number: E72928

#### **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
IEC	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
IEC	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
(YL)	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(YL	Designed according to	UL 1283	Electromagnetic interference filters
CSA Broup	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
CSA Broup	Designed according to	CSA C22.2 no. 8	Electromagnetic interference (EMI) filters

#### **Application standards**

Application standards where the product can be used

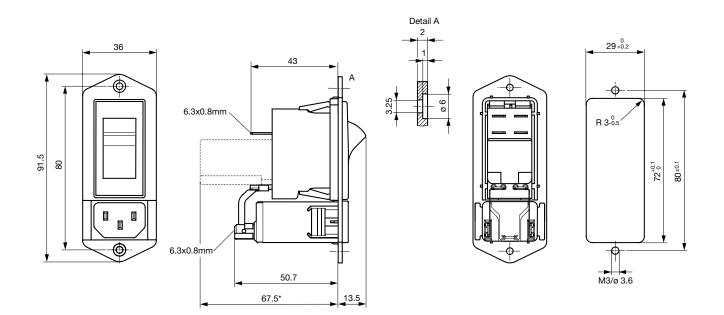
Organization	Design	Standard	Description
IEC.	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.
IEC.	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

#### Compliances

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.
ROHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
<b>5</b> 0	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.
Ť	Medical Technology	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

#### Dimension [mm]



#### \* --- Version TA45 with undervoltage release

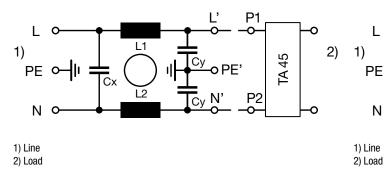
#### **Technical Data of Filter-Components**

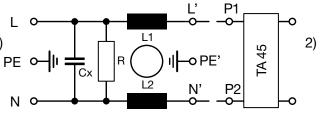
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R [Μ</b> Ω]
1	Standard version	2 x 11	47	2.2	-
2	Standard version	2 x 4	47	2.2	-
3	Standard version	2 x 2.5	47	2.2	-
4	Standard version	2 x 1.6	47	2.2	-
6	Standard version	2 x 0.7	47	2.2	-
8	Standard version	2 x 0.6	47	2.2	-
10	Standard version	2 x 0.4	47	2.2	-
15	Standard version	2 x 0.1	47	2.2	-
1	Medical Version (M5)	2 x 11	47	-	1
2	Medical Version (M5)	2 x 4	47	-	1
6	Medical Version (M5)	2 x 0.7	47	-	1
8	Medical Version (M5)	2 x 0.6	47	-	1
10	Medical Version (M5)	2 x 0.4	47	-	1
15	Medical Version (M5)	2 x 0.1	47	-	1

#### Diagrams

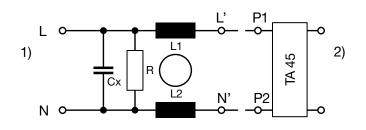


Medical Version (M5)



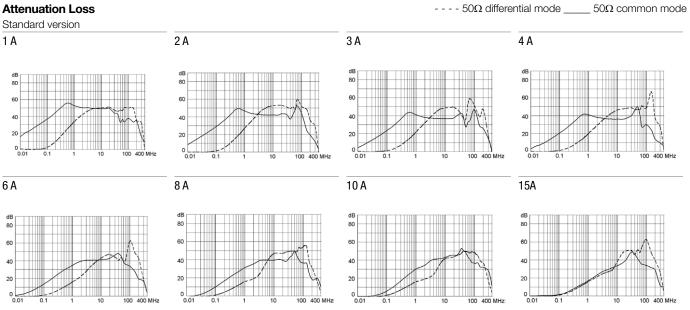


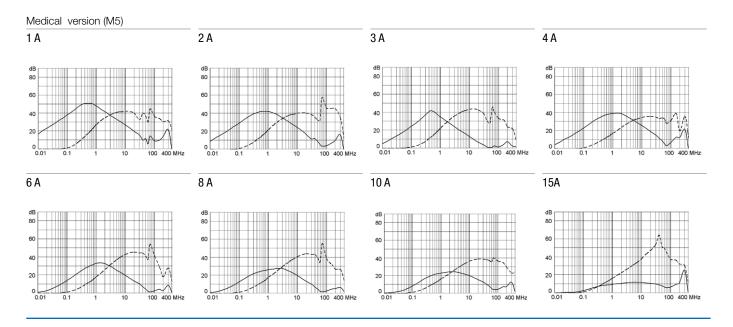
Medical filter (M5) protection class II





#### **Attenuation Loss**





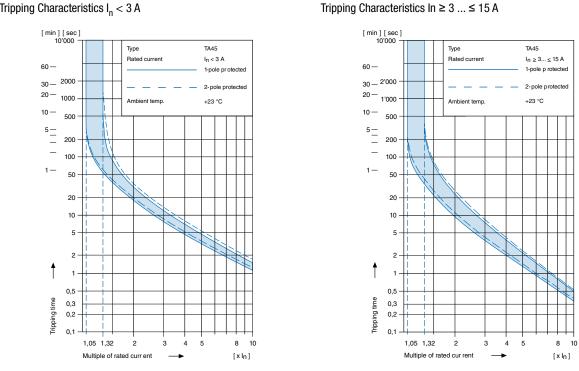
#### Effect of ambient temperature

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
-10	0.89
-5	0.91
0	0.92
+23	1.00
+30	1.03
+40	1.08
+55	1.16

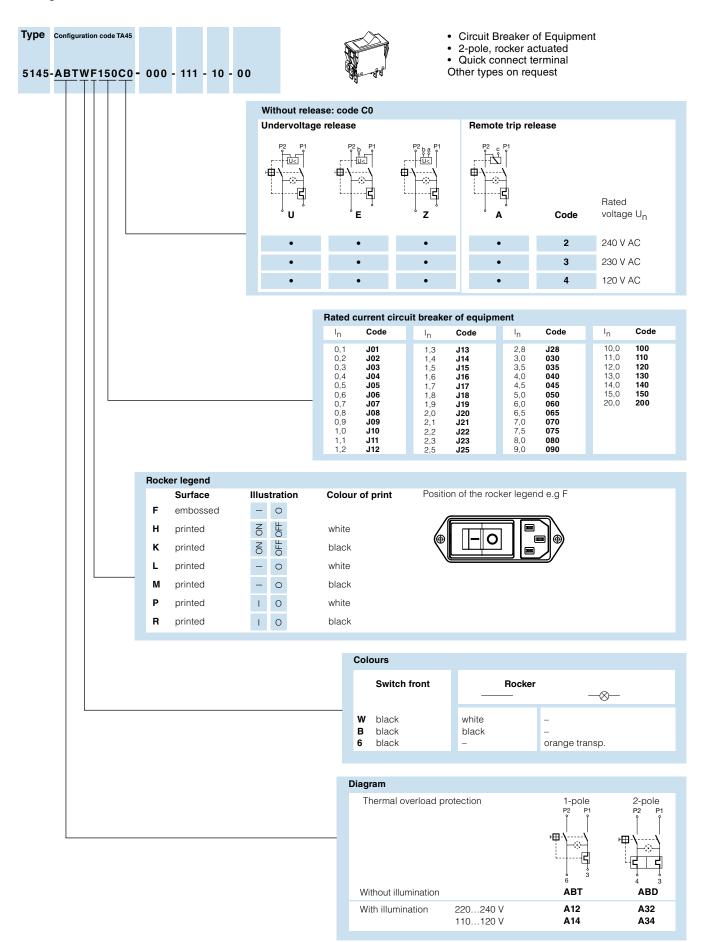
Example: Rated current = 5 A, Environmental temperature =  $40 \circ C$ , --> Correction factor = 1.08, Resulting current = 5.5 A --> Fount to next higher rated current: 6 A

#### **Time-Current-Curves**



#### Tripping Characteristics $I_n < 3 A$

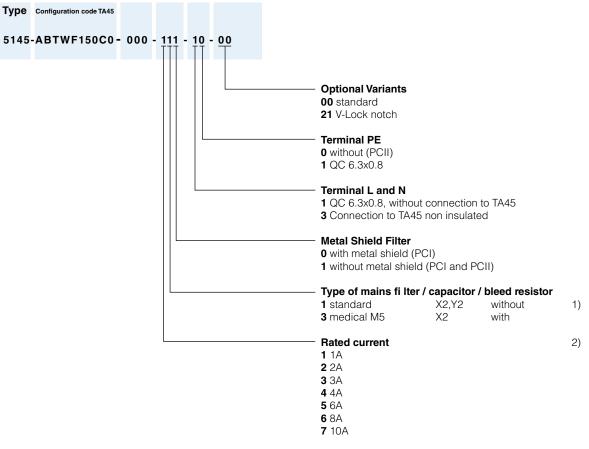
#### **Configuration code TA45**



#### **Configuration code TA45**

Type         Configuration code TA45           5145-         ABTWF150C0 - 000	- 111 - 10 - 00		44	•	Circuit Breaker o 2-pole, rocker ac Quick connect te Other types on req	tuated erminal	
		Without releas	se: code C0				
		Undervoltage	release		Remote trip rel	ease	
				P <sup>2</sup> b a P1  +UZ     Z	₽² ° ° °	Code	Rated voltage U <sub>n</sub>
		•	•	•	•	2	240 V AC
		•	•	•	•	3	230 V AC
		•	•	•	•	4	120 V AC
			Rated current	circuit breaker	of equipment		
			I <sub>n</sub> Code	۱ <sub>n</sub>	Code I <sub>n</sub>	Code	I <sub>n</sub> Code
			0,1 J01 0,2 J02 0,3 J03 0,4 J04 0,5 J05 0,6 J06 0,7 J07 0,8 J08 0,9 J09 1,0 J10 1,1 J11 1,2 J12	1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,5	J13         2,8           J14         3,0           J15         3,5           J16         4,0           J17         4,5           J18         5,0           J19         6,0           J20         6,5           J21         7,0           J22         7,5           J23         8,0           J25         9,0	J28 030 040 045 050 060 065 070 075 080 090	10,0       100         11,0       110         12,0       120         13,0       130         14,0       140         15,0       150         20,0       200
Rocke	er legend						
		Ilustration	Colour of prin	t Position	n of the rocker leger	id e.g F	
F H K L M P R		I     I     I       I     I     I       I     I     I	white black white black white black				
			Colours				
			Sw	itch front	Rocker		-&
			W bla B bla 6 bla	ck	white black -	– – orange trans	p.
			Diagram				
				al overload pro	Nection		
				t illumination	220240 V	ABT A12	ABD A32
				annination	220240 V 110120 V	A12 A14	A32 A34

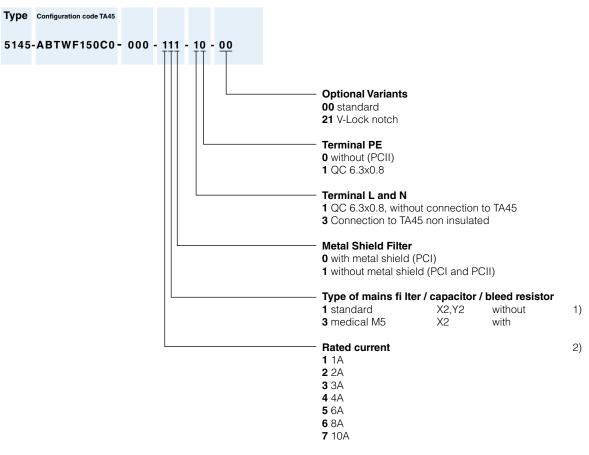
#### Configuration code (Order example)



1) Not in conjunction with PC II

2) The rated current of the line-filter must not be exceeded in the end application.

#### Configuration code (Order example)



#### 1) Not in conjunction with PC II

2) The rated current of the line-filter must not be

exceeded in the end application.

#### Variants

Circuit Break	ers			Filter		Connectors				
Rated Cur- rent [A]	Rocker co- lour	Illumination	Add-on mo- dules	Rated Cur- rent [A]	Filter Type	Protection Class	V-Lock	Internally wired	Config. Code	Order Number
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.0012.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	10	Standard version	l or II		prewired	-	5145.0012.711
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or II		prewired	-	5145.0031.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	2	Standard version	l or ll		prewired	-	5145.0040.211
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	8	Standard version	l or ll		prewired	-	5145.0423.611
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	10	Standard version	l or ll		prewired	-	5145.0470.711
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.0470.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.0470.831.01
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	4	Standard version	l or ll		prewired	-	5145.0562.411
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.0586.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	8	Standard version	l or II		prewired	-	5145.0646.611
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.0847.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	3	Standard version	l or ll		prewired	-	5145.0879.310
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Standard version	l or ll		prewired	-	5145.0880.110
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Standard version	l or II		prewired	-	5145.0881.111
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	2	Standard version	l or ll		prewired	-	5145.0882.211
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.0885.810
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.0885.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.0885.831.01

Circuit Break	ers			Filter		Connectors				
Rated Cur- rent [A]	Rocker co- lour	Illumination	Add-on mo- dules	Rated Cur- rent [A]	Filter Type	Protection Class	V-Lock	Internally wired	Config. Code	Order Number
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.0991.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	4	Standard version	l or ll		prewired	-	5145.1356.411
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.1698.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Standard version	l or ll		prewired	-	5145.2166.111
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	2	Standard version	l or ll		prewired	-	5145.2451.211
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.2754.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.2755.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.2770.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Standard version	l or ll		prewired	-	5145.2773.811
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.2810.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Standard version	l or ll		prewired	-	5145.2841.111
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	4	Standard version	l or ll		prewired	-	5145.2844.411
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Standard version	l or ll		prewired	-	5145.2857.511
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Standard version	l or ll		prewired	-	5145.2956.111
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0031.830
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0031.831
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	10	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0470.731
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0470.831
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0586.531
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0764.831

Circuit Breakers				Filter	ilter Connectors						
Rated Cur- rent [A]	Rocker co- lour	Illumination	Add-on mo- dules	Rated Cur- rent [A]	Filter Type	Protection Class	V-Lock	Internally wired	Config. Code	Order Number	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0847.531	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0885.831	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0890.831	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0990.531	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	6	Medical Ver- sion (M5)	l or ll		prewired	-	5145.0991.531	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	10	Medical Ver- sion (M5)	l or ll		prewired	-	5145.1593.731	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	10	Medical Ver- sion (M5)	l or ll		prewired	-	5145.2772.731	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.2773.831	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	1	Medical Ver- sion (M5)	l or ll		prewired	-	5145.2774.131	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	2	Medical Ver- sion (M5)	l or ll		prewired	-	5145.2775.231	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	2	Medical Ver- sion (M5)	l or ll		prewired	-	5145.2858.230	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or ll		prewired	-	5145.3000.830	
-	-	non- illuminated or illuminated	Optional with undervoltage- or remote trip release	15	Medical Ver- sion (M5)	l or II		prewired	-	5145.3303.831	

#### Most Popular.

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

Packaging unit 20 Pcs

#### Accessories

Description



#### Mating Outlets/Connectors

Category / Description

#### Appliance Outlet Overview complete



4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with pro- tection class I	4787
4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder terminals or quick connect terminals, 10 A, Suitable for appliances with protection class I	4788
IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal	5091
Appliance Outlet further types to 5145	
Connector Overview complete	
4022 Mounting: Power Supply Cord, 3 x 1.5 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4022
4782 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782



4022 Mounting: Power Supply Cord, 3 x 1.5 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4022
4782 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4012 Mounting: Power Supply Cord, 3 x 1 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4012
4785 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4785
4300-06 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
Connector further types to 5145	

#### Mating Outlets/Connectors shuttered



#### Power Cord Overview complete

VAC17KS, V-Lock cord retaining, diverse m, Connector IEC C17, diverse, black / grey / white VAC17KS
Power Cord further types to 5145

# **Mouser Electronics**

Authorized Distributor

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## Schurter:

5-ABTWF150C0-811 5-ABTWF150C0-831 5-ABTWF050C0-531 5-ABTWF050C0-511 5-ABDWF150C0-811 5-		
ABDWF150C0-831 5-ABDWF050C0-511 5-ABDWF050C0-531 5-ABDWF100C0-711 5145.3000.830 5145.0012.511		
$\underline{5145.0012.711}  \underline{5145.0022.711}  \underline{5145.0031.830}  \underline{5145.0040.211}  \underline{5145.0423.611}  \underline{5145.0470.730}  \underline{5145.0470.731}  5145.0470$		
5145.0470.831.01 5145.0551.511 5145.0562.411 5145.0646.611 5145.0764.831 5145.0861.830 5145.0879.310		
<u>5145.0880.110</u> <u>5145.0881.111</u> <u>5145.0882.211</u> <u>5145.0885.810</u> <u>5145.0885.831.01</u> <u>5145.0890.831</u> <u>5145.0893.711</u>		
$\underline{5145.0990.531}  \underline{5145.0991.511}  \underline{5145.0991.531}  \underline{5145.0991.611}  \underline{5145.1034.811}  \underline{5145.1184.631}  \underline{5145.1271.311}$		
$\underline{5145.1356.411}  \underline{5145.1593.731}  \underline{5145.1698.811}  \underline{5145.2091.411}  \underline{5145.2166.111}  \underline{5145.2451.211}  \underline{5145.2754.811}$		
<u>5145.2755.811</u> <u>5145.2770.811</u> <u>5145.2772.731</u> <u>5145.2773.811</u> <u>5145.2773.831</u> <u>5145.2774.131</u> <u>5145.2775.231</u>		
$\underline{5145.2810.511}  \underline{5145.2841.111}  \underline{5145.2844.411}  \underline{5145.2851.811}  \underline{5145.2857.511}  \underline{5145.2858.230}  \underline{5145.2882.811}$		
$\underline{5145.2956.111}  \underline{5145.3000.811}  \underline{5145.3303.831}  \underline{5145.3417.811}  \underline{5145.3583.510}  \underline{5145.0031.811}  \underline{5145.0031.831}$		
$\underline{5145.0470.711}  \underline{5145.0586.511}  \underline{5145.0586.531}  \underline{5145.0847.511}  \underline{5145.0847.531}  \underline{5145.0885.811}  \underline{5145.0885.831}$		
5145.0991.510 5145.1477.711 5145.2217.711 5145.ABDWF100C0.811 5145.0470.831 5145.0022.731		
<u>5145.0429.611</u> <u>5145.2090.211</u> <u>5145.3768.711</u> <u>5145.0646.631</u> <u>5145.0470.811</u> <u>5145.0991.611.01</u> <u>5145.0885.835.21</u>		
<u>5145.0022.611</u> <u>5145.0646.610</u> <u>5145.2858.231</u>		