



DATASHEET

Single Phase Common Mode Facility Filter – SMF911

These Facility filters offer attenuation of 100dB against electromagnetic noise present on the power lines. They are often utilized in military power supplies where their high current ratings and high performance are very beneficial. The supply should have a balanced return current and also solid low impedance connection to potential earth.

Technical Specifications:

Rated Voltage	: 277VAC / 380VDC
Current Rating	: 6A to 3000A @50°C
Frequency	: 0-60 Hz
Insulation Resistance	: >100MΩ @ 250VDC (Before Connecting Discharge Resistor)
Discharge Resistance	: Internally Connected
Dielectric Withstand	: 2200 VDC each Line to case (Before Connecting MOVs)
Maximum Voltage drop per line	: ≤2% of supply voltage at full load
Overload Capability	: 140 % of rated current for 15 minutes
Operating Temperature	: -40°C to +50°C

Features:

- Designed to Handle Large Currents
- Integrated with Surge Suppression to Protect against voltage spikes
- Effectively Attenuates unwanted high-frequency Noise
- Robust Construction

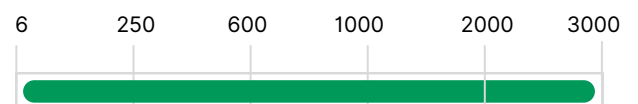
Applications:

- Shielded Rooms
- Radar Power Supplies
- EMC Test Chambers
- Command and Control Centers
- Data Centers
- Combat/Tracked Vehicles
- MIL Grade Panels

Performance Indicator:



Rated Current (A):



Storage Temperature	: -40°C to +85°C
Enclosure Material	: CRCA-Plated
Finish	: Powder Coating / Paint
Design Corresponding to	: MIL STD 220A, MIL-PRF-15733J, UL1283, IEC60939
MTBF	: >0.8 million hours (calculated using Mil Hdbk 217D)
Insertion Loss Performance	: 100dB from 100KHz to 18GHz (Standard) 100dB from 10KHz to 40GHz (Extended)
Surge Suppression (optional)	: 40kA (8/20µs)

Ordering Information: Standard Performance

Model Number	Part Number	Model Number	Part Number	Rated Current @50 °C (A)	DC Resistance (mΩ)	Maximum Leakage Current (A)	Min. Weight (Kgs)
SMF911-2-6	E111431-1	SMF911S-2-6	E111625-1	6	30	1.8	8
SMF911-2-10	E111432-1	SMF911S-2-10	E111626-1	10	25	1.8	8
SMF911-2-16	E111433-1	SMF911S-2-16	E111627-1	16	25	1.8	8
SMF911-2-20	E111434-1	SMF911S-2-20	E111628-1	20	20	1.8	16
SMF911-2-25	E111435-1	SMF911S-2-25	E111629-1	25	15	1.8	16
SMF911-2-30	E111436-1	SMF911S-2-30	E111630-1	30	15	1.8	16
SMF911-2-32	E111437-1	SMF911S-2-32	E111631-1	32	10	1.8	16
SMF911-2-40	E111438-1	SMF911S-2-40	E111632-1	40	8	1.8	20
SMF911-2-50	E111439-1	SMF911S-2-50	E111633-1	50	8	1.8	20
SMF911-2-60	E111440-1	SMF911S-2-60	E111634-1	60	8	1.8	20
SMF911-2-63	E111441-1	SMF911S-2-63	E111635-1	63	8	1.8	20
SMF911-2-100	E111442-1	SMF911S-2-100	E111636-1	100	6	1.8	22
SMF911-2-125	E111443-1	SMF911S-2-125	E111637-1	125	6	2.6	60
SMF911-2-150	E111444-1	SMF911S-2-150	E111638-1	150	6	2.6	60
SMF911-2-200	E111445-1	SMF911S-2-200	E111639-1	200	4	2.6	60
SMF911-2-225	E111446-1	SMF911S-2-225	E111640-1	225	2	4.4	80
SMF911-2-250	E111447-1	SMF911S-2-250	E111641-1	250	1	4.4	80
SMF911-2-300	E111448-1	SMF911S-2-300	E111642-1	300	0.5	4.4	110
SMF911-2-400	E111449-1	SMF911S-2-400	E111643-1	400	0.4	4.4	110
SMF911-2-600	E111450-1	SMF911S-2-600	E111644-1	600	0.4	6.4	200
SMF911-2-800	E111451-1	SMF911S-2-800	E111645-1	800	0.4	6.4	250
SMF911-2-1000	E111452-1	SMF911S-2-1000	E111646-1	1000	0.4	6.4	250
SMF911-2-1200	E111453-1	SMF911S-2-1200	E111647-1	1200	0.4	6.4	300
SMF911-2-1600	E111454-1	SMF911S-2-1600	E111648-1	1600	0.1	6.4	320
SMF911-2-2000	E111455-1	SMF911S-2-2000	E111649-1	2000	0.1	6.4	340
SMF911-2-2500	E111456-1	SMF911S-2-2500	E111650-1	2500	0.1	6.4	350
SMF911-2-3000	E111457-1	SMF911S-2-3000	E111651-1	3000	0.1	6.4	460

SMF911S – Standard Performance with Surge Suppressor

Note: EXXXXXX - Y

- Y - Indicates Enclosure Paint Color
- 1 - Olive Green RAL 6003
- 2 - Light Grey RAL 7035
- 3 - Dark Grey RAL 7046

Ordering Information: Extended Performance

Model Number	Part Number	Model Number	Part Number	Rated Current @50 °C (A)	DC Resistance (mΩ)	Maximum Leakage Current (A)	Min. Weight (Kgs)
SMF911N-2-6	E108476-1	SMF911NS-2-6	E111652-1	6	30	2.5	16
SMF911N-2-10	E108477-1	SMF911NS-2-10	E111653-1	10	26	2.5	16
SMF911N-2-16	E108478-1	SMF911NS-2-16	E111654-1	16	26	2.5	16
SMF911N-2-20	E108479-1	SMF911NS-2-20	E111655-1	20	24	2.5	18
SMF911N-2-25	E108480-1	SMF911NS-2-25	E111656-1	25	18	2.5	18
SMF911N-2-30	E108481-1	SMF911NS-2-30	E111657-1	30	18	2.5	18
SMF911N-2-32	E108482-1	SMF911NS-2-32	E111658-1	32	15	2.5	18
SMF911N-2-40	E108483-1	SMF911NS-2-40	E111659-1	40	10	2.5	22
SMF911N-2-50	E108484-1	SMF911NS-2-50	E111660-1	50	10	2.5	22
SMF911N-2-60	E108485-1	SMF911NS-2-60	E111661-1	60	10	2.5	22
SMF911N-2-63	E108486-1	SMF911NS-2-63	E111662-1	63	10	2.5	22
SMF911N-2-100	E108487-1	SMF911NS-2-100	E111663-1	100	8	2.5	60
SMF911N-2-125	E108488-1	SMF911NS-2-125	E111664-1	125	8	6	75
SMF911N-2-150	E108489-1	SMF911NS-2-150	E111665-1	150	8	6	75
SMF911N-2-200	E108490-1	SMF911NS-2-200	E111666-1	200	6	6	75
SMF911N-2-225	E108491-1	SMF911NS-2-225	E111667-1	225	4	6	90
SMF911N-2-250	E108492-1	SMF911NS-2-250	E111668-1	250	2	6	90
SMF911N-2-300	E108493-1	SMF911NS-2-300	E111669-1	300	0.8	6	125
SMF911N-2-400	E108494-1	SMF911NS-2-400	E111670-1	400	0.6	6	125
SMF911N-2-600	E108495-1	SMF911NS-2-600	E111671-1	600	0.6	8	215
SMF911N-2-800	E108496-1	SMF911NS-2-800	E111672-1	800	0.6	8	265
SMF911N-2-1000	E108497-1	SMF911NS-2-1000	E111673-1	1000	0.6	8	265
SMF911N-2-1200	E108498-1	SMF911NS-2-1200	E111674-1	1200	0.6	8	320
SMF911N-2-1600	E108499-1	SMF911NS-2-1600	E111675-1	1600	0.2	8	340
SMF911N-2-2000	E108500-1	SMF911NS-2-2000	E111676-1	2000	0.2	8	380
SMF911N-2-2500	E108501-1	SMF911NS-2-2500	E111677-1	2500	0.2	8	380
SMF911N-2-3000	E108502-1	SMF911NS-2-3000	E111678-1	3000	0.2	8	500

SMF911NS – Extended Performance with Surge Suppressor

Note: EXXXXXX - Y

Y - Indicates Enclosure Paint Color

1 - Olive Green RAL 6003

2 - Light Grey RAL 7035

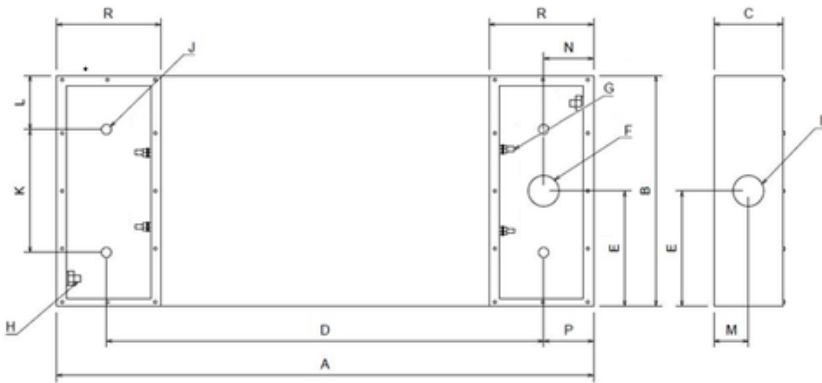
3 - Dark Grey RAL 7046

Note:

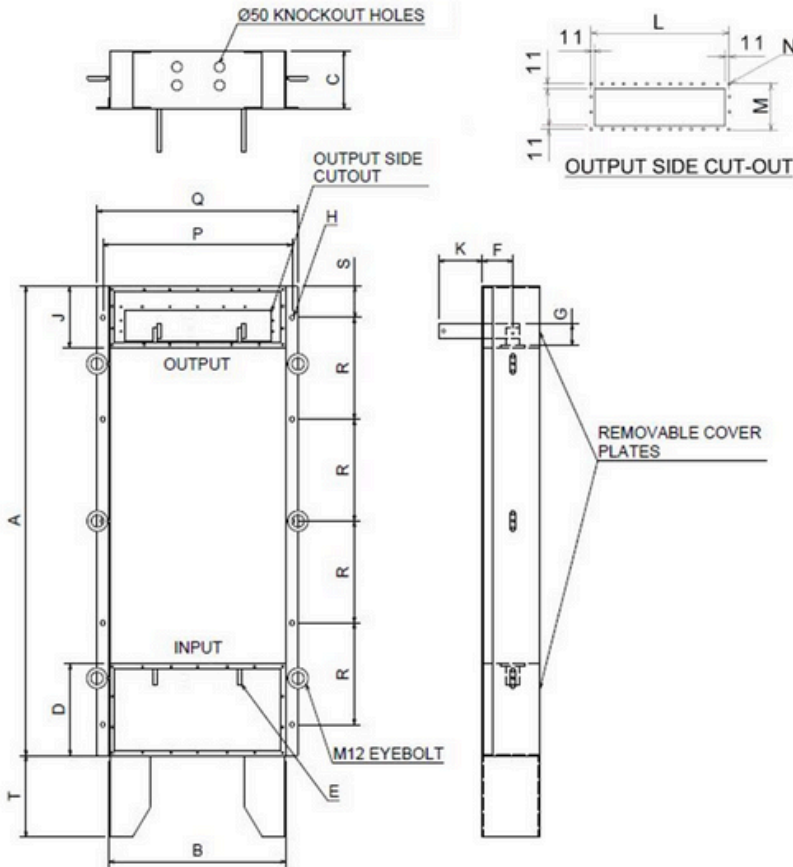
1. Earth Leakage Current is measured at 250VAC, 50Hz
2. This Filter series have very high leakage current to the ground, it is recommended to use Earth Leakage Circuit Breaker (ELCB) or Residual Circuit Breaker (RCCB) at the load side of filter
3. Different Enclosure Paint Colors are provided on request

Mechanical Drawing :

Up to 400A



600A to 3000A



Mechanical Dimensions :

Standard Performance (Up to 400A)

Rated Current (A)	A	B	C	D	E	ØF	G	H	ØJ	K	L	M	N	P	R
6	310	175	90	212	88	20	M5	M6	9	127	24	45	35	20	65
10	310	175	90	212	88	20	M5	M6	9	127	24	45	35	20	65
16	310	175	90	212	88	20	M8	M10	9	127	24	45	35	20	65
20	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
25	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
30	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
32	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
40	550	205	105	487	103	32	M8	M10	9	83	61	48	45	31	85
50	550	205	105	487	103	32	M8	M10	9	83	61	48	45	31	85
60	550	205	105	487	103	32	M8	M10	9	83	61	48	45	31	85
63	550	205	105	487	103	32	M8	M10	9	83	61	48	45	31	85
100	640	205	120	537	103	32	M12	M12	9	83	61	48	65	52	110
125	660	475	135	537	238	51	M12	M12	13	255	110	68	60	62	120
150	660	475	135	537	238	51	M12	M12	13	255	110	68	60	62	120
200	660	475	135	537	238	51	M12	M12	13	255	110	68	60	62	120
225	660	475	135	537	238	51	M16	M16	13	255	110	68	60	62	120
250	660	475	135	537	238	51	M16	M16	13	255	110	68	60	62	120
300	660	475	135	537	238	51	M20	M20	13	255	110	68	60	62	120
400	1250	475	150	760	238	63	M20	M20	17	255	110	75	75	245	300

Extended Performance (Up to 400A)

Rated Current (A)	A	B	C	D	E	ØF	G	H	ØJ	K	L	M	N	P	R
6	550	205	95	487	103	32	M5	M6	9	83	61	48	45	31	85
10	550	205	95	487	103	32	M5	M6	9	83	61	48	45	31	85
16	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
20	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
25	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
30	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
32	550	205	95	487	103	32	M8	M10	9	83	61	48	45	31	85
40	640	205	120	537	103	32	M8	M10	9	83	61	48	65	52	110
50	640	205	120	537	103	32	M8	M10	9	83	61	48	65	52	110
60	640	205	120	537	103	32	M8	M10	9	83	61	48	65	52	110
63	640	205	120	537	103	32	M8	M10	9	83	61	48	65	52	110
100	660	475	135	537	238	51	M12	M12	13	255	110	68	60	62	120
125	750	500	160	620	250	51	M12	M12	13	240	130	80	60	65	120
150	750	500	160	620	250	51	M12	M12	13	240	130	80	60	65	120
200	750	500	160	620	250	51	M12	M12	13	240	130	80	60	65	120
225	850	500	160	660	250	63	M16	M16	13	240	130	80	60	95	180
250	850	500	160	660	250	63	M16	M16	13	240	130	80	60	95	180
300	1050	525	185	660	263	63	M20	M20	13	265	130	93	60	195	250
400	1050	525	185	660	263	63	M20	M20	13	265	130	93	60	195	250

Standard Performance (600A to 3000A)

Rated Current (A)	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
600	1400	500	250	300	40x8	110	125	14	300	125	8x50=400	3x50=150	11	560	620	300	100	300
800	1500	560	250	300	50x8	110	125	14	300	125	9x50=450	3x50=150	11	620	680	300	150	300
1000	1500	560	250	300	50x8	110	125	14	300	125	9x50=450	3x50=150	11	620	680	300	150	300
1200	1600	655	250	300	80x10	110	150	14	300	200	9x60=540	3x50=150	11	720	770	350	100	300
1600	1800	655	300	400	125x10	140	200	14	400	300	9x60=540	4x57.5=230	11	720	770	350	200	350
2000	2000	655	300	400	127x16	140	200	14	400	300	9x60=540	4x57.5=230	11	720	770	400	200	350
2500	2300	655	300	450	127x16	140	200	14	400	300	9x60=540	4x57.5=230	11	720	770	500	150	400
3000	2600	655	350	450	130x20	170	200	14	400	300	9x60=540	4x57.5=230	11	720	770	575	150	400

Extended Performance (600A to 3000A)

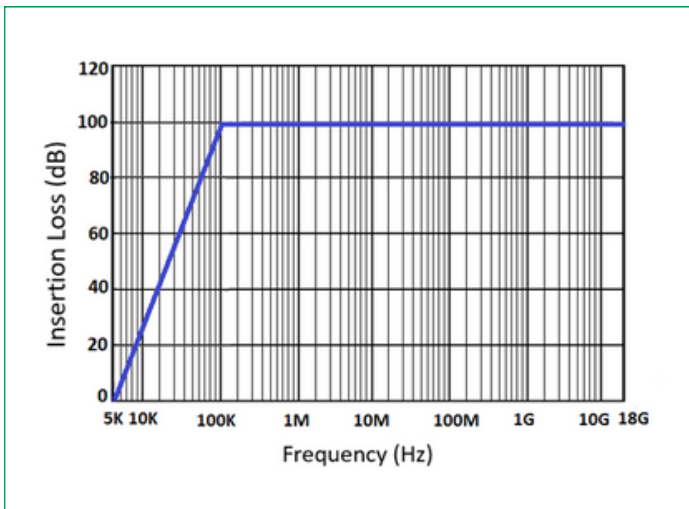
Rated Current (A)	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
600	1650	490	170	300	40x8	90	125	14	300	200	8x48=384	3x50=150	11	550	610	350	125	300
800	2050	565	190	350	50x8	110	125	14	300	200	9x50=450	3x50=150	11	625	685	425	175	350
1000	2050	565	190	350	50x8	110	125	14	300	200	9x50=450	3x50=150	11	625	685	425	175	350
1200	2280	655	200	350	80x10	110	200	14	350	250	9x60=540	3x60=180	11	715	775	470	200	350
1600	2670	655	320	400	125x10	160	200	14	400	300	9x60=540	4x57.5=230	11	715	775	550	235	400
2000	2930	655	320	450	127x16	160	200	16	450	300	9x60=540	4x57.5=230	11	715	775	600	265	500
2500	3060	655	320	450	127x16	160	200	16	450	300	9x60=540	4x57.5=230	11	715	775	625	280	500
3000	3580	785	350	500	130x20	175	250	16	500	300	10x68=680	4x65=260	11	845	905	750	290	500

All dimensions are in mm;

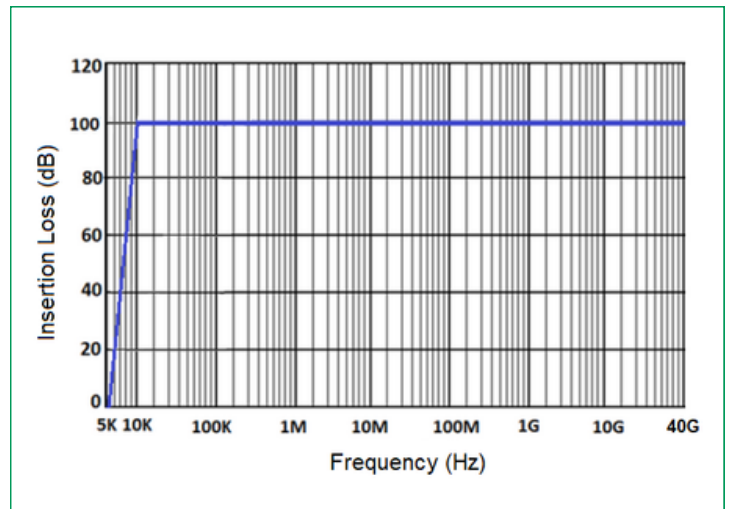
Note: The output threaded tube or Bulk-head Penetration Pipe along with accessories shall be supplied on request

Insertion Loss Graph :

Standard Performance

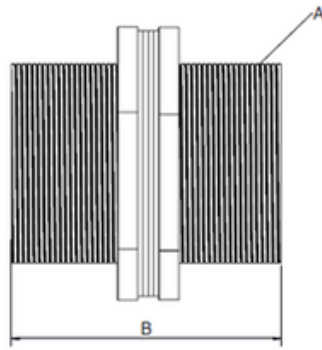


Extended Performance



Accessories Details :

Bulk Head Penetration Kit

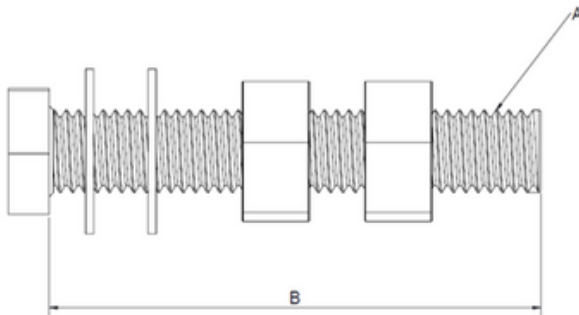


Accessories :

1. Threaded Pipe - 1 No
2. Plain Washer - 2 No's
3. Hex Nut - 2 No's
4. Gasket - 2 No's

SL No.	Part Number	Description	Thread(A) X Length(B)
1	E111914-1	BULKHEAD PENETRATION KIT FOR M20	M20X100
2	E111915-1	BULKHEAD PENETRATION KIT FOR M25	M25X100
3	E111916-1	BULKHEAD PENETRATION KIT FOR M32	M32X100
4	E111917-1	BULKHEAD PENETRATION KIT FOR M40	M40X100
5	E111918-1	BULKHEAD PENETRATION KIT FOR M50	M50X100
6	E111919-1	BULKHEAD PENETRATION KIT FOR M63	M63X100
7	E111920-1	BULKHEAD PENETRATION KIT FOR M75	M75X100

Fixing Screw Kit



Accessories :

1. Bolt - 1 No
2. Plain Washer - 2 No's
3. Hex Nut - 2 No's

SL No.	Part Number	Description	Thread(A) X Length(B)
1	E111921-1	FIXING SCREW KIT FOR M5	M5X40
2	E111922-1	FIXING SCREW KIT FOR M6	M6X40
3	E111923-1	FIXING SCREW KIT FOR M8	M8X50
4	E111924-1	FIXING SCREW KIT FOR M10	M10X50
5	E111925-1	FIXING SCREW KIT FOR M12	M12X60
6	E111926-1	FIXING SCREW KIT FOR M16	M16X60
7	E111927-1	FIXING SCREW KIT FOR M20	M20X70

Note: The suggested Fasteners can be used with a mounting surface thickness up to 20mm