



TEMPEST PLUGGABLE POWER FILTERS EURO RANGE



MPE Limited
Hammond Road,
Knowsley Industrial Park,
Liverpool
L33 7UL
UK



Description

MPE Limited's range of TEMPEST pluggable filters has been designed for use with TEMPEST applications where compliance to NATO SDIP-27 B/C is required. Utilising ultra-high speed feedthrough capacitors, all units deliver optimum performance across the full frequency range and under all loading conditions. The filter range has been designed to ensure fitting and electrical installation is as quick and simple as possible.

Typical Applications

- TEMPEST applications requiring EMI protection of single phase mains power lines to NATO SDIP-27 B/C
- Designed for rapid deployment applications where hardwired connections are not practical
- Simple mechanical and electrical installation

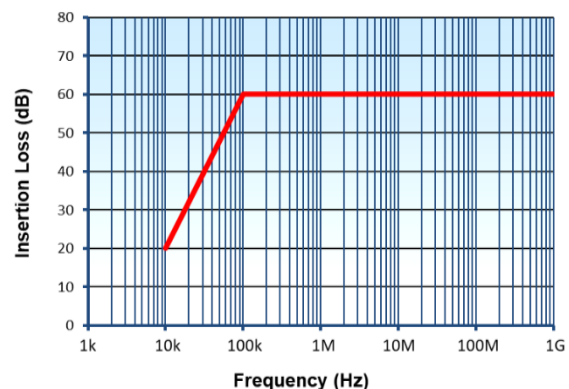


Features

- 6A & 16A CEE 7/7 Schuko pin plug input & 7/3 socket outlets
- 32A IEC 60309 'Commando' connector input & CEE 7/3 Schuko socket outlets
*alternatively terminated filters (e.g. 3 Pin BS1363, Powercon, IEC etc.) are available upon request
- Designed to AV/ICT equipment safety standard EN 62368-1
- Fully 360° screened input cable to maintain red/black separation to filter
- Low Smoke Zero Halogen (LSZH) rated cabling for use in sensitive areas
- Self-healing metallised plastic film capacitor dielectric material for fail-safe transient handling and reliability
- Rugged ferromagnetic stainless steel enclosure
- Designed to be downline tolerable to a personnel protection RCCB
- CE & RoHS compliant

Insertion Loss Performance

Typical asymmetric attenuation of 60dB from 100kHz to 1GHz shown as measured in a 50Ω system, at all loading conditions, in accordance with CISPR-17.





Technical Specification

Rated Voltage	250VAC (SP&N) 50/60Hz
Test Voltage (Line – Earth)	1250VDC
(Line – Line)	1250VDC
Rated Current, I _R at 50°C	6A, 16A, 32A (see range available)
Max. Earth Leakage Current	6A & 16A rated filters – less than 3.5mA, 32A rated filters – less than 20mA
Max. Temperature Rise on Full Load	25°C
Operating Temperature Range	-25°C to 50°C
Insertion Loss (50Ω, asymmetric)	60dB from 100 kHz to 1GHz (see graph)
Discharge Time	Less than 1s to below 34V (filter incorporates discharge resistors)

EU Product Range

Filters are available with an appropriately fused 7/7 Schuko pin plug or industrial 'Commando' style input plug on a 2 metre length of screened cable. Different output options include either 1, 2 or 4 socket outlets or a 2 metre length of screened cable with unterminated ends that can be incorporated into an electrical system.

EU Product Range					
Rated Current	Input 2m length of screened cable with suitably rated plug	Outlet			
		Single Outlet 1 x CEE 7/3 Schuko socket	Dual Outlet 2 x CEE 7/3 Schuko socket	Quad Outlet 4 x CEE 7/3 Schuko socket	In-Line 2m length of unterminated screened 2P+E cable
6A	CEE 7/7 Schuko pin plug fitted with 7A fuse	DS30830EU	DS30831EU		DS30832EU
16A	CEE 7/7 Schuko pin fitted with 16A fuse	DS30833EU	DS30834EU	DS30835EU	DS30836EU
32A	IEC 60309 'Commando' plug No fusing within filter unit*		DS30837EU	DS30838EU	DS30839

*The User must ensure adequate fuse protection.





Mechanical Details

Enclosure Material	Ferromagnetic stainless steel
Finish	Natural, dressed
Capacitor Potting Compound	Epoxy resin meeting UL94 V-0 flammability rating
Earth Connection	Via input termination earth pin
Socket outlet	Covered outlet (IP54 rating when covered)
Weight	See product dimensional drawings on pages 5 – 11
Marking	Self-adhesive labels

Dimensions

See product dimensional drawings on pages 5 – 11.

NATO Stock Numbers

MPE Part Number	NATO Stock Number (NSN)
DS30830EU	5915-99-353-1169
DS30831EU	5915-99-156-5222
DS30832EU	
DS30833EU	5915-99-938-6086
DS30834EU	5915-99-343-2290
DS30835EU	5915-99-577-5337
DS30836EU	
DS30837EU	5915-99-584-2808
DS30838EU	5915-99-219-0951
DS30839	5915-99-615-9661

Installation

Although the filter does not need to be mounted to a solid surface, it is provided with a mounting option and where possible it should be fixed securely with maximum distance between the filter and the User's device. The input screened cable and any equipment cables on the filter output should be maximally separated from each other to maintain red/black cable separation. Please consult the MPE TEMPEST Pluggable Filters Installation and Maintenance Guide Application Note for further information.

Safety

Relevant safety standards have been adhered to in the design and manufacture of this product. The filter must be solidly and permanently earthed to allow safe discharge of all internal capacitors - The earth connection of the input plug must be present and must not be interfered with. The User should ensure they do not overload the filter over the load limit.

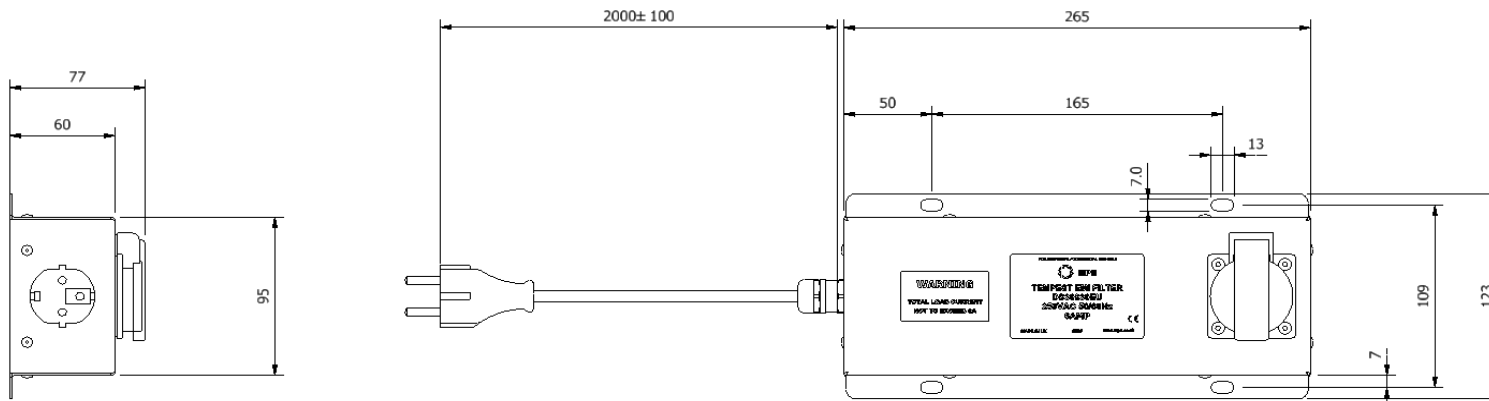


MPE
Quality. Reliability. Performance.

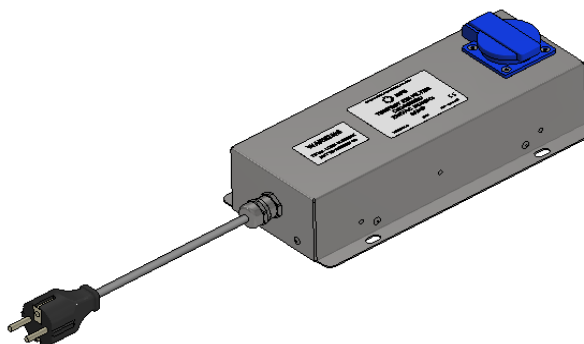
DS30830EU & DS30833EU – 6A & 16A SINGLE SOCKET FILTERS

DS30830EU (7 Amp fuse fitted in plug)

DS30833EU (16 Amp fuse fitted in plug)

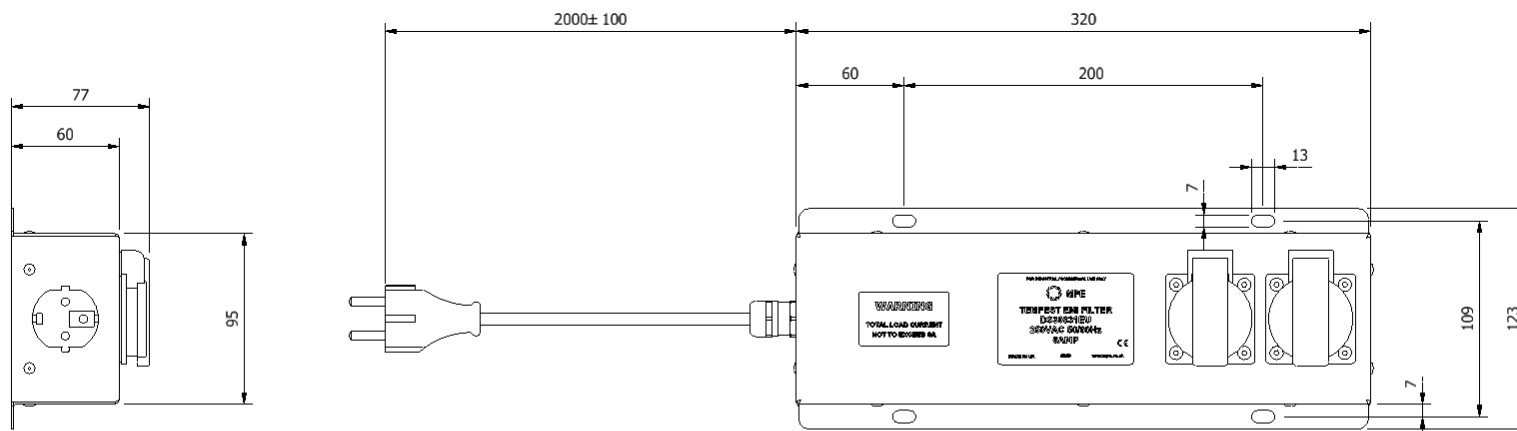


Weight (approx.) 3.3kg
(both types)

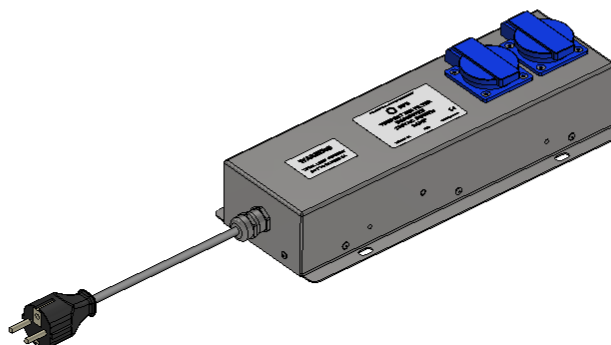


DS30831EU (7 Amp fuse fitted in plug)

DS30834EU (16 Amp fuse fitted in plug)



Weight (approx.) 3.3kg
(both types)



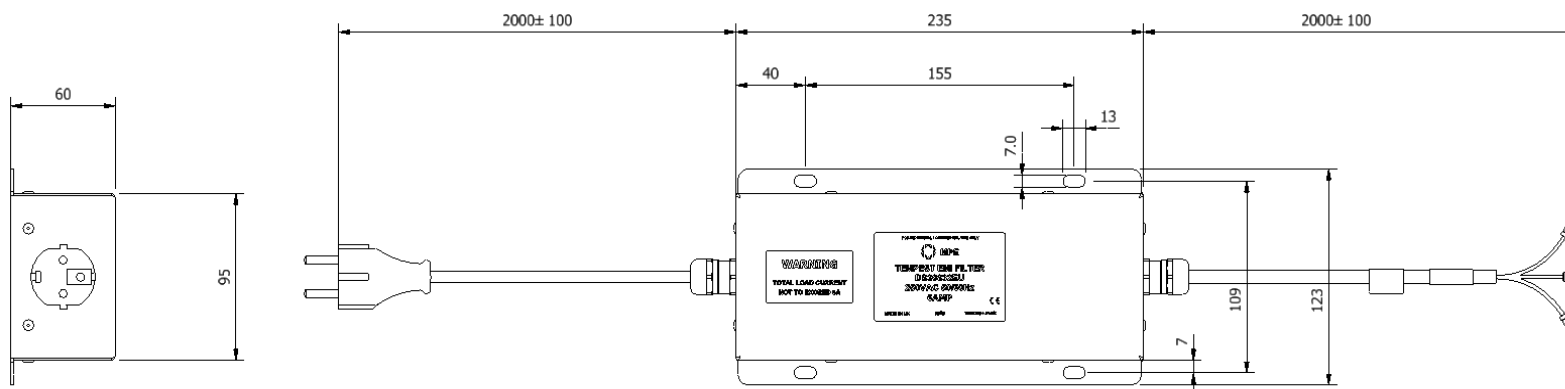


MPE
Quality. Reliability. Performance.

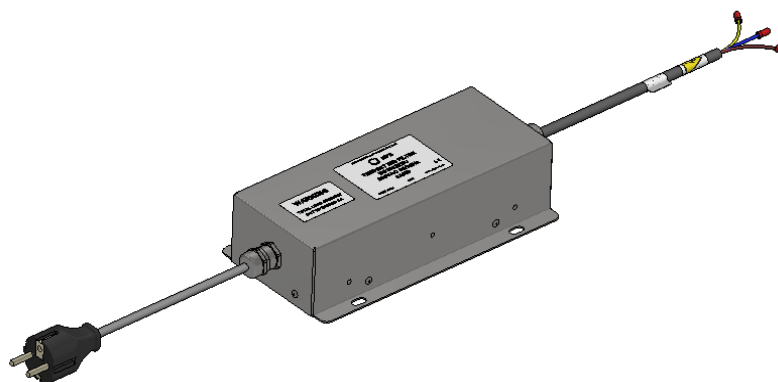
DS30832EU & DS30836EU – 6A & 16A IN-LINE FILTER

DS30832EU (7 Amp fuse fitted in plug)

DS30836EU (16 Amp fuse fitted in plug)



Weight (approx.) 3.0kg
(both types)

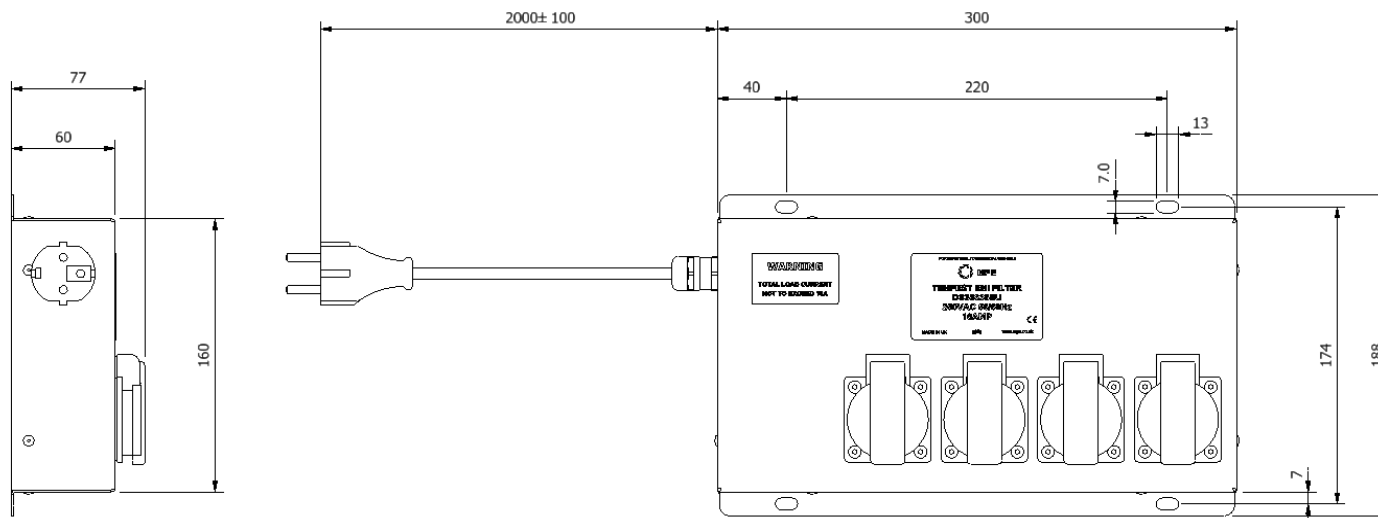




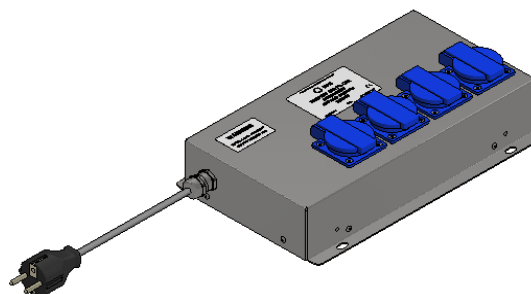
MPE
Quality. Reliability. Performance.

DS30835EU – 16A QUAD SOCKET FILTER

DS30835EU (16 Amp fuse fitted in plug)



Weight (approx.) 4.0kg

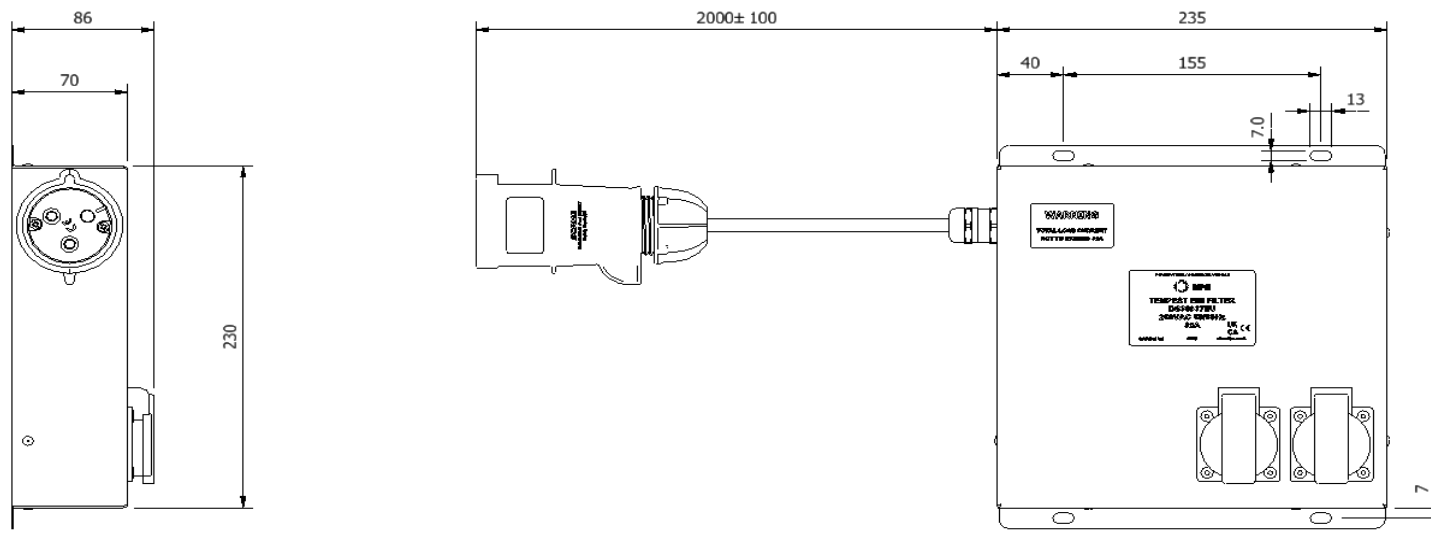




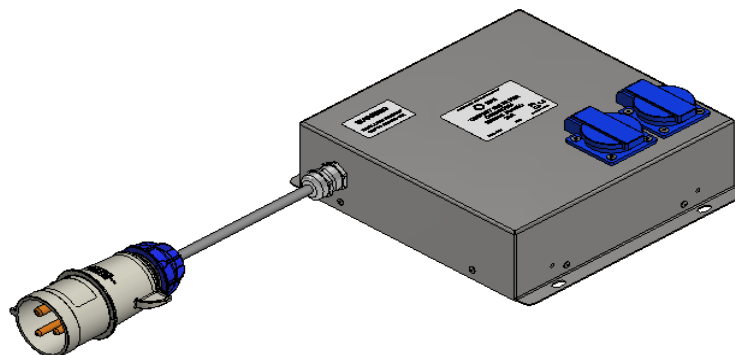
MPE
Quality. Reliability. Performance.

DS30837EU – 32A DUAL SOCKET FILTER

DS30837EU (No fuse in plug)



Weight (approx.) 4.0kg

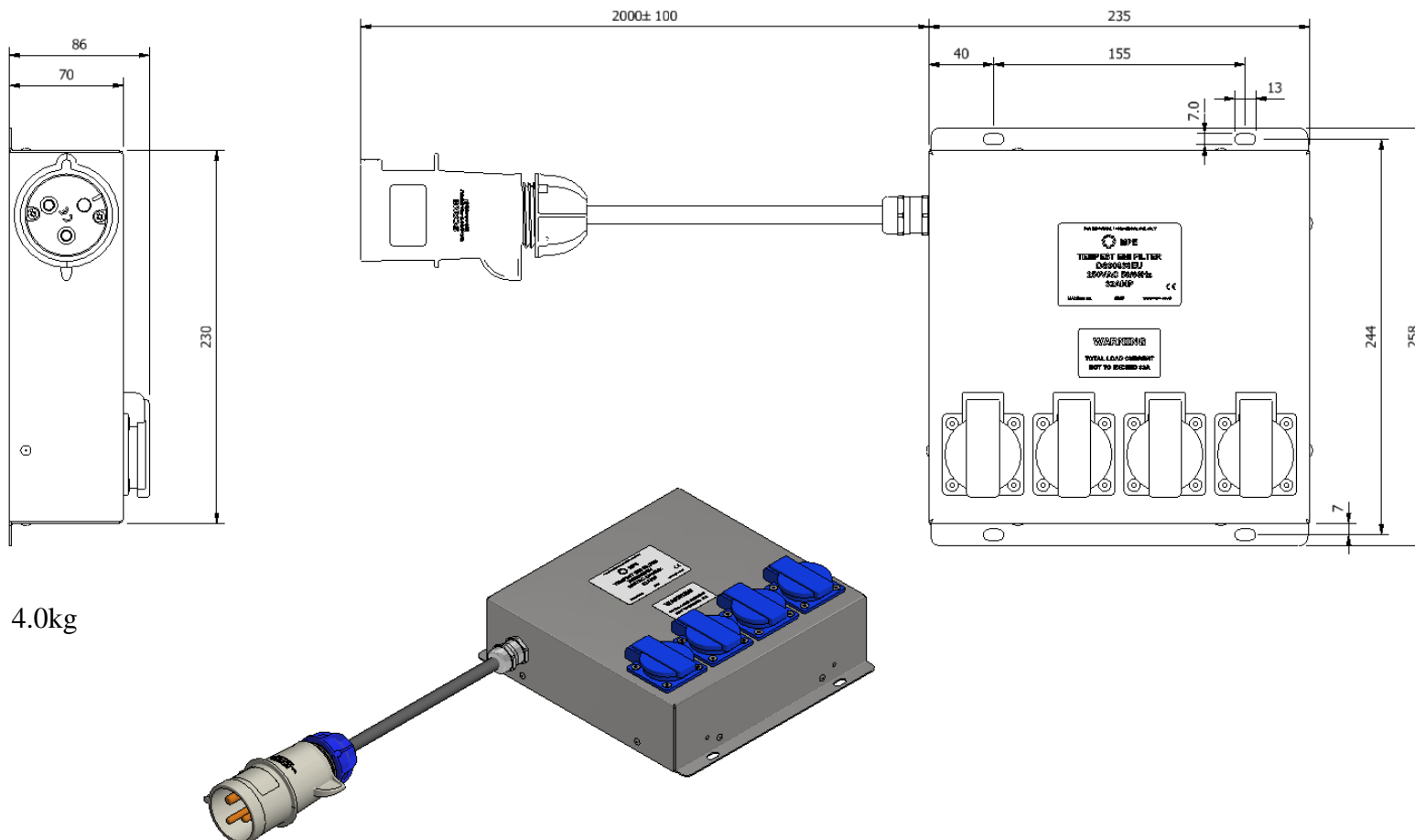




MPE
Quality. Reliability. Performance.

DS30838EU – 32A QUAD SOCKET FILTER

DS30838EU (No fuse in plug)



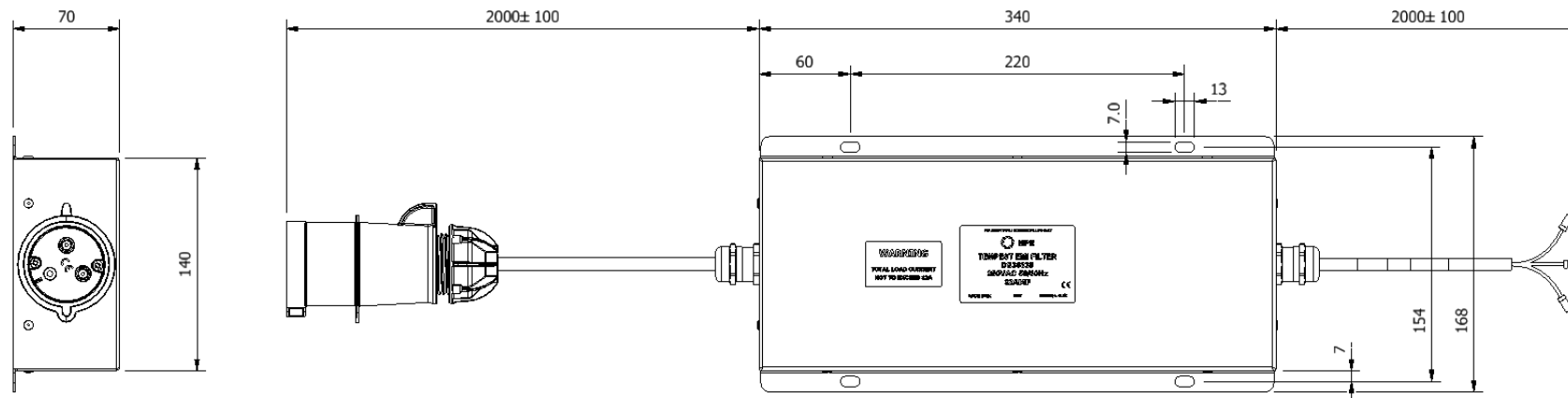
Weight (approx.) 4.0kg



MPE
Quality. Reliability. Performance.

DS30839 – 32A IN-LINE FILTER

DS30839 (No fuse in plug)



Weight (approx.) 4.0kg

