

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

Standard- or Medical-Filter



Protection class I with shield



Protection class II without shield



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

Approvals

- Approval Reference Type: 5145
- VDE Certificate Number: 40035745
- UL File Number: E72928

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 the new type [DF12](#)

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#), [Microsite](#)

Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250VAC; 50Hz
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 125VAC; 60Hz
Leakage Current	standard < 0.5mA (250 V / 60Hz) medical < 5 µA (250 V / 60 Hz)
Dielectric Strength	> 1.7kVDC between L-N > 2.7kVDC between L/N-PE Test voltage (2 sec)
Allowable Operation Temperature	-10 °C to 55 °C
Climatic Category	10/055/21 acc. to IEC 60068-1
IP-Protection	from front side IP 40 acc. to IEC 60529
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Terminal	Quick connect terminals 6.3 x 0.8 mm
Panel Thickness S	Screw: max 8mm Mounting screw torque max 0.5Nm
Material: Housing	Thermoplastic, black, UL 94V-0

appliance inlet/-outlet	C14 or C18 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I or II
Circuit Breakers	Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235 2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage- or remote trip release Short circuit capacity Icn: at In < 3A/240VAC : 10 x In at In ≥ 3A/240VAC : 300A
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 100'000h acc. to MIL-HB-217 F

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

Technical drawing of the M3000 3000mAh battery pack, showing front, side, and detail views with dimensions.

Front View Dimensions:

- Overall Width: 36
- Overall Height: 91.5
- Internal Height: 80

Side View Dimensions:

- Top Section Width: 43
- Bottom Section Width: 50.7
- Total Width: 67.5*
- Bottom Flange Width: 13.5
- Terminal Size: 6.3x0.8mm

Detail A Dimensions:

- Top Flange Width: 2
- Internal Width: 1
- Bottom Flange Width: 3.25
- Internal Diameter: $\varnothing 6$

Top View Dimensions:

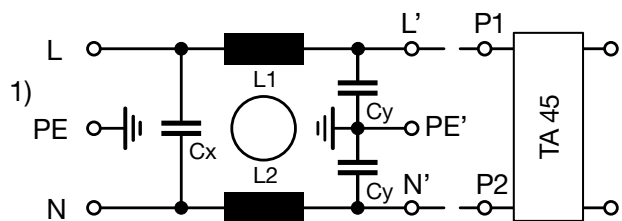
- Overall Width: 29⁰_{+0.2}
- Overall Height: 80 ± 0.1
- Internal Height: 72⁰_{+0.1}
- Radius: R 3⁰_{-0.5}
- Bottom Mounting: M3/ $\varnothing 3.6$

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
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

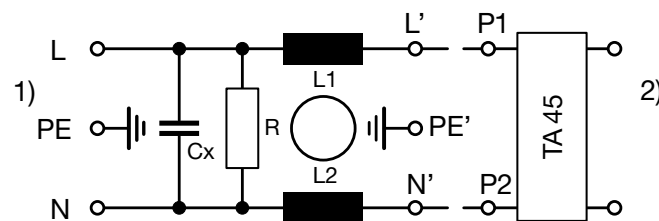
Diagrams

Standard version



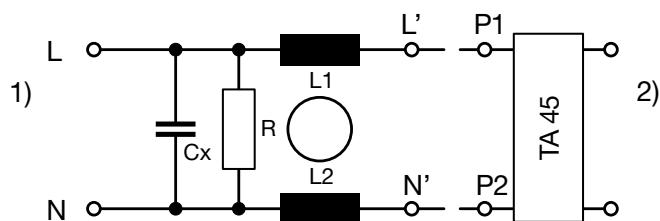
1) Line
2) Load

Medical version (M5)



1) Line
2) Load

Medical filter (M5) protection class II



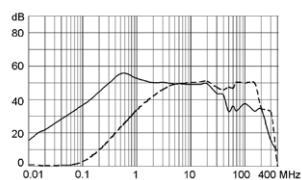
1) Line
2) Load

Attenuation Loss

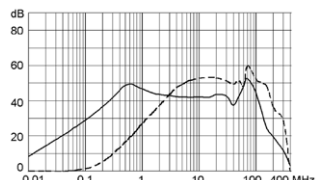
Standard version

--- 50Ω differential mode ____ 50Ω common mode

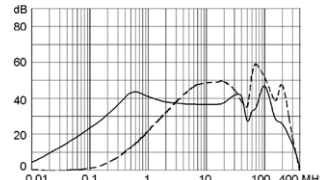
1 A



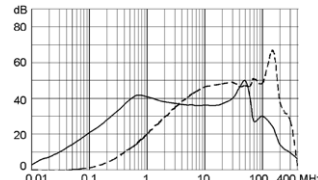
2 A



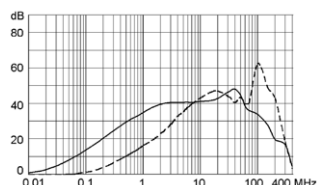
3 A



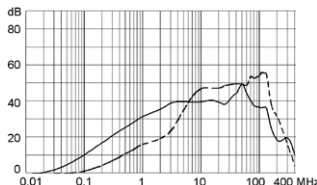
4 A



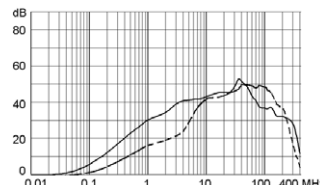
6 A



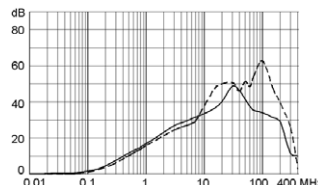
8 A



10 A



15 A



Medical version (M5)

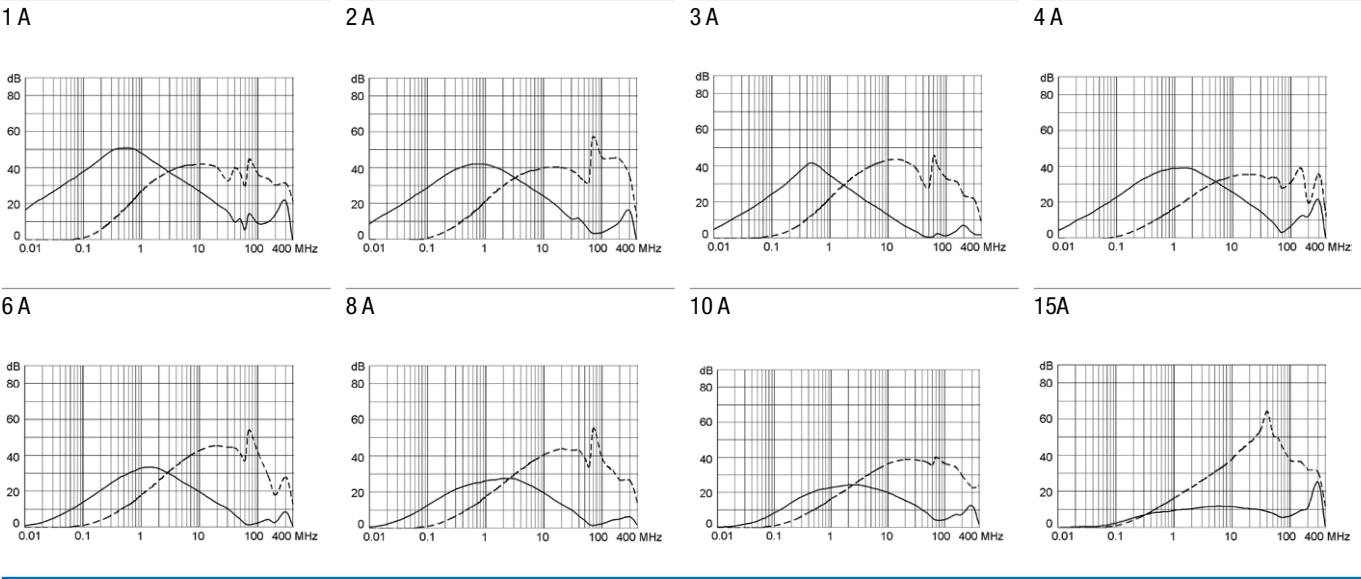


Table 1 Selection for type TA45

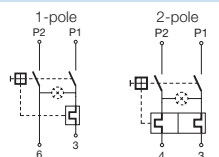
Order example



- Circuit Breaker of Equipment
- 2-pole, rocker actuated
- Quick connect terminal
- Other types on request

Diagram

Thermal overload protection



Without illumination

ABT

ABD

With illumination 220...240 V
110...120 V

A12

A14

A32

A34

Colours

Switch front

W black
B black
6 black

Rocker

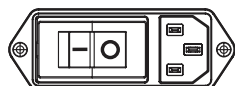
white
black
— orange transp.

Rocker legend

Surface	Illustration	Colour of print
F embossed / Relief	— ○	
H printed / bedruckt	ON OFF	white / weiss
K printed / bedruckt	ON OFF	black / schwarz
L printed / bedruckt	— ○	white / weiss

Surface	Illustration	Colour of print
M printed	— ○	black
P printed	I ○	white
R printed	I ○	black

Position of the rocker legend
e.g F

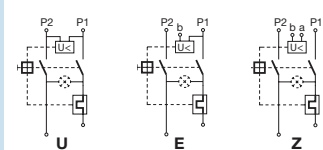


Rated current circuit breaker of equipment

I_n	Code	I_n	Code	I_n	Code	I_n	Code
0,1	J01	1,3	J13	2,8	J28	10,0	100
0,2	J02	1,4	J14	3,0	030	11,0	110
0,3	J03	1,5	J15	3,5	035	12,0	120
0,4	J04	1,6	J16	4,0	040	13,0	130
0,5	J05	1,7	J17	4,5	045	14,0	140
0,6	J06	1,8	J18	5,0	050	15,0	150
0,7	J07	1,9	J19	6,0	060	20,0	200
0,8	J08	2,0	J20	6,5	065		
0,9	J09	2,1	J21	7,0	070		
1,0	J10	2,2	J22	7,5	075		
1,1	J11	2,3	J23	8,0	080		
1,2	J12	2,5	J25	9,0	090		

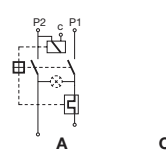
Without release: code C0

Undervoltage release



•	•	•
•	•	•
•	•	•

Remote trip release

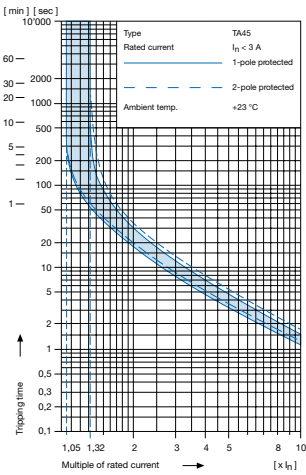


•	2	240 V AC
•	3	230 V AC
•	4	120 V AC

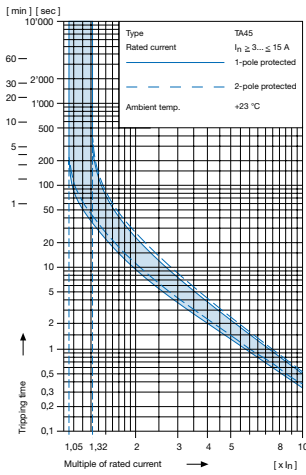
ABT **W** **F** **150** **C0**

Technical data (continued)
Circuit breaker

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



Tripping characteristics
 $I_n \geq 3 \dots \leq 15\text{ A}$



Effect of ambient temperature 1)

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 below.

* Ambient temperature [°C] Correction factor

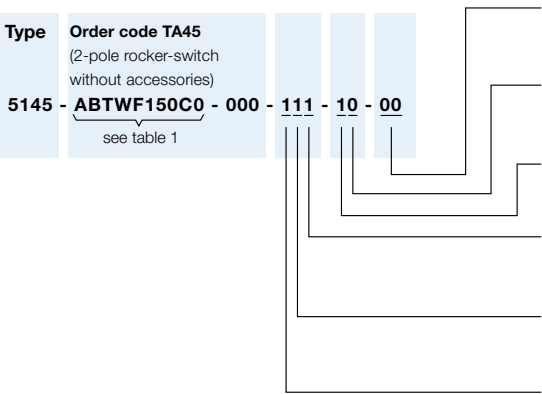
-10	0,89
- 5	0,91
0	0,92
+23	1,00
+30	1,03
+40	1,08
+55	1,16

* 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	6,0 A
Ambient temperature	+40 °C
Correction factor	1,08
Chosen rated current at + 40 °C ambient temperature	6 A x 1,08 = 6,5 A

Configuration code (example)



Optional Variants

- 00 standard
- 21 V-Lock notch

Terminal PE

- 0 without (PCII)
- 1 QC 6.3x0.8

Terminal L and N

- 1 QC 6.3x0.8, without connection to TA45
- 3 Connection to TA45 non insulated

Metal Shield Filter

- 0 with metal shield (PCI)
- 1 without metal shield (PCI and PCII)

Type of mains filter / capacitor / bleed resistor

- 1 standard X2,Y2 without 1)
- 3 medical M5 X2 with

Rated current 2)

- 1 1A
- 2 2A
- 3 3A
- 4 4A
- 5 6A
- 6 8A
- 7 10A
- 8 15A

1) Not in conjunction with PC II

2) The rated current of the line-filter must be equal or more than the rated current of TA45.

Packaging unit 20 Pcs

Accessories

Description



Assorted Covers
Rear Cover

0859.0074

Mating Outlets/Connectors

Category / Description

Appliance Outlet Overview complete



IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder Terminal	4787
IEC Appliance Outlet F, Snap-in Mounting, Front Side, Solder or Quick-connect Terminal	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



4782 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4022 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4022
4785 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4785
4300-06 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
4012 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13	4012

Connector further types to 5145

...

Mating Outlets/Connectors shuttered



Power Cord Overview complete

Power cord with IEC connector C17, V-Lock, straight	VAC17KS
---	---------

Power Cord further types to 5145