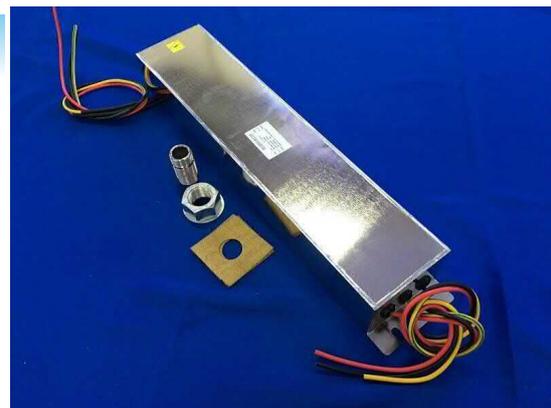


Shielded Room Filters

C5 Series

With single, three phase or ground wire



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 - 1000A and higher
- Easy installation, no need to be welded to the shielded facilities
- Nickel plated steel case with high mechanical strength

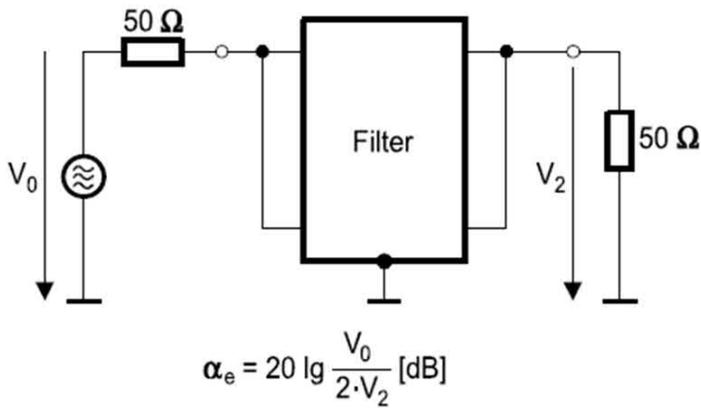
Technical Specifications

	Symbol	Value	Unit	Remarks
Rated voltage	V_R	440/250	VAC	
		500	VDC	
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 $Z = 50 \Omega$)

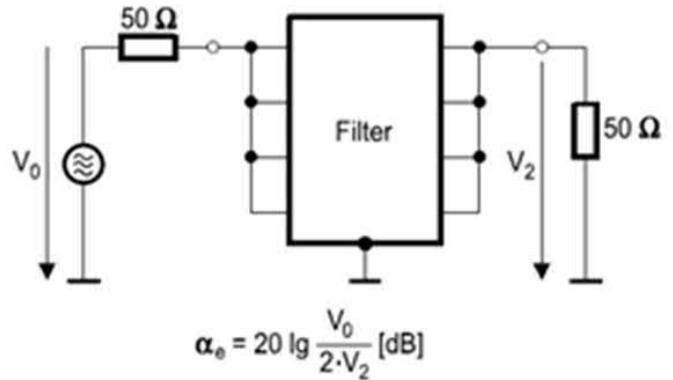
Measurement circuit



Asymmetrical measurement circuit
to MIL-STD-220A

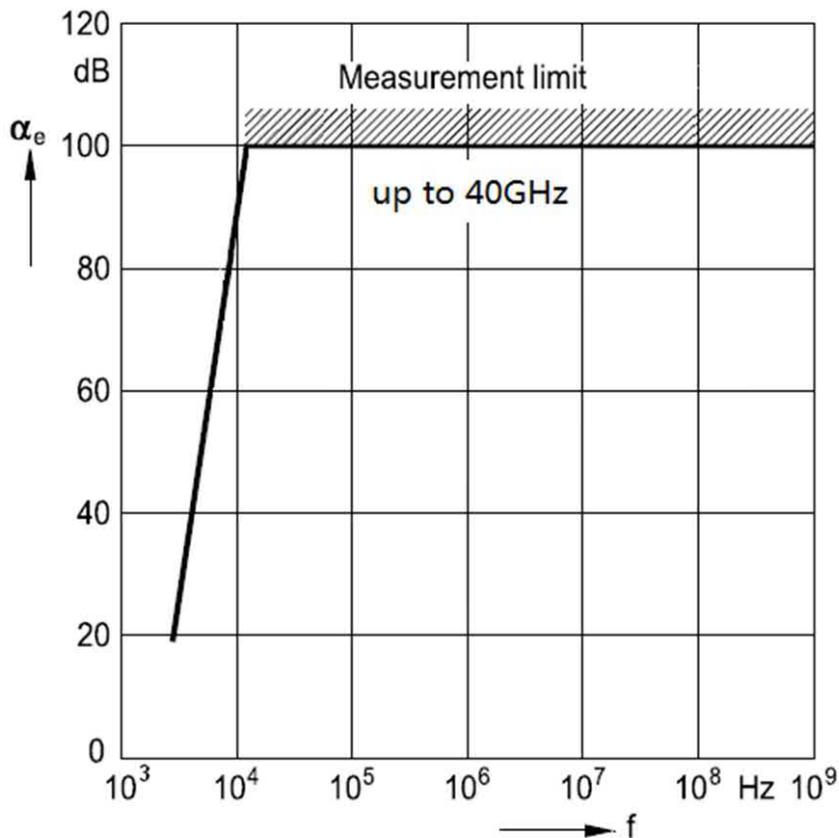
Insertion loss α_e (typical values at $Z = 50 \Omega$)

Measurement circuit



Asymmetrical measurement circuit
to MIL-STD-220A

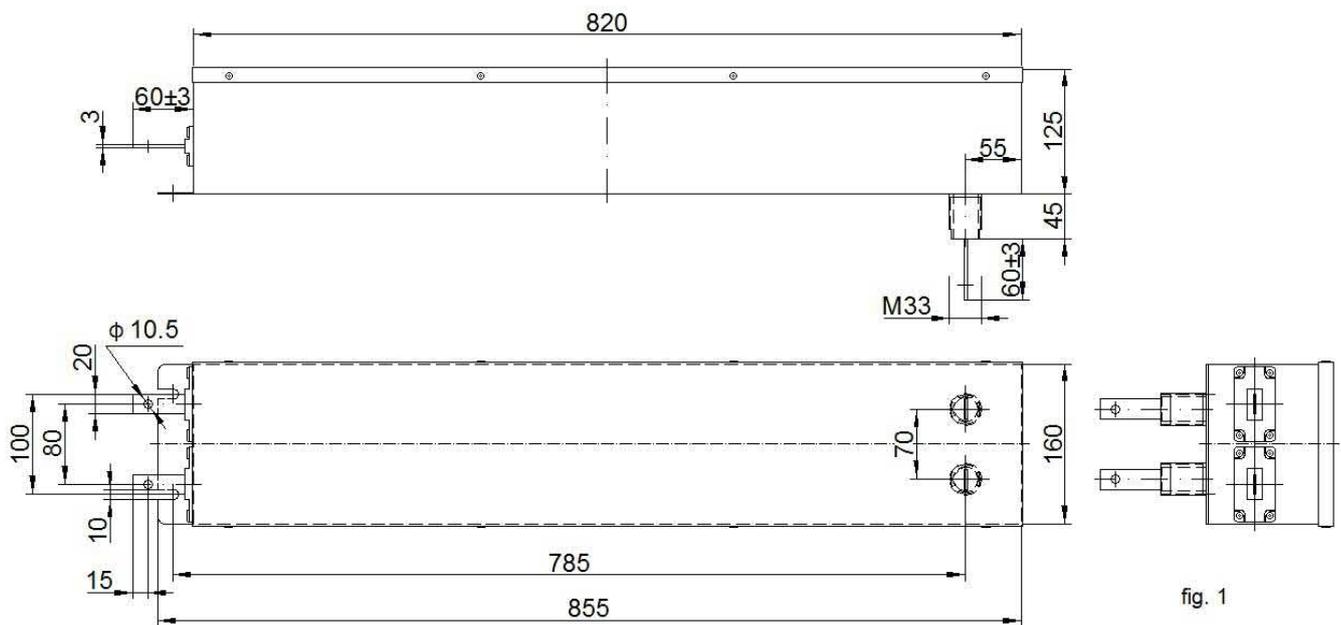
Insertion Loss Characteristics

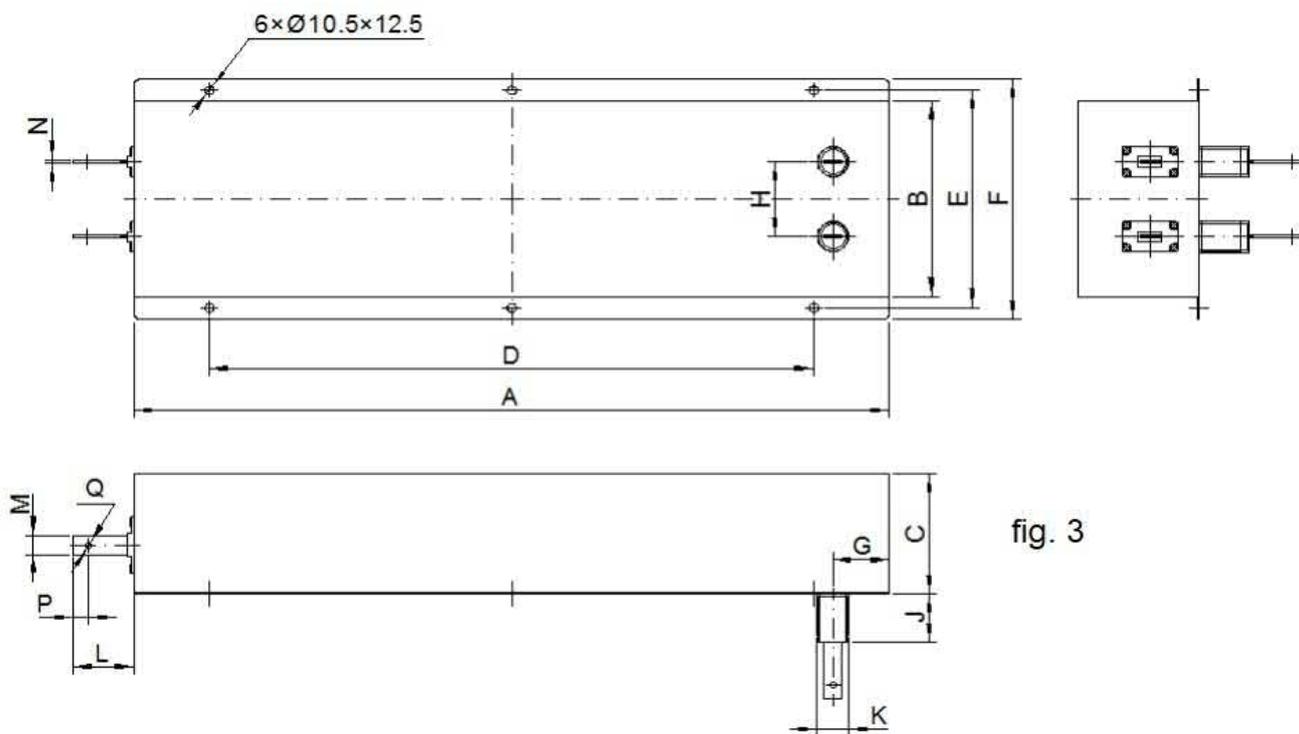
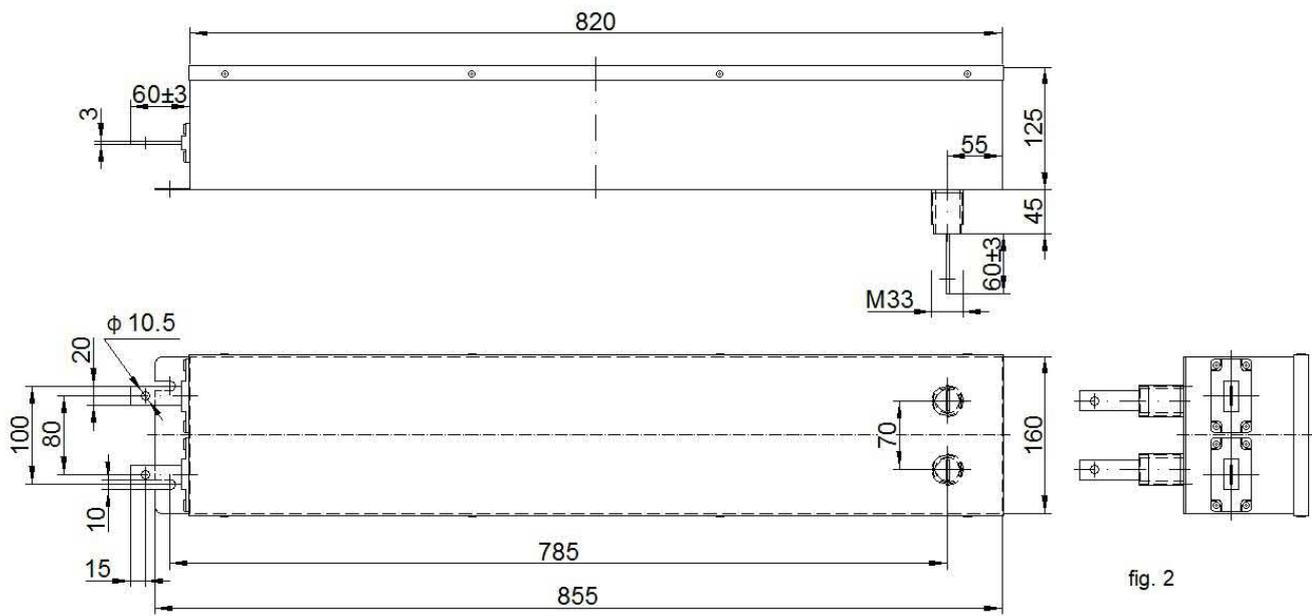


Characteristics - Single Phase

Model	Rated Current [A]	Connection (mm ²)	Packaging (fig.)	Size (MM)							
				A	B	C	D	E	F	G	H
DL-2x16C5-M	2x16	4	1	550	120	90	545	585	60	25	-
DL-2x30C5-M	2x30	6	1								
DL-2x50C5-M	2x50	10	1								
DL-2x70C5-M	2x70	16	1								
DL-2x100C5-M	2x100	25	1	770	160	125	755	805	100	35	-
DL-2x150C5/60-M	2x150	bus bar	2	820	160	125	785	855	100	55	70
DL-2x200C5/60-M	2x200	bus bar	2								
DL-2x250C5/60	2x250	bus bar	3	1000	260	140	800	290	320	75	100
DL-2x300C5/60	2x300	bus bar	3								
DL-2x600C5/60	2x600	bus bar	3	1100	280	200	800	310	340	75	120
DL-2x800C5/60	2x800	bus bar	3			240					
DL-2x1000C5/60	2x1000	bus bar	4	1200	320	240	800	350	380	80	160

Legend: 60 = bus bar, M = clinch-bolt





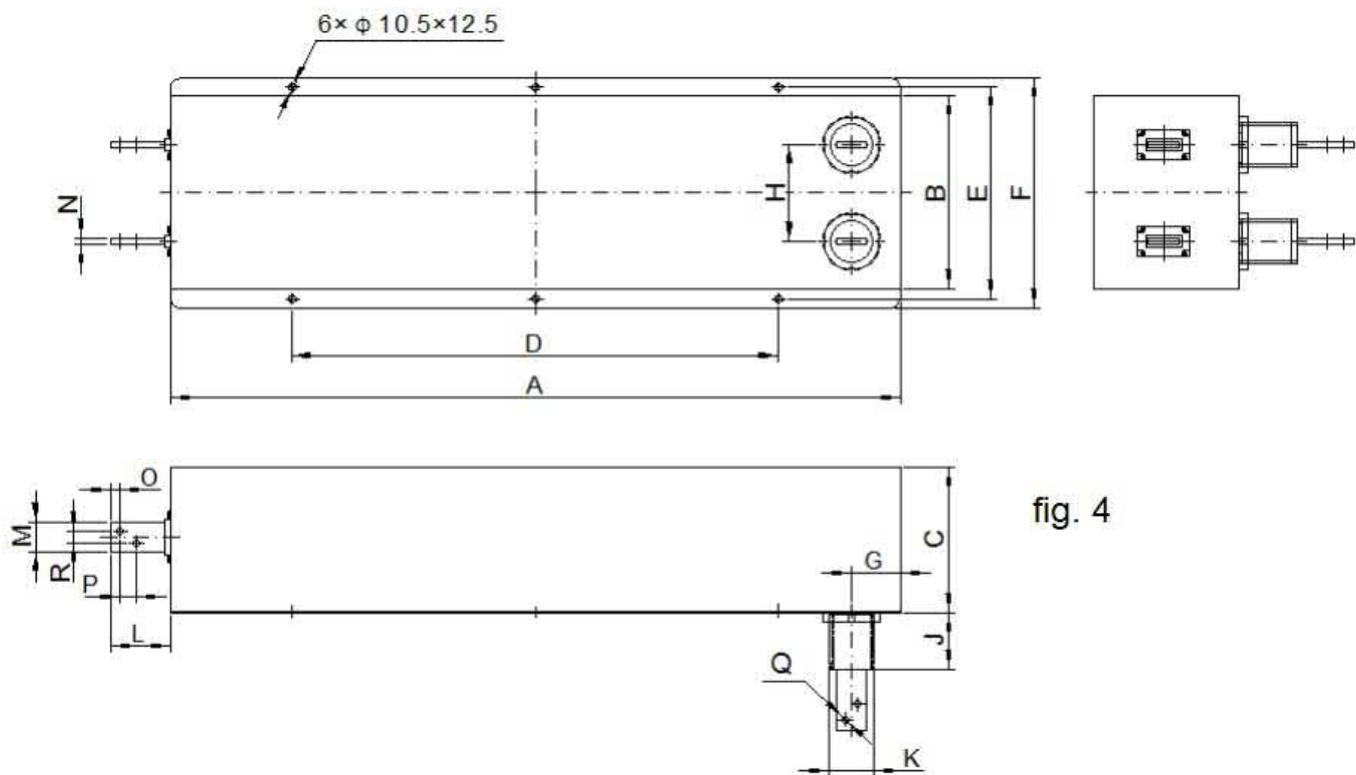


fig. 4

Connection Dimensions - Single Phase

Model	Size (MM)									
	J	K	L	M	N	O	P	Q	R	
DL-2x16C5-M	45	M33								
DL-2x30C5-M										
DL-2x50C5-M										
DL-2x70C5-M										
DL-2x100C5-M	45	2xM33								
DL-2x150C5/60-M DL-2x200C5/60-M										
DL-2x250C5/60	65	2xM42	80	25	4	-	20	Ø10.5		-
DL-2x300C5/60	65	2xM42	80	25	6	-	20	Ø10.5		-
DL-2x600C5/60	65	2xM48	80	30	8	-	20	Ø11		-
DL-2x800C5/60	65	2xM48	80	30	10	-	20	Ø11		-
DL-2x1000C5/60	95	2xM72	100	50	10	17	26	Ø13		20

Characteristics - Three Phase

Model	Rated Current [A]	Connection (mm ²)	Packaging (fig.)	Size (MM)							
				A	B	C	D	E	F	G	H
DL-4x16C5-M	4x16	4	1	550	240	90	545	585	150	25	-
DL-4x30C5-M	4x30	6	1								
DL-4x50C5-M	4x50	10	1	700	260	125	685	735	160	35	-
DL-4x70C5-M	4x70	16	1								
DL-4x100C5-M	4x100	25	2								
DL-4x150C5/60-M	4x150	bus bar	3	930	320	155	895	965	180	55	80
DL-4x200C5/60-M	4x200	bus bar	3								
DL-4x250C5/60	4x250	bus bar	4	1200	460	160	800	430	460	75	100
DL-4x300C5/60	4x300	bus bar	4			200					
DL-4x600C5/60	4x600	bus bar	4	1200	400	200	800	430	460	75	100
DL-4x800C5/60	4x800	bus bar	4			240					
DL-4x1000C5/60	4x1000	bus bar	5	1200	320	240	800	350	380	80	160

Legend: 60 = bus bar, M = clinch-bolt

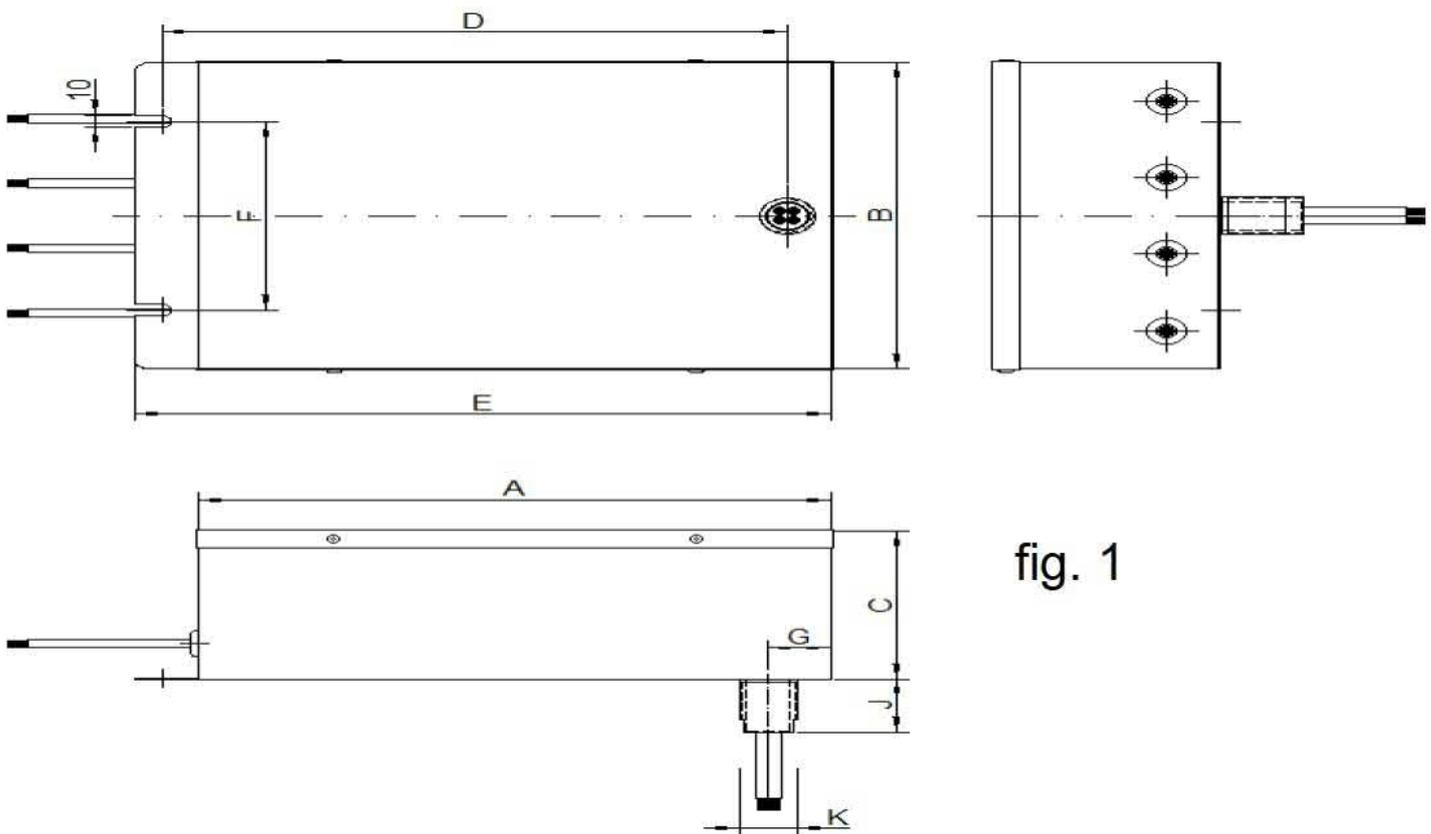


fig. 1

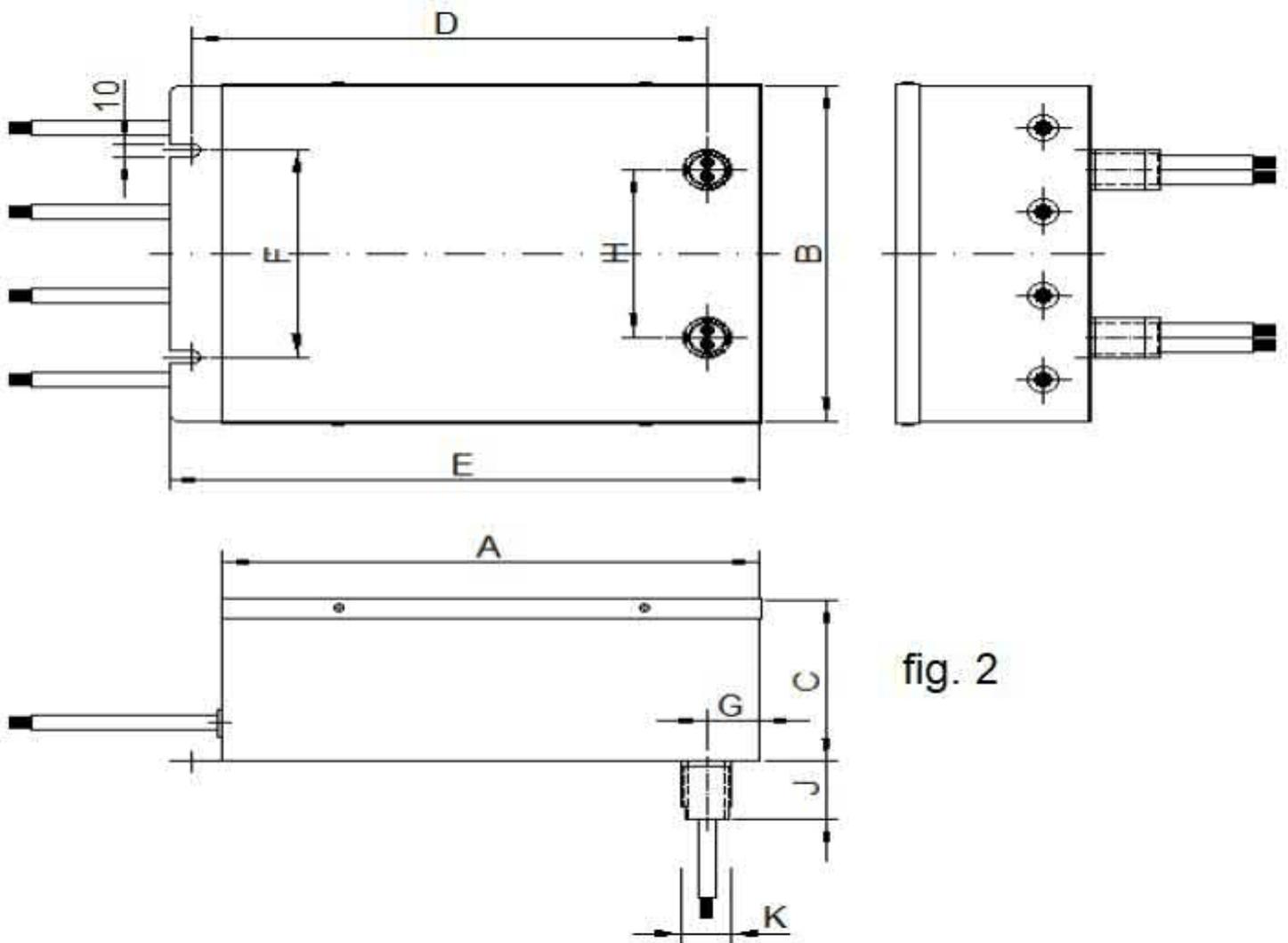


fig. 2

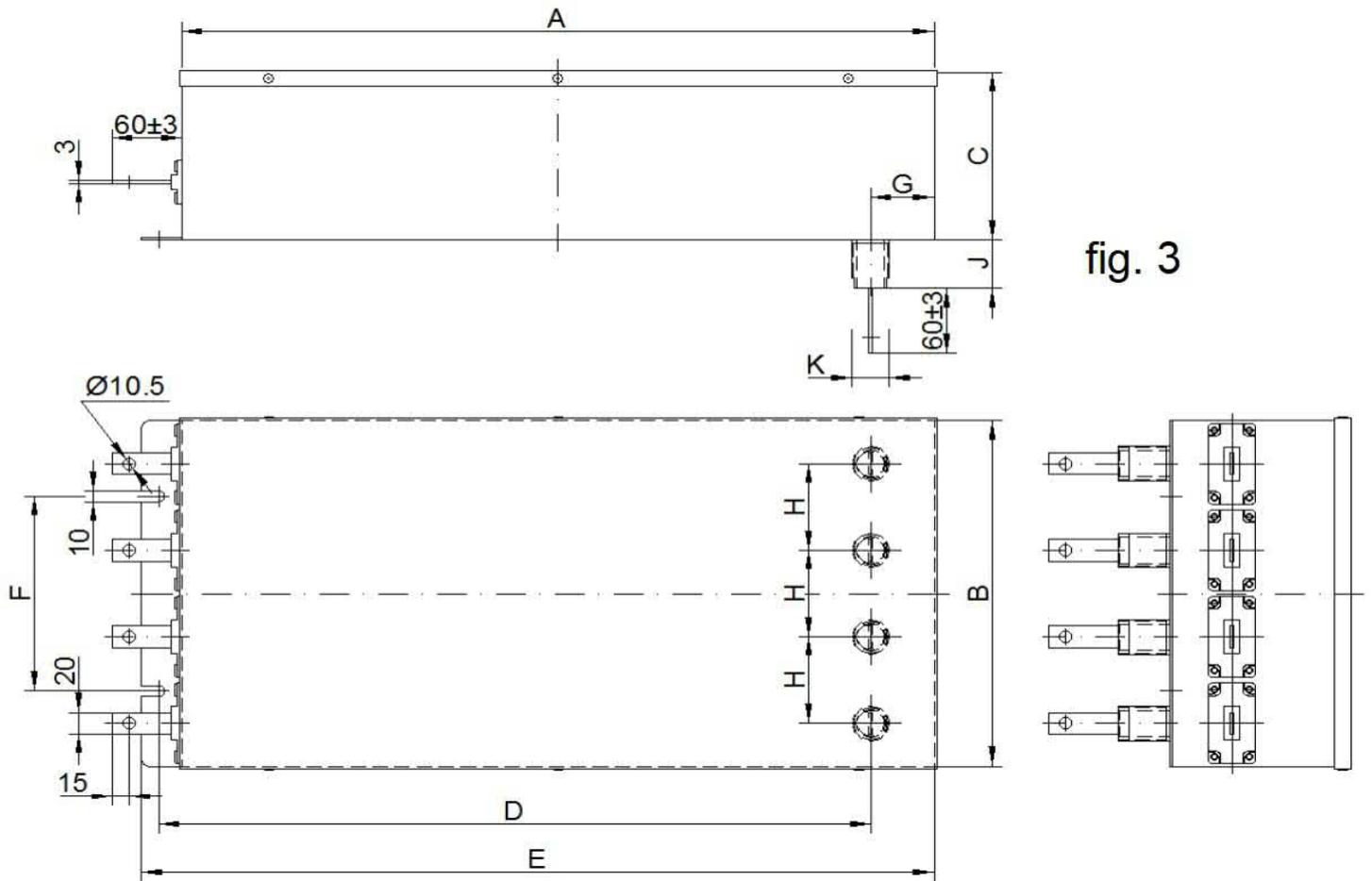


fig. 3

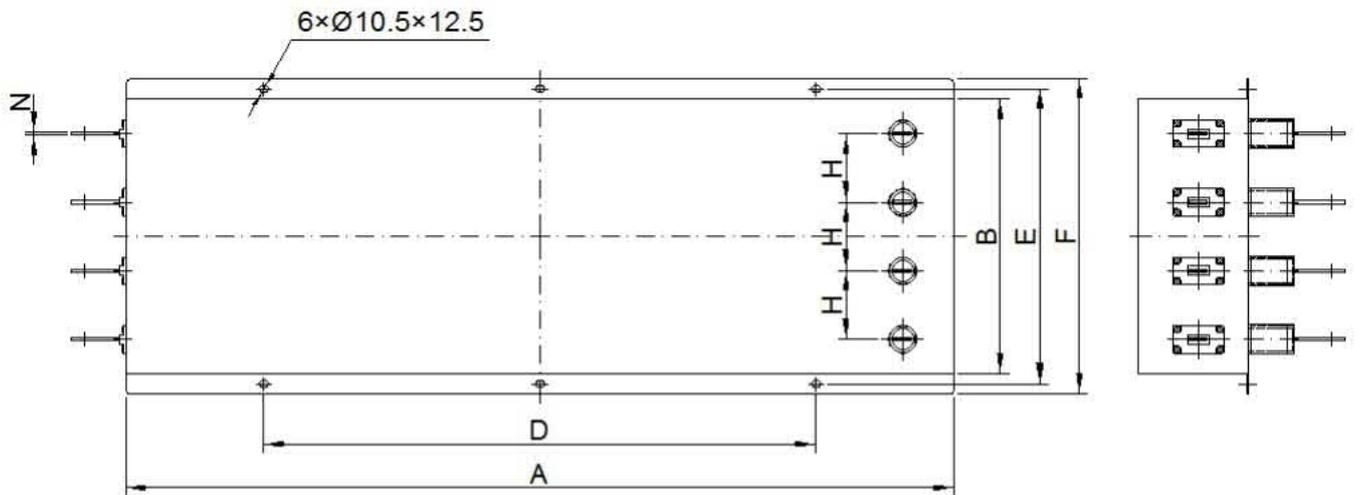
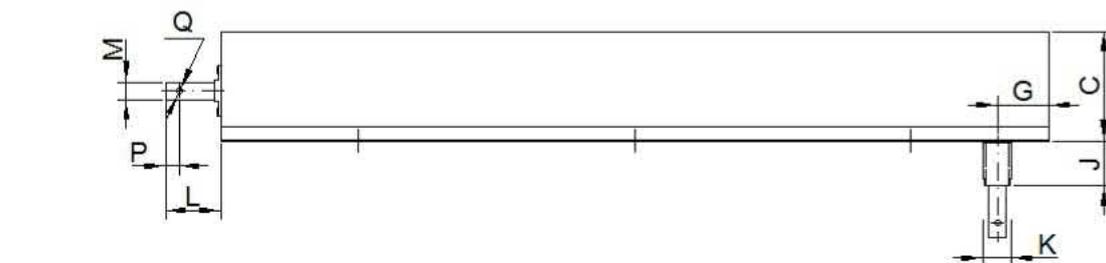
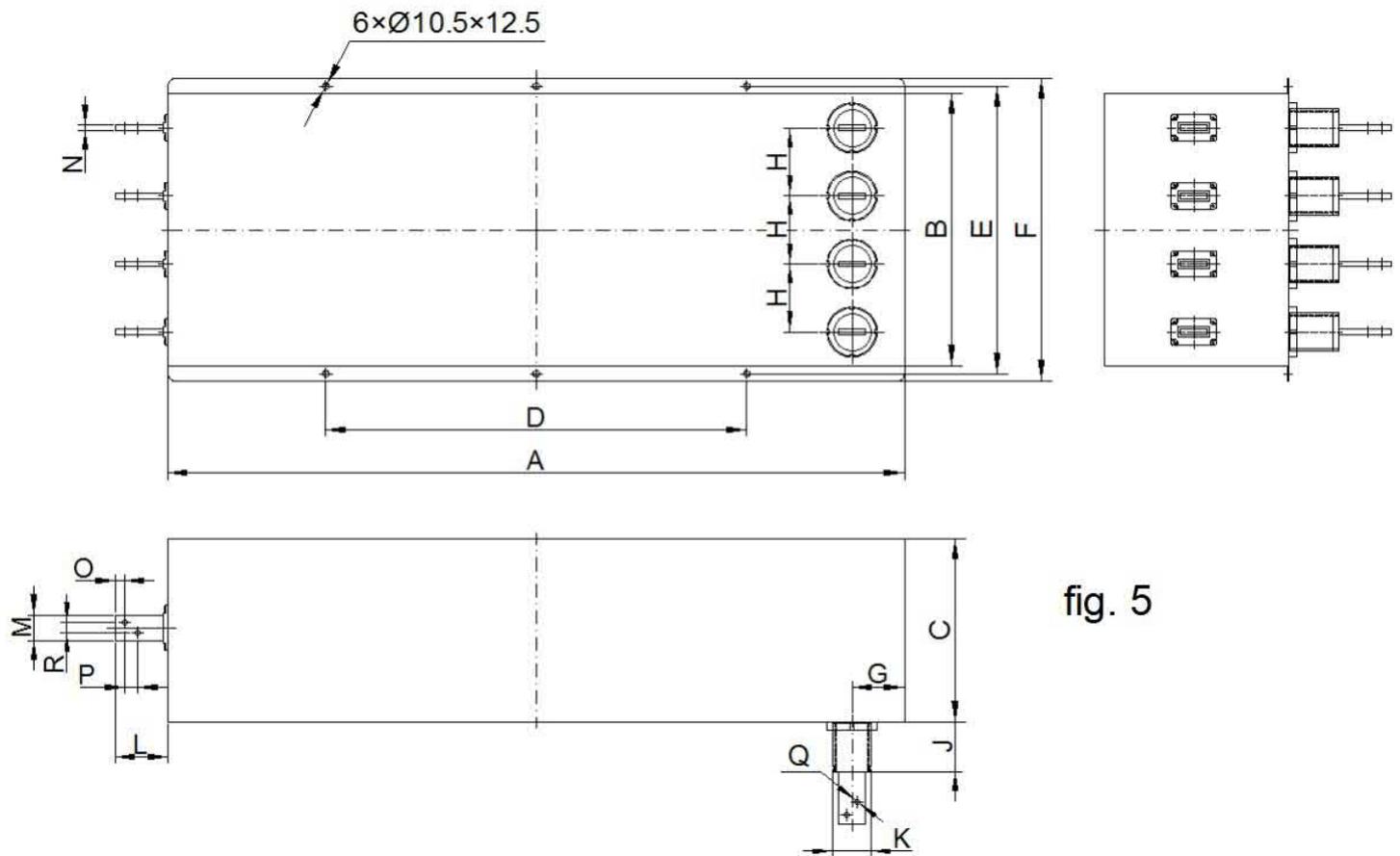


fig. 4





Connection Dimensions - Three Phase

Model	Size (MM)								
	J	K	L	M	N	O	P	Q	R
DL-4x16C5-M	45	M33							
DL-4x30C5-M									
DL-4x50C5-M									
DL-4x70C5-M									
DL-4x100C5-M									
DL-4x150C5/60-M DL-4x200C5/60-M	45	4xM33							
DL-4x250C5/60	65	4xM42	80	25	4	-	20	Ø10.5	-
DL-4x300C5/60	65	4xM42	80	25	6	-	20	Ø10.5	-
DL-4x600C5/60	65	4xM48	80	30	8	-	20	Ø11	-
DL-4x800C5/60	65	4xM48	80	30	10	-	20	Ø11	-
DL-4x1000C5/60	95	4xM72	100	50	10	17	26	Ø13	20

Ground Filter

Typical application: TN-S power supply system

	Symbol	Value	Unit	Remarks
Rated voltage	V_R	220	VAC	
		500	VDC	
Rated current	I_R	10 - 200	A	
Operating frequency	f_{op}	0 - 60	Hz	
Insertion loss		≥ 100	dB	14 kHz ... 40 GHz

Characteristics

Model	Rated Current [A]	Connection (mm ²)	Packaging (fig.)
DL-10C5-G-M	2x10	4	1
DL-16C5-G-M	2x16	4	1
DL-30C5-G-M	2x30	6	1
DL-50C5-G-M	2x50	10	1
DL-70C5-G-M	2x70	16	1
DL-100C5-G-M	2x100	25	2
DL-150C5-G/60-M	2x150	bus bar	3
DL-200C5-G/60-M	2x200	bus bar	3

Legend: 60 = bus bar, M = clinch-bolt

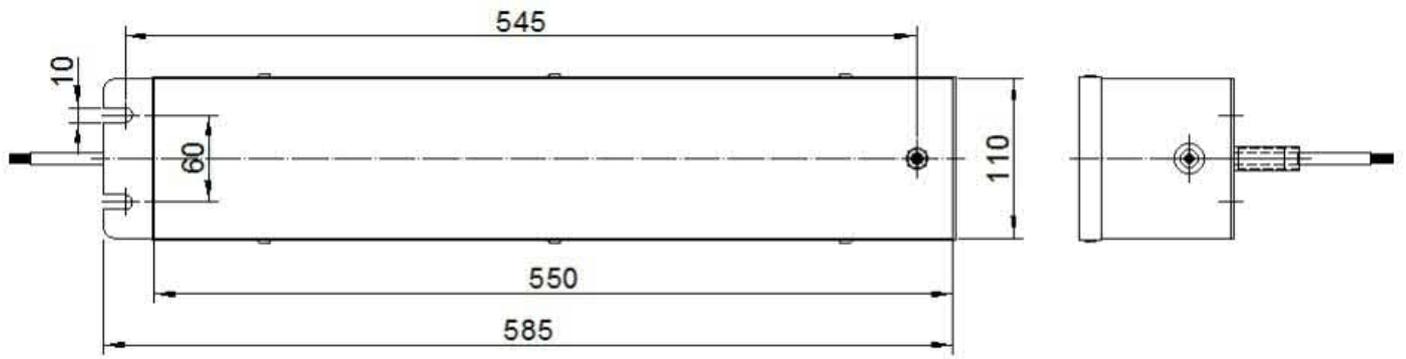


fig. 1

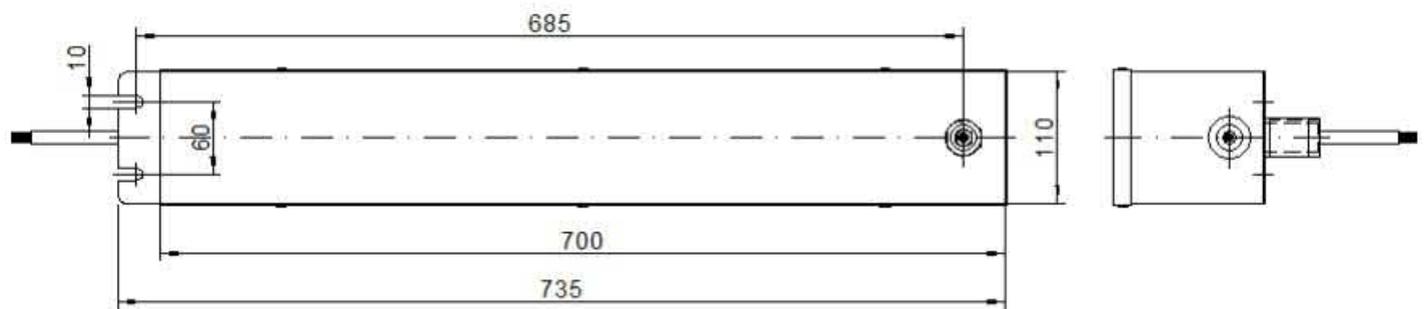
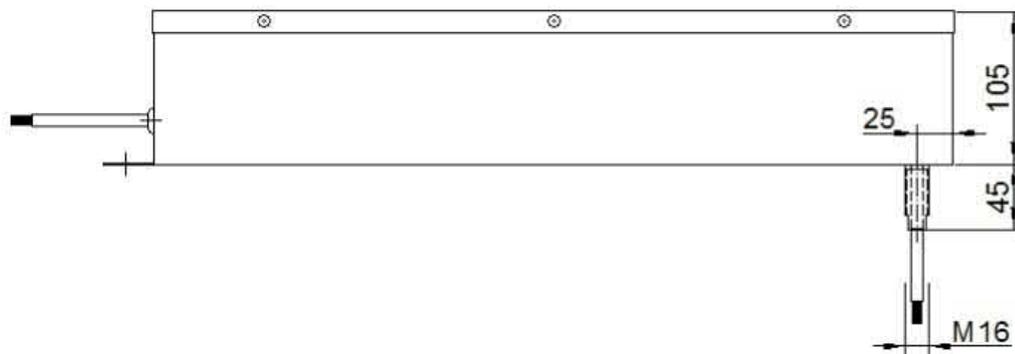
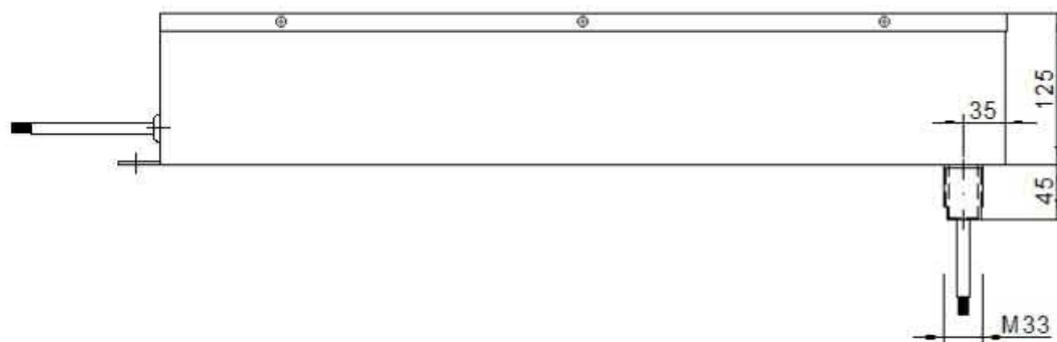


fig. 2



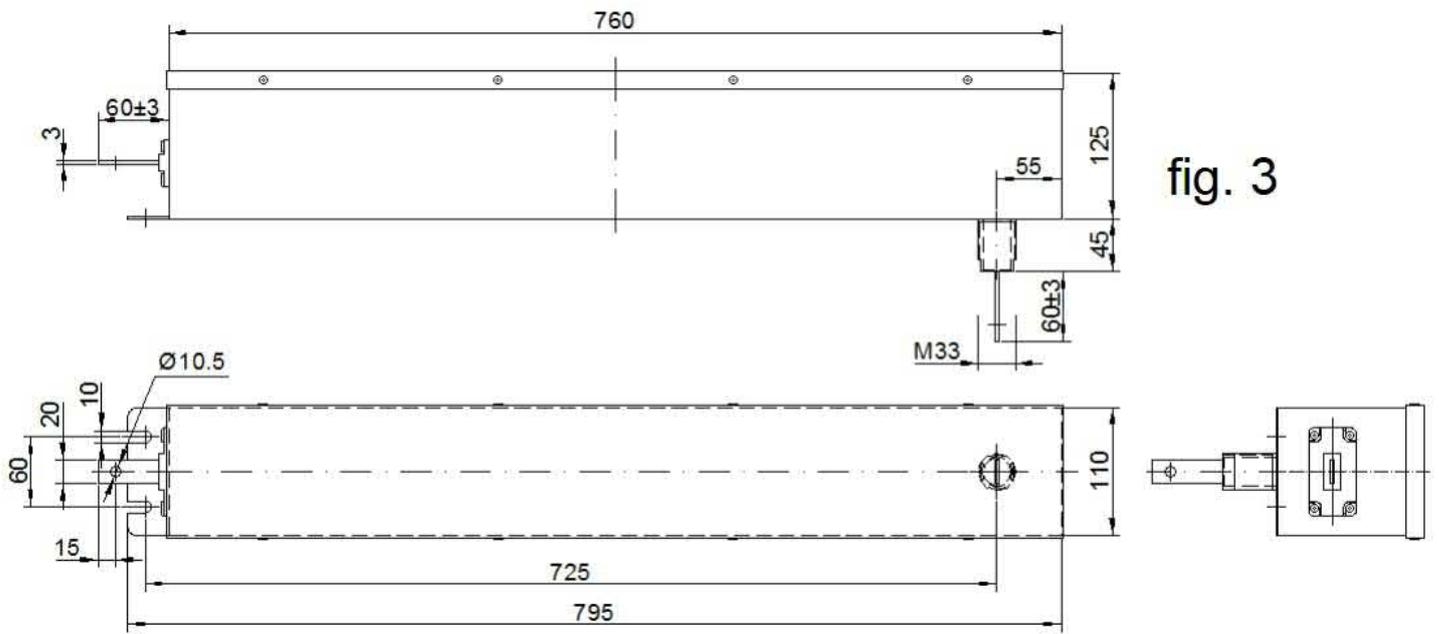
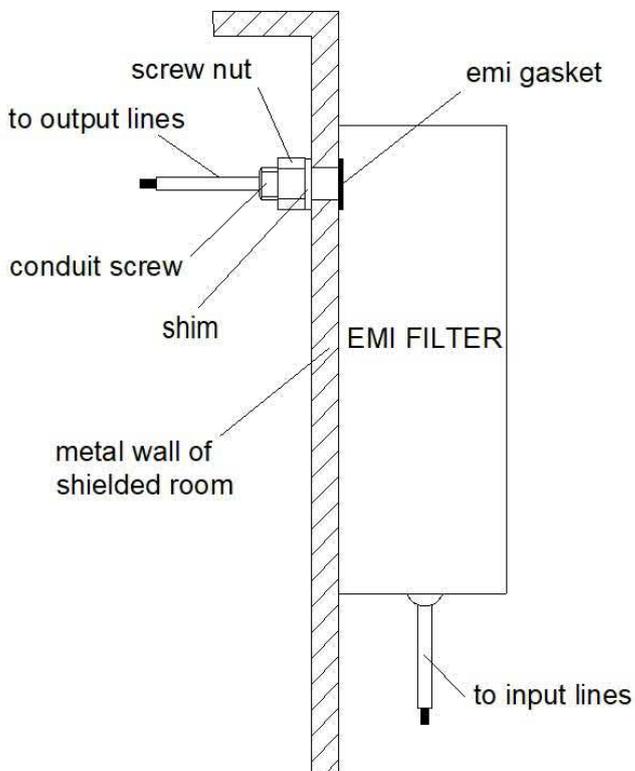


fig. 3

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