

Shielded Room Filters

C52-JCL Series


Single or three phase



Typical Application

- Electromagnetic shielded room
- Shielded room
- Anechoic chamber
- Electronic shelter
- Shielded cabinet

Conformity

CE  EN 60939, VDE 0565-3

 CSA C22,2

 UL 1283

Climate Category: 25/070/21(IEC 60068-1)

Features and Benefits

- Multi-stage filter for common and differential mode filtering
- Compact size, low voltage, low leakage current
- Rated current ranges from 16 - 800A
- Easy installation, no need to be welded to the shielded facilities
- Stainless steel case provides high mechanical strength and corrosion protection
- Convenient and safe use due to fully shielded connection structure of enclosure

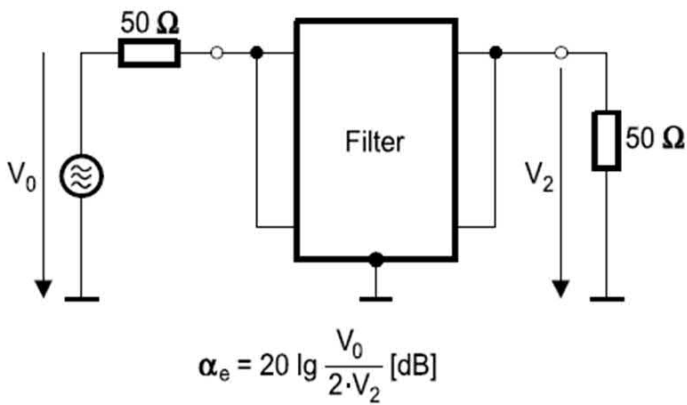
Technical Specifications

	Symbol	Value	Unit	Remarks
Rated voltage	V_R	250	VAC	single phase, 2-line
		440/250	VAC	3-phase, 4-line
Rated current	I_R	16 - 1000	A	
Operating frequency	f_{op}	50/60	Hz	Option for 400 Hz available
Insertion loss		≥ 100	dB	14 kHz ... 40 GHz
Leakage current	I_l	< 0.2	A	
Voltage drop	V_F	< 1	V	
Operating temperature	T_{amb}	-25 ... +75	°C	
Storage temperature	T_S	-25 ... +85	°C	
Test voltage - line to line	V_{test}	1000	V	
Test voltage - line to ground	V_{test}	1000	V	

Test Schematic

Insertion loss α_e (typical values at $Z = 50 \Omega$)

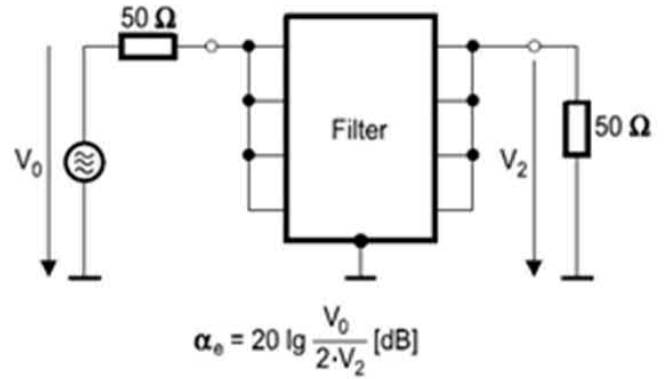
Measurement circuit



Asymmetrical measurement circuit
to MIL-STD-220A

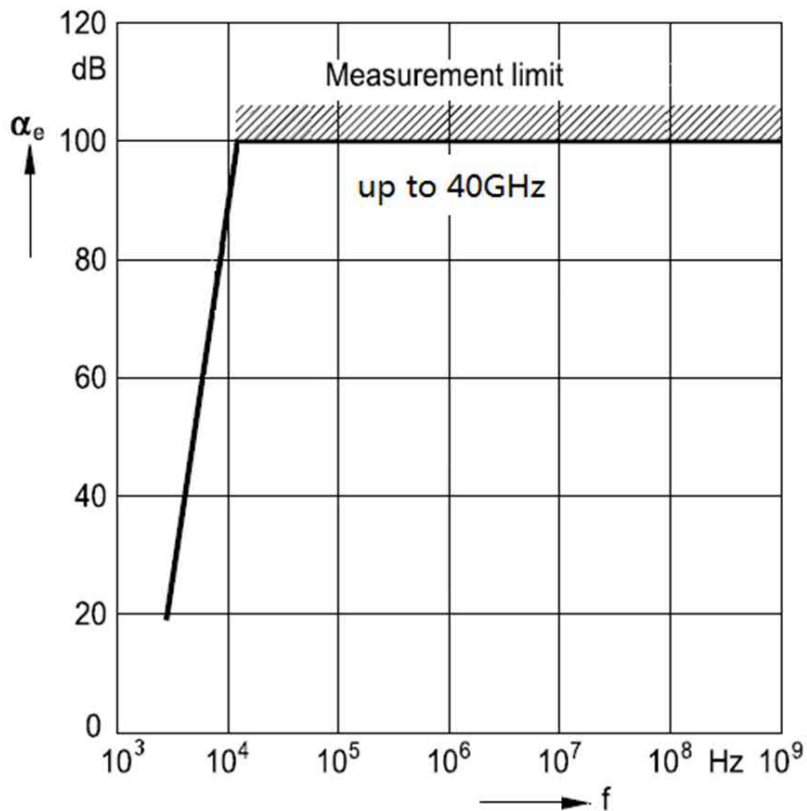
Insertion loss α_e (typical values at $Z = 50 \Omega$)

Measurement circuit



Asymmetrical measurement circuit
to MIL-STD-220A

Insertion Loss Characteristics



Characteristics - Common Mode

Model	Rated Current [A]	Rated Voltage [VAC]	Packaging (fig.)
DL-2x16C52-JCL	2x16	250	1
DL-2x30C52-JCL	2x30		1
DL-2x50C52-JCL	2x50		1
DL-2x70C52-JCL	2x70		1
DL-2x100C52-JCL	2x100		1
DL-2x200C52-JCL	2x150		2
DL-4x16C52-JCL	4x16	440/250	3
DL-4x30C52-JCL	4x30		3
DL-4x50C52-JCL	4x50		3
DL-4x70C52-JCL	4x70		3
DL-4x100C52-JCL	4x100		3
DL-4x200C52-JCL	4x200		4

Characteristics - Differential Mode

Model	Rated Current [A]	Rated Voltage [VAC]	Packaging (fig.)
DL-2x16C52-H-JCL	2x16	250	1
DL-2x30C52-H-JCL	2x30		1
DL-2x50C52-H-JCL	2x50		1
DL-2x70C52-H-JCL	2x70		1
DL-2x100C52-H-JCL	2x100		1
DL-2x200C52-H-JCL	2x150		5
DL-4x16C52-H-JCL	4x16	440/250	3
DL-4x30C52-H-JCL	4x30		3
DL-4x50C52-H-JCL	4x50		3
DL-4x70C52-H-JCL	4x70		3
DL-4x100C52-H-JCL	4x100		3
DL-4x200C52-H-JCL	4x200		6

Legend: H = differential mode

fig. 1

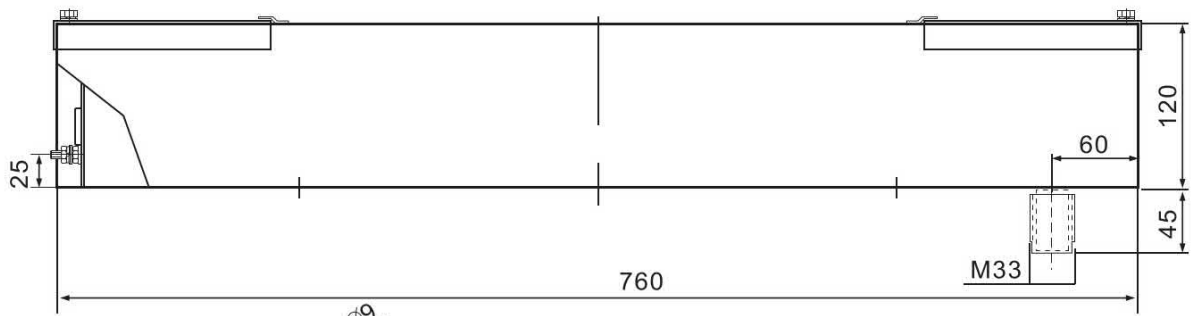
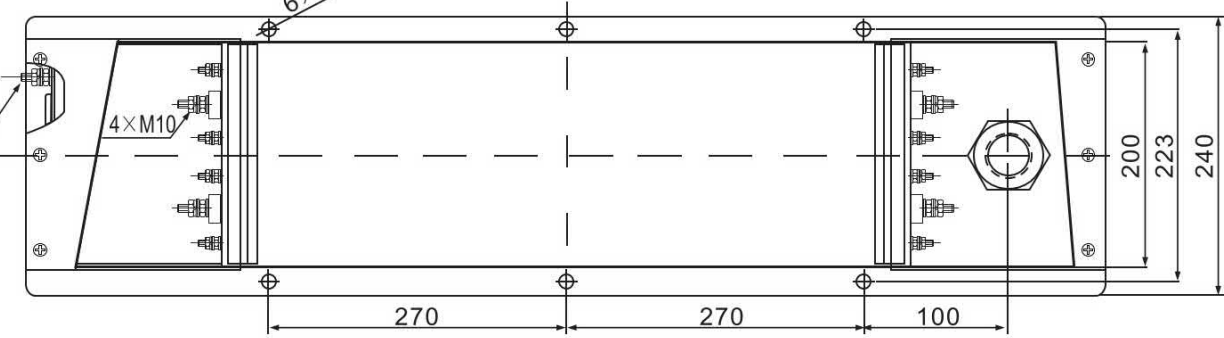
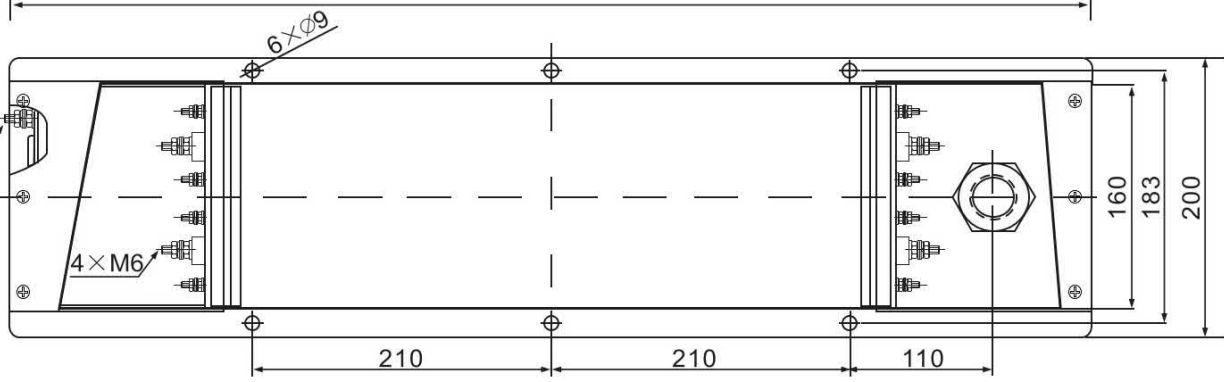
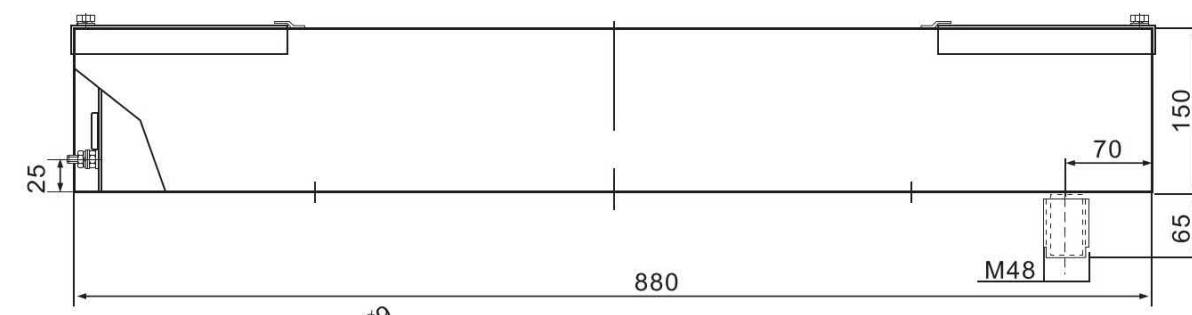


fig. 2



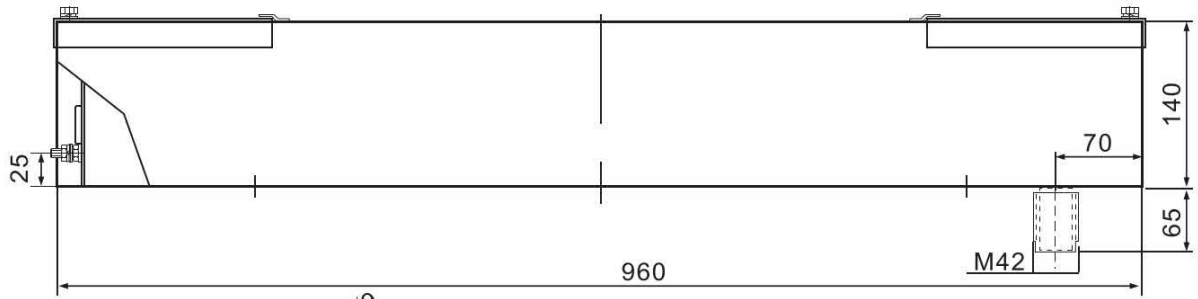


fig. 3

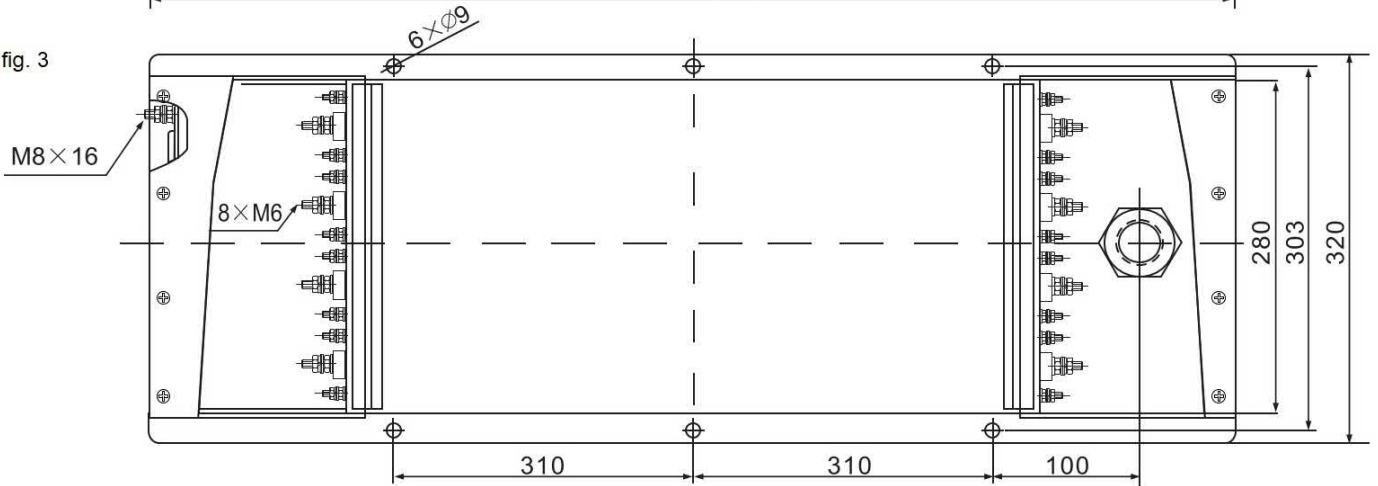
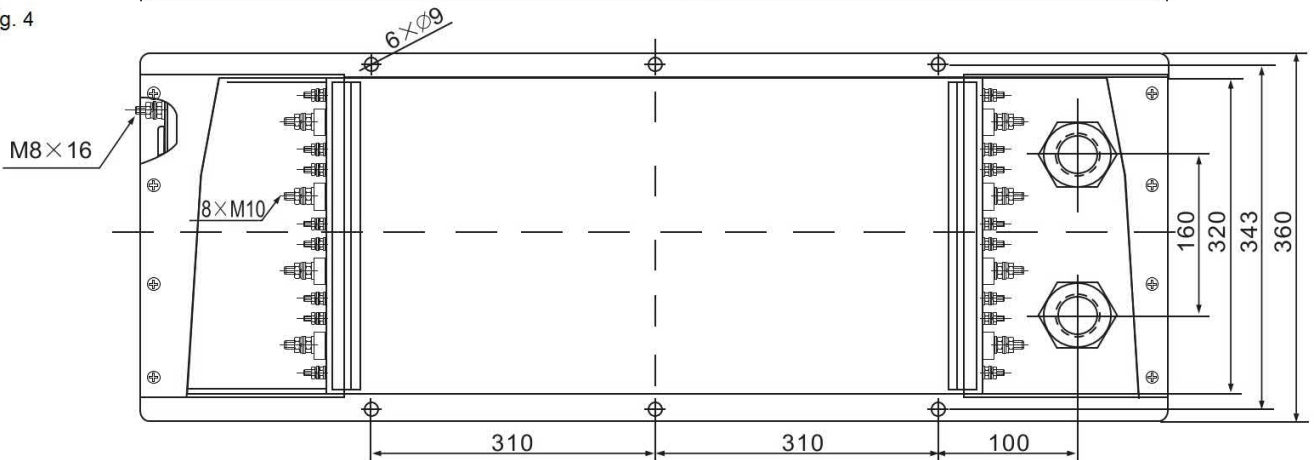


fig. 4



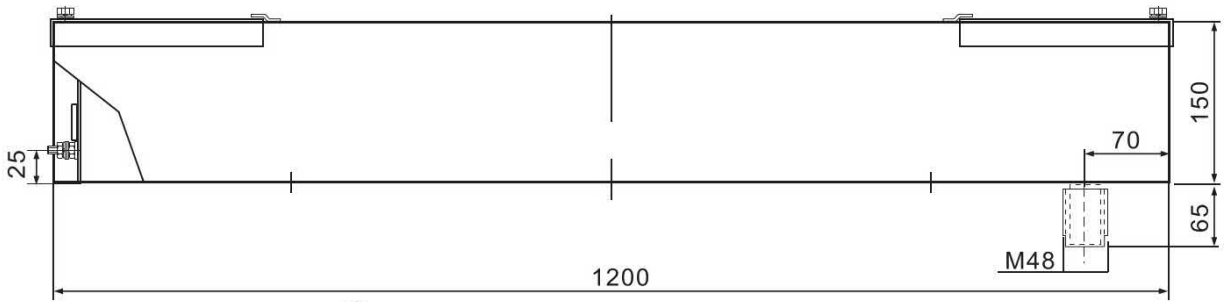


fig. 5

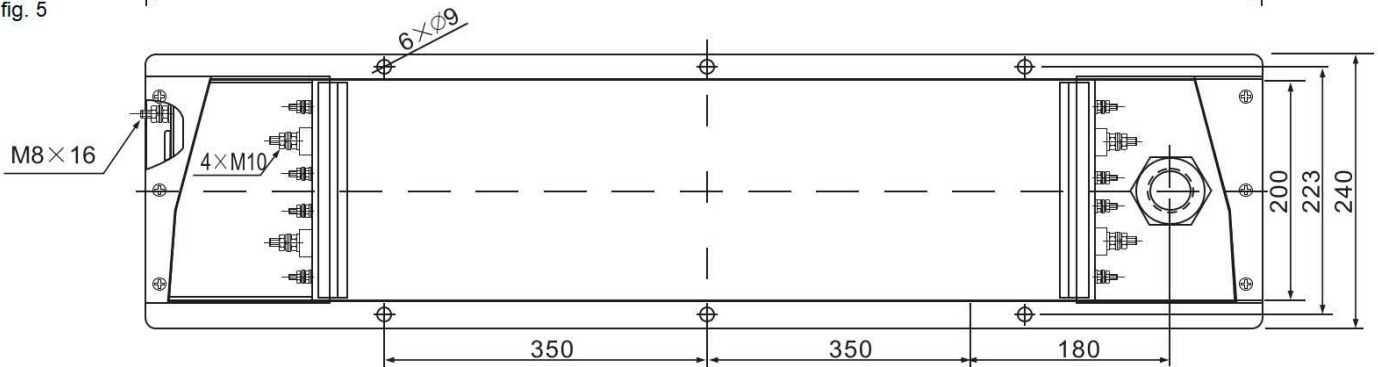
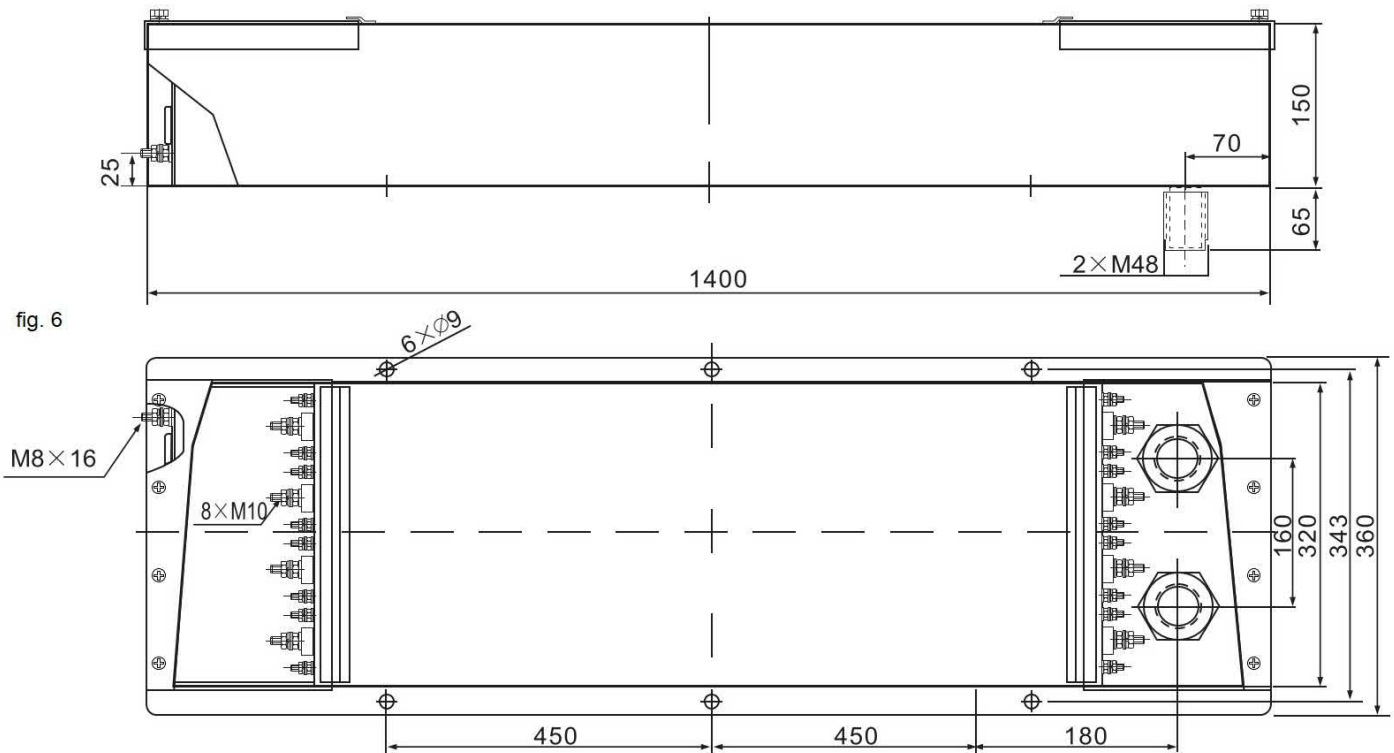
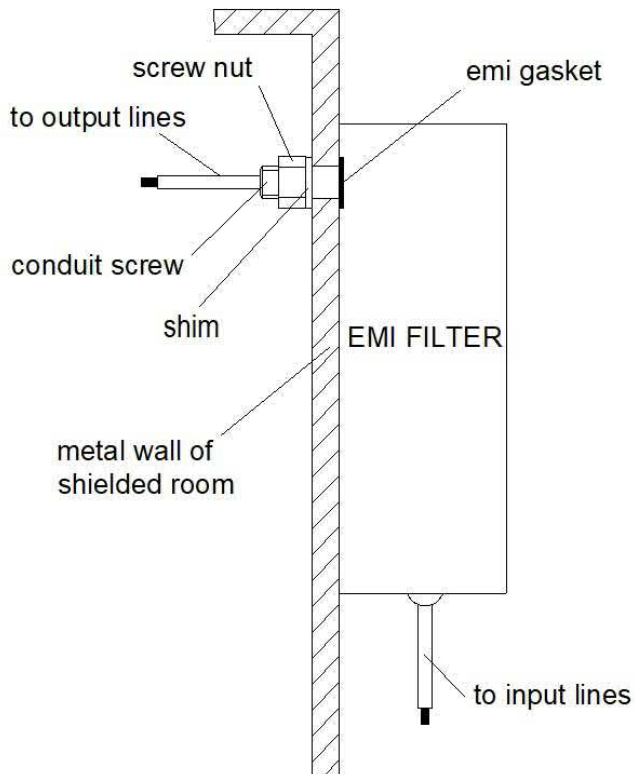


fig. 6



Typical Installation



Assembly Parts List

Pos.	Qty.	Description
1	1	conduit screw
2	1	shim
3	1	screw nut
4	2	EMI gasket

Metralytica GmbH
Oehleckerring 13
22419 Hamburg
Germany

www.metralytica.eu

+49 40 5936175-00
sales@metralytica.eu