Data Sheet
8843.8 Power Entry Module

CONTENT

1 General Description

General

The power entry module type 8843.8 meets IEC / EN 60950.
The power entry module is internally completely wired.

It consists of the following parts :

Appliance inlet (8843-8X11-1X1-00)

For a pin temperature of max. 70° C.
The appliance inlet meets the following standards :

- IEC / EN 60320-1 / C14
- UL 498
- CSA 22.2 no. 182.3-16

Protection class I (L / N / PE) according to IEC 61140.

Fuse-holder (8843-090X-00)
Fuse-holder 1-pole or 2-pole with interchangeable fuse-drawer for fuse-links 5x20mm or 6.3x32mm.
The fuse-holder is accessible from the equipment front.

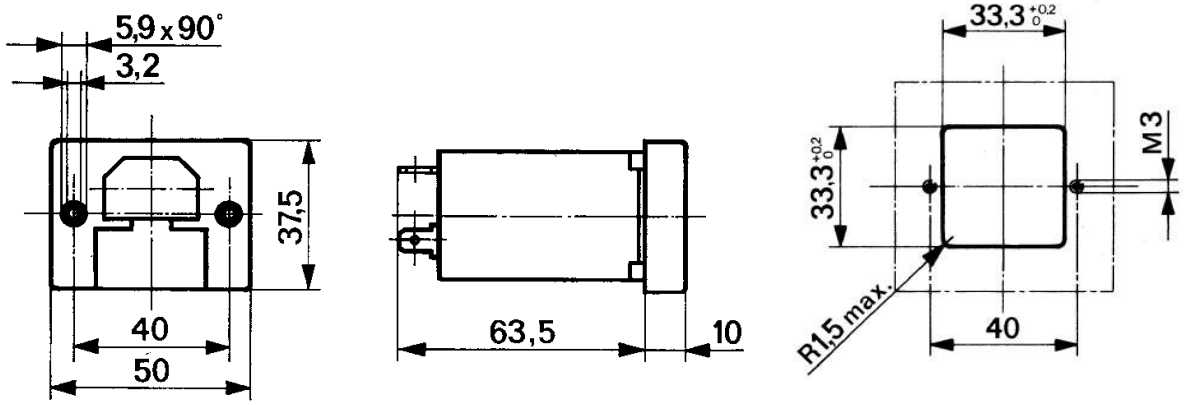
The live parts cannot be touched with the standard test-finger according to IEC 60529
in the following conditions :
- during operating, i.e. with inserted fuse-drawer.
- during opening, i.e. with open fuse-drawer.
- during replacing the fuse-link held by the fuse-drawer.

The fuse-holder meets the following standards :
- IEC 60127-6
- UL 4248-1
- CSA C22.2 no. 4248.1

Mains-filter (8843-8X11-1X1-00)
1-stage mains-filter for standard or medical application.
The mains-filter meets the following standards :
- IEC 60939
- UL 1283
- CSA 22.2 No.8

2 Dimensions

8843.8



3 Electrical Data

3.1 General

Rated voltage Un	250 V AC 50 / 60 Hz	
Rated current In	1, 3, 6, 10 A	
Insulation resistance	> $3x10^3$ MΩ	between live parts of different potentials
(500 V DC ; 1 min.)	> $3x10^3$ MΩ	between protective conductor PE and live parts
Dielectric strength	> 1.7 kV	between live parts of different potentials
(50 Hz; 1 min.)	> 2.7 kV	between protective conductor PE and live parts
Test voltage	1075 V DC	between live parts of different potentials.
(2sec.) Fabrication test	2250 V DC	between protective conductor PE and live parts.
Impulse withstand voltage	> 4 kV	between live parts of different potentials
Û 1.2/50µs	> 5 kV	between protective conductor PE and live parts
Overvoltage category	I I I	according to IEC 60664-1
Clearence and creepage	> 3 mm	between live parts of different potentials
distances	> 4 mm	between live parts and protective conductor PE
Pollution degree	3	according to IEC60664-1
Protection class (Protection against electric shock)	Suitable for appliances of protection class I, acc. to IEC 61140 respectively acc. to VDE 0106 / part 1	

3.2 Appliance inlet

Dimensions acc. to IEC / EN 60320-1	C 14 for protection class I (L / N / PE)
Pin temperature	max. 70° C

3.3 Fuse-holder

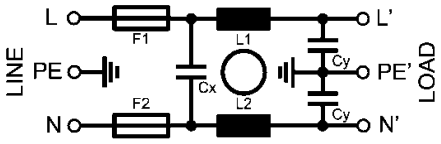
Rated voltage Un	250 V AC	
Rated current In	10 A according to IEC 60127-6, UL 4248-1 and CSA C22.2 no. 4248.1	
Rated admissible power	5 x 20	1.2 W (per pole)
acceptance at Ta = 23°C	6.3 x 32	1.6 W (per pole)
Contact resistance	≤ 5 mΩ according to IEC 60127-6	
Protection against electrical shock	Category PC2 according to IEC 60127-6 If the power entry module is installed as normal, it is not possible To touch any live parts with the test-finger according to IEC60529.	

3.4 Mains-filter

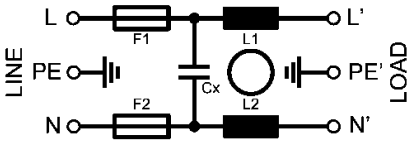
Rated voltage Un	125 / 250 VAC 50 / 60 Hz
Rated current In	1, 3, 6, 10 A @ Ta 40° C
Max. leakage current	mains-filter standard max. 0.5 mA (250V / 60Hz) mains-filter medical M5 max. 5 µA (250V / 60Hz)
The mains-filter for standard or medical applications meets	IEC 60939 / UL 1283 / CSA C22.2 no. 8

3.5 Diagrams

Filter standard (2-pole fuse)
8843-8X11-111-00



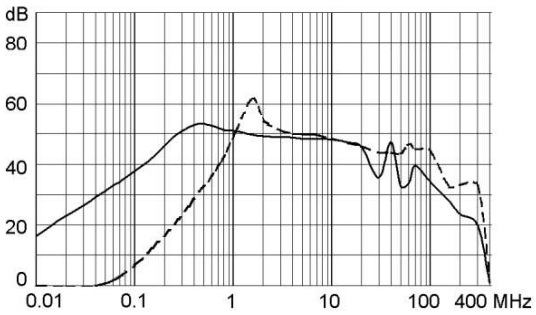
Filter medical M5 (2-pole fuse)
8843-8X11-101-00



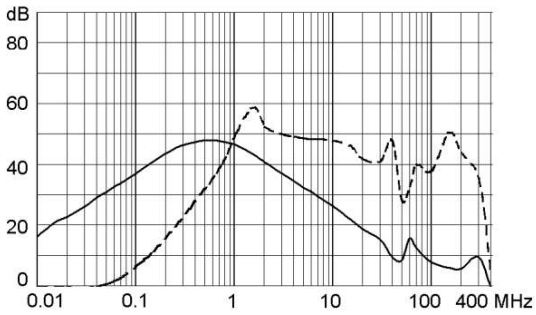
3.6 Components data

Rated current [A]	Filter type	Inductors L1 / L2 [mH]	max. Number of turns	Wire gauge Ø [mm]	CX [nF]	CY [pF]	DC-resistance @ 25°C [mΩ]
1	Standard	11	2 x 54	0.25	100	2x 2200	450
3		1.6	2 x 23	0.63			30
6		0.7	2 x 16	0.85			16
10		0.4	2 x 10	1.12			7
1	Medical M5	11	2 x 54	0.25	100	-	450
3		1.6	2 x 23	0.63			30
6		0.7	2 x 16	0.85			16
10		0.4	2 x 10	1.12			7

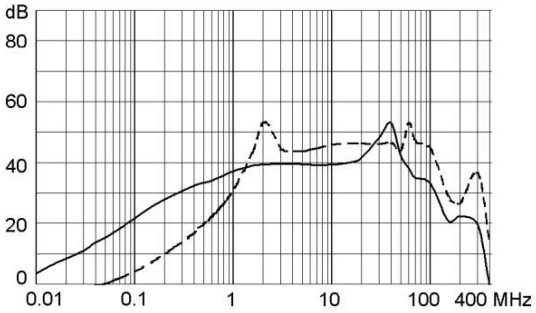
3.7 Attenuation loss



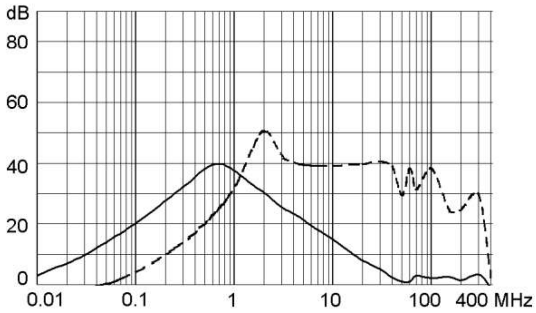
1 A standard



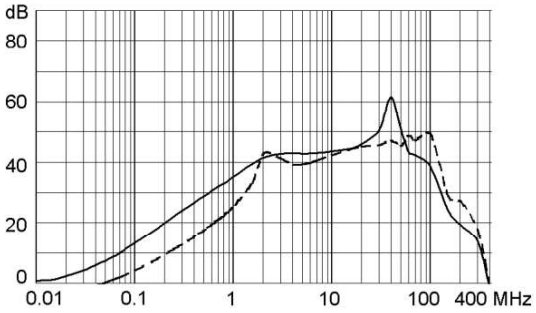
1 A medical M5



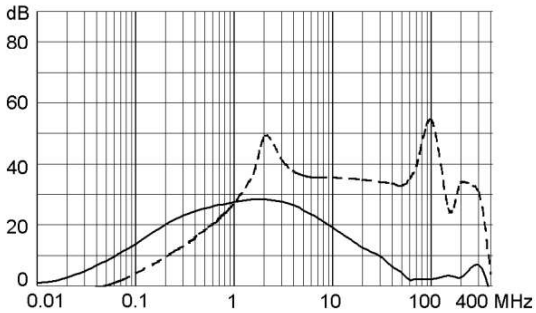
3 A standard



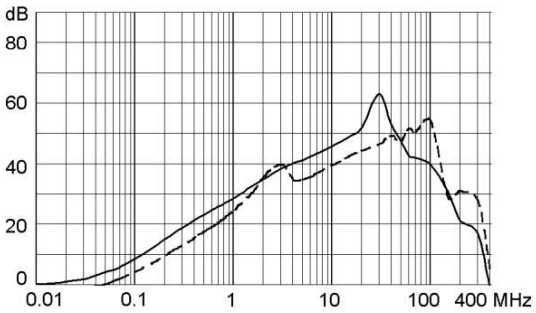
3 A medical M5



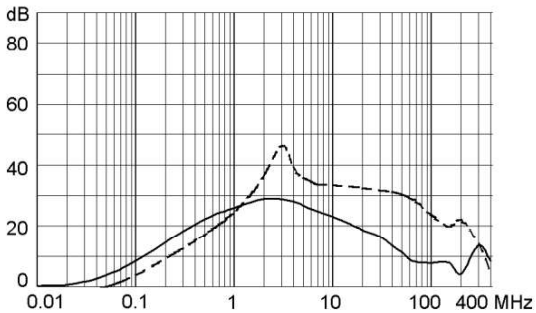
6 A standard



6 A medical M5



10 A standard



10 A medical M5

—— asymmetric measurement: L + N - PE, 50/50 Ohm according to CISPR17
– – – symmetric measurement: L - N, 50/50 Ohm according to CISPR17

4 Mechanical Data

4.1 Mounting

The power entry module type 8843 is suitable for panel mounting from the front side with screw-on mounting .

Connection takes place with quick-connect terminals 6.3x0.8mm.

4.2 Terminals

L / N and protective conductor PE	Quick-connect terminals 6.3x0.8mm, acc. to IEC 61210 L / N and protective conductor PE, tin-plated

4.3 Packing and weight

Original packing	10 pcs.	
Net weight gr. per 1 pcs.	8843-0X6X-00	130.0 g
	8843-090X-00	2.8 g

5 Materials

PEM	main parts	Type PA 6 polyamide Flame class UL94 V-0 (0.75mm thick) Comparative tracking index CTI 600 V Temp.-index RTI, electr. 130° C Index oxygen LO I 32 %
	Lid	Type PC polycarbonate Flame class UL94 V-2 (0.75mm thick) Comparative tracking index CTI 250 V Temp.-index RTI, electr. 125° C Index oxygen LO I 28 %
	Filter case	German silver
	Print board	Glas epoxy FR4
	Live parts	Copper alloy, protected against corrosion.
Fuseholder	plastic parts	Type PBT polybutylene terephthalate Flame class UL94 V-0 (0.4mm thick) Comparative tracking index CTI 525 V Temp.-index RTI, electr. 140° C
	Live parts	Copper alloy, protected against corrosion.

6 Environmental Condition

6.1 Temperatures

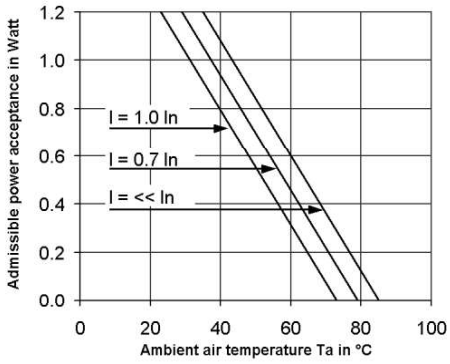
Storage temperature:	- 40°C up to + 85°C
Ambient temperature:	- 25°C up to + 25°C , but occasionally reaching +35°C
Operating temperature:	- 25°C up to + 70°C
Climatic category:	25 / 085 / 21 according to IEC 60068-1

Derating curve:

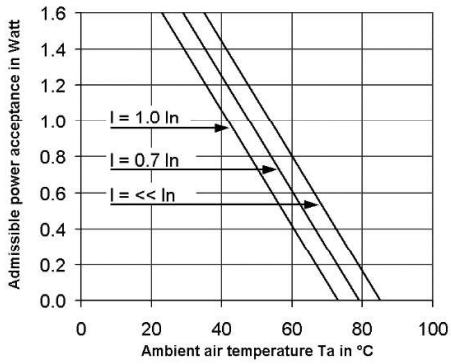
Fuse-holder

Table 1 : Admissible power acceptance versus ambient air temperature Ta

5x20 Fuse (2-pole)



6.3x32 Fuse (2-pole)



Remark
The admissible power acceptance of the fuseholder is determined by a standardized testing procedure at rated current and at an ambient air temperature of 23° C, whereby the maximum permissible temperatures at the fuseholder must not be exceeded. Application and mounting method, especially for closed fuseholder, can influence the heating situation considerably. Therefore the heating situation has to be tested at the working condition of the fuseholder at maximum current and maximum ambient air temperature.

6.2 Vibration and shock resistance

Resistance to vibration according to IEC 60068-2-6	Test Fc ; Frequency range 10 - 500 Hz, cross-over frequency 60 Hz < 60 Hz constant amplitude of 0.75mm > 60 Hz constant acceleration of 10 g

6.3 Degree of protection

Degree of protection	IP40 according to IEC 60529 Front face of filter, with insert fuse-holder.

7 Approvals

Country	Certification Body	Type	Mark	File no.
Europe	VDE	ENEC Mark		40025966
U.S.A. / Canada	UL	Recognized		E 72928

8 Configuration Code

8.1 Power entry module

8843 - 8 X X X - X X X - 00

Terminals (L, N, PE)
1 = Quick Connect 6.3x0.8

Y-Capacitor
0 = without
1 = Y2, 2200pF

X-Capacitor
1 = X2, 100nF

Mounting
1 = Screw, Front side

Fuse holder
1 = 2-pole

Rated current
1 = 1A
3 = 3A
5 = 6A
7 = 10A

8.2 Fuse holder

FC12 - 0 0 0 X

Contact version (L, N)
1 = with contact for 6.3x32 fuse
2 = with contact for 5x20 fuse