



APPLICATION GUIDE

The FIN 130SP, 230SP, 730, 735 and 740 series parallel filters are 3-Phase RFI Filters for parallel connection with 3-Phase power supply systems; they therefore draw only a small current from the mains. These filters are usually connected to the output of the 3-Phase power breaker of the system. The parallel series filters are designed for both screw and DIN rail installations.

The FIN 730, 735, 740 filters reduce interferences in the frequency range from 100 kHz to 10 MHz. They have been developed particularly so as to greatly reduce the interference below the standard frequency limit of 150 kHz, which can be particularly important in some industrial environments.

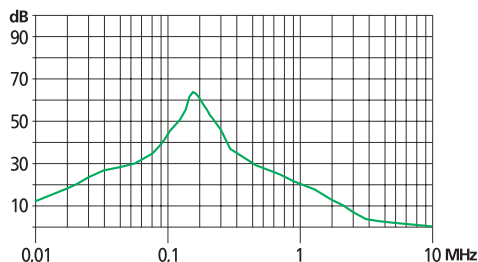
The FIN 130SP and 230SP filters have a resonance point around 150 kHz, and provide a great reduction of the interferences particularly in the frequency range between 50 kHz and 5 MHz.

ELECTRIC CHARACTERISTICS

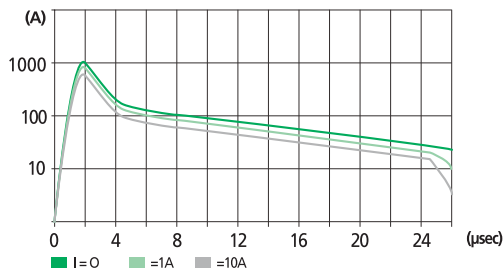
Capacitor Dielectric	Film Polypropylene
Capacitor Electrodes	Vacuum deposited aluminium layers
Capacitor Construction	Extended double side metallized carrier film with internal series connection and metallized film
Resistor Construction	Metallic layer
Coating	Solvent resistant (UL94 V-I) plastic case with flame retardant (UL94 V-0) epoxy resin sealing
Standard Reference	IEC 68
Resistance Power	3 W
Voltage Category	Nominal Voltage at 85° C
Max Repetive Pulse Rise Time	650 V/μs
Max Non Repetive Pulse Rise Time	1000 V/μs
Capacitor Dissipation Factor	<5x10⁻⁴ measured at 1 kHz / 25±5°C
Insulation Resistance	>30 GΩ between terminals after 1 minute of energisation at 100 V / 25±5°C
Climatic Class	- 40 / +85 °C

FIN130SP	Nominal Voltage 50/60 Hz	Nominal Voltage	Phase to Ground Test Voltage	Phase to Phase Test Voltage	C1 Rated Capacitance	Rated Resistance
.001.M	600 V _{AC}	1000 V _{DC}	3200 V _{DC}	2400 V _{DC}	7μF ±10% at 1kHz	3.3MΩ ±20% at 1kHz
Leakage current for phase at 230 V phase to ground 50 Hz / 40°C						< 25mA

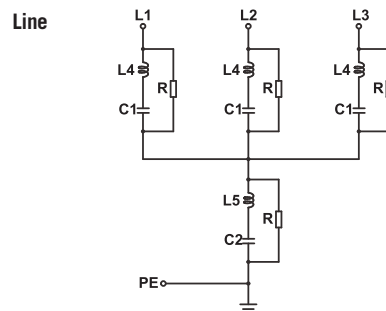
RESONANCE CIRCUIT RESPONSE



RESPONSE TO CURRENT PULSE

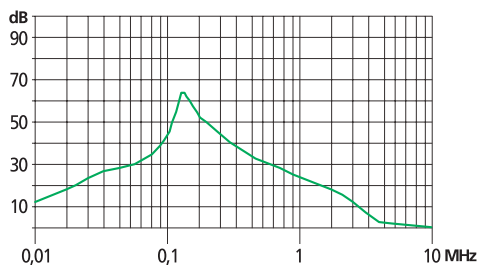


ELECTRIC DIAGRAM

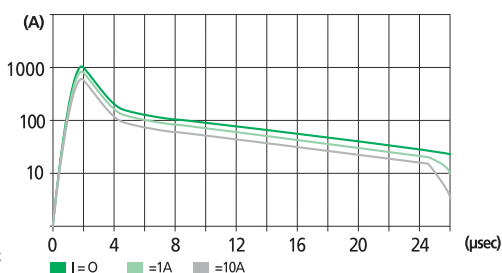


FIN230SP	Nominal Voltage 50/60 Hz	Nominal Voltage	Phase to Ground Test Voltage	Phase to Phase Test Voltage	C1 Rated Capacitance	Rated Resistance
.001.M	600 V _{AC}	1000 V _{DC}	3200 V _{DC}	2400 V _{DC}	10μF ±10% at 1kHz	3.3MΩ ±20% at 1kHz
Leakage current for phase at 230 V phase to ground 50 Hz / 40°C						< 25mA

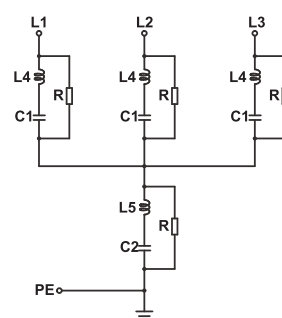
RESONANCE CIRCUIT RESPONSE



RESPONSE TO CURRENT PULSE



ELECTRIC DIAGRAM

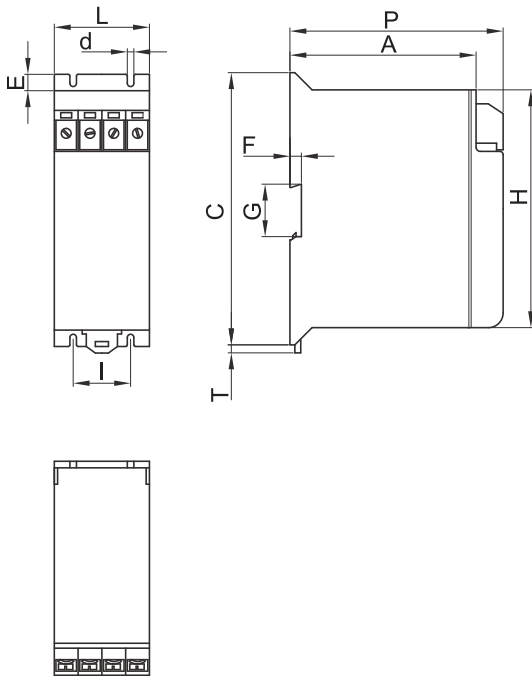


MECHANICAL DIMENSIONS (mm)

Model	L	d	E	I	P	A	C	T	G	F	H	Weight Kg	Case
FIN130SP.001.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1.15	1
FIN230SP.001.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1.15	1
FIN730.001.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1	1
FIN730.002.MC	59	4.5	10	35	130	112	166	4	37.5	7	146	1	1
FIN730.001.MLCP	59	4.5	10	35	130	112	166	4	37.5	7	146	1	1
FIN735.001.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1	1
FIN740.068.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1	2

CONNECTION

Rigid Cable (mm ²)	Flexible Cable (mm ²)	Torque (Nm)
1 - 4	1 - 4	1.8
1 - 4	1 - 4	1.8
1 - 4	1 - 4	1.8
1 - 4	1 - 4	1.8
1 - 4	1 - 4	1.8
1 - 4	1 - 4	1.8

CASE 1

CASE 2
