imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



IEC Appliance Inlet C20 with Filter, Circuit Breaker TA45 (recessed)

EF12



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

Approvals

- VDE Certificate Number: 40001520
- UL File Number: E72928

- All single elements are already wired
- Circuit Breaker non-illuminated or illuminated
- With EMC-shield
- Suitable for use in equipment according to IEC/UL 60950
- Suitable for use in medical equipment according to IEC/UL 60601-1
- Other versions on request
- Variant with notch for V-Lock mating Cordsets

References

Alternative: version without line filter EF11 Alternative: Standard version

Weblinks

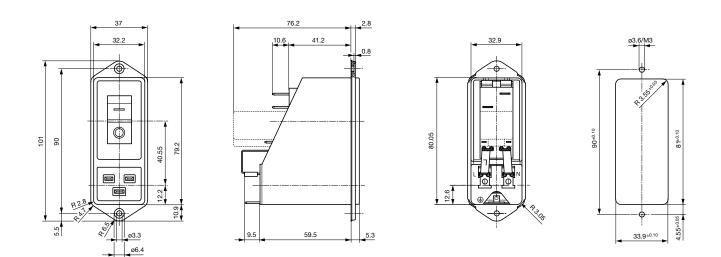
pdf datasheet, html-datasheet, General Product Information, RoHS, CHINA-RoHS, REACH, Distributor-Stock-Check, Accessories, Detailed request for product

Technical Data

Ratings IEC Ratings UL/CSA	12 - 16A @ Ta 40 °C / 250 VAC; 50 Hz 12 - 20A @ Ta 40 °C / 250 VAC; 60 Hz	appliance inlet/-outlet	C20 acc. to IEC 60320-1, 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, 16A, Protection Class I		
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 Icn:		
IP-Protection	from front side IP 40 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 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	> 100'000 h acc. to MIL-HB-217 F		
Material: Housing	Thermoplastic, black, UL 94V-0				

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in **General Product Information**

Dimension



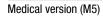
* --- Version TA45 with undervoltage release

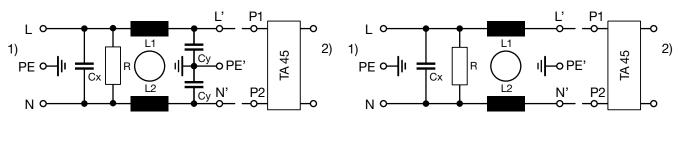
Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [Μ Ω]
12	Standard Version	2 x 0.8	100	2.2	1
16	Standard Version	2 x 0.6	100	2.2	1
20	Standard Version	2 x 0.3	100	2.2	1
12	Medical Version (M5)	2 x 0.8	100	-	1
16	Medical Version (M5)	2 x 0.6	100	-	1
20	Medical Version (M5)	2 x 0.3	100	-	1

Diagrams

Standard version





1) Line	1) Line
1) Line 2) Load	2) Load

---- 50Ω differential mode _____ 50Ω common mode

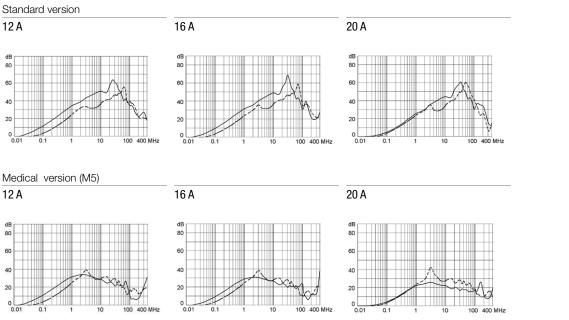
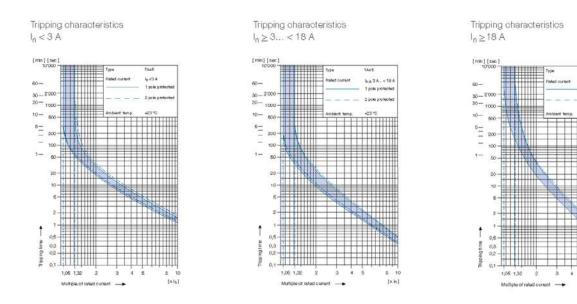


Table 1 Selectio Order example	n for type TA45				ABT	W	F 150 C0
	 Circuit Brea 2-pole, rocl Quick conn Other types o 	ect terminal					
49- 4 ·	Diagram						
	Thermal overload p	protection	1-pole				
	Without illuminatio	n	ABT	ABD	ר		
	With illumination	220240 V 110120 V	A12 A14	A32 A34	}		
	Colours						
	Switch front	Rock	er —⊗–	-			
	W blackB black6 black	white black -	– – orange transp.				
Rocker legend							
Surface	Illustration	Colour of print	Surface	Illustr	ation Color	ur of print	
F embossed	- 0		M printed	-	0 black		
H printed	NO HO	white	P printed	1	O white		
K printed	OFF ON	black	R printed	1	0 black		
L printed	- 0	white	i pintos		Diddit		
Position of the ro	cker legend						
e.g F		Rated current circ	uit breaker of equip	ment			
		I _n Code	I _n Code	I _n Cod	le I _n	Code	
		10,010011,011012,0120	13,0 130 14,0 140 15,0 150	16,0 160 17,0 170 18,0 180	20,0		
		Other rated currer	nts on request				
Without releas		Remote tri	p release				
P ² P ² P ¹ P ² P ¹ P ² P ¹ V		pr pr	F	Rated oltage U _n			
•	•	• •	2 2	40 V AC			
•	•	• •	3 2	30 V AC			
•	•	• •	4 1	20 V AC			

Technical data (continued) **Circuit breaker**



1) Effect of ambient temperature

The unit is calibrated for an ambient temperature of +23 °C. To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table on the right side:

* 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

* Temperature must be measured at the rear of the breaker next to the terminals after equipment operating temperature has been reached.

1) Example	
Rated current at +23 °C	
Ambient temperature	
Correction factor	
Chosen rated current at	
+40 °C ambient temperature	

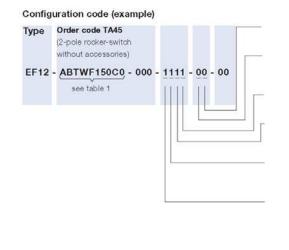
6,0 A +40 °C 1,08

Exin

1₆ 218 A 1 pole pr

2 10 10 10

6 A x 1,08 = 6,5 A



Color 0 black

Interlocking

0 without V-Look 1 with V-Look

Terminal PE 1 QC 6.3x0.8

Terminal L and N

1 QC 6.3x0.8 3 Connection to TA45 non insulated

Type of mains filter / capacitor / bleed resistor 1 standard 2 medical M5 X2,Y2 X2 with bleed resistor with bleed resistor 1)

Rated current 20 A 16 A 12 A

23

1) The rated current of the line-filter must be equal

or more than the rated current of TA45.

cessories		
	Description	
	Assorted Covers Rear Cover	
		0859.0109
	Cord retaining kits Cord retaining strain relief	
	Flat head, Z	0888.0021
	Flat head, H	4700.0008
ating Outlets/Conn	octors	



Connector Overview complete

IEC Connector C19, Rewireable, Straight	4795
IEC Connector C19, Rewireable, Angled	4790
IEC Connector C19, Rewireable, Straight	0104U
Connector further types to EF12	

Mating Outlets/Connectors shuttered



Power Cord Overview complete

Overview Power Cord with IEC Appliance Connector C19, V-Lock, straight Power Cord further types to EF12 VAC19KS