Three Phase Parallel Filters

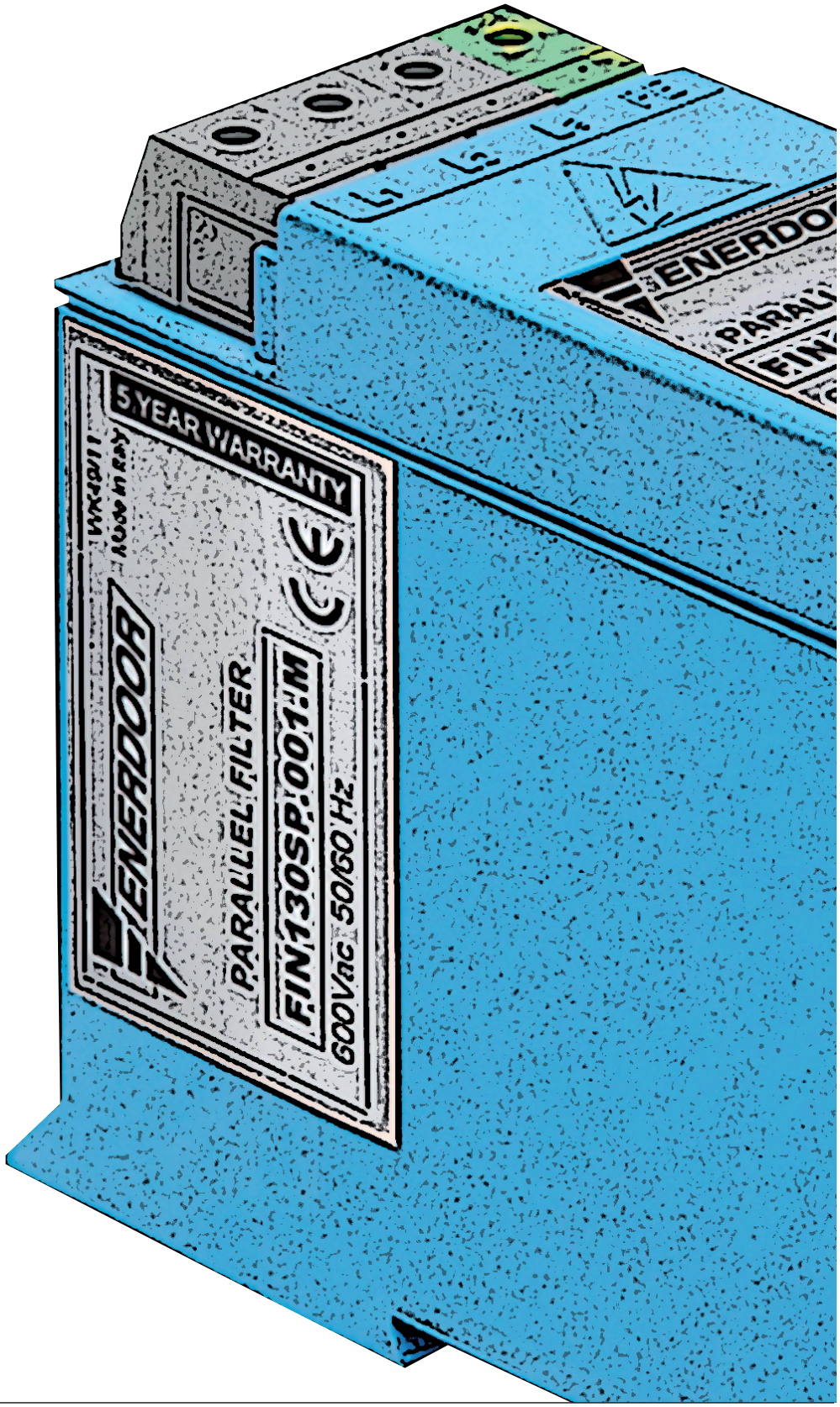
Enerdoor three phase parallel filters provide protection from variable frequency drives, SCRs, controllers, and other high commutation electrical equipment. This line provides high attenuation in the frequency range of 10 KHz to 5 MHz offering a solution for applications with low to medium frequency concerns. When used in conjunction with other Enerdoor series, this combination ensures EMI/RFI protection for equipment in any environment.

This series offers a unique solution available with nominal voltage up to 750 Vac and any current level due to the parallel connection to the line. Offered in 3 phase and 3 phase plus neutral this line carries CE and UL approvals.

The FIN730 and FIN740 filters reduce EMI interference in the 30 kHz to 10 MHz frequency range. The FIN230 filter has a resonance frequency of 150 kHz and provides a significant interference reduction in the frequency range of 50 kHz to 5 MHz. This series features panel and DIN rail mounting for fast and easy installation.

Parallel filter applications include:

- CNC machines
- Recharging stations
- Multiple drive applications
- Renewable energy
- SCR applications

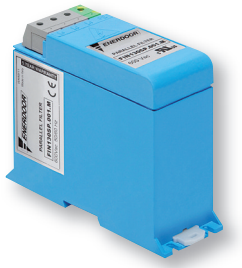


EMI/RFI Parallel filter with excellent attenuation in low frequency range

Datasheet 3/2017

APPROVALS:

c UL us E215863 UL1283 CSA C22.2 RoHS CE



FIN130SP.001.M

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent attenuation in low frequency range

BENEFITS

- 5 Year warranty
- High differential and common mode attenuation
- Compact design
- Easy installation

MARKETS

- CNC machines
- Recharging stations
- Multiple drive applications
- Renewable energy

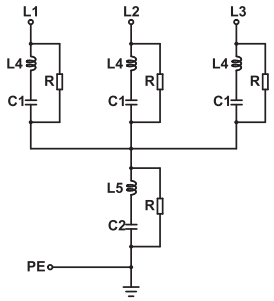
ORDERING CODE

FIN 230SP	.001	.M
Model		Connection
		M = Terminal Blocks

FIN230SP.001.M

ATTENUATION INDICATOR

ELECTRIC DIAGRAM



FIN735.001.M

TECHNICAL SPECIFICATIONS

Nominal voltage	See Electrical Characteristics
Frequency	50 – 60 Hz
Rated current	Unlimited
Potential test voltage phase to phase	2400 Vdc (2 sec.)
Potential test voltage phase to ground	3200 Vdc (2 sec.)
Leakage current normal conditions	< 25 mA *
Leakage current worst conditions	< 70 mA
IP Protection	IP20
Climatic class	-40 / +85° C
MTBF at 40°C	250.000 Hrs

* **Voltage 230 Vac phase to ground 50H / 40°C**

ELECTRICAL CHARACTERISTICS

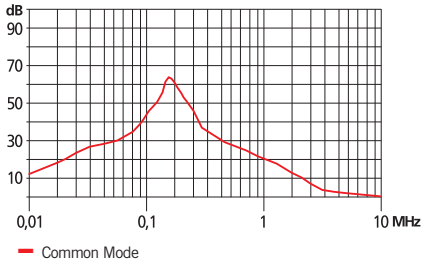
Model	Nominal Voltage AC (Vac)	Nominal Voltage DC (Vdc)	Power Loss (W)
FIN130SP.001.M	600	1000	10
FIN230SP.001.M	600	1000	10
FIN735.001.M	650	1100	10

CONNECTIONS

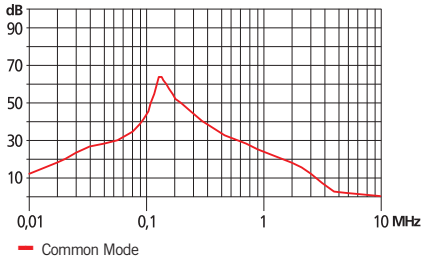
LINE			PE
Solid Cable (mm^2)	Stranded Cable (mm^2)	Terminal Block Torque (Nm)	Torque (Nm)
1 - 4	1 - 4	1.8	1.8
1 - 4	1 - 4	1.8	1.8
1 - 4	1 - 4	1.8	1.8

TYPICAL ATTENUATION

FIN130SP.001M



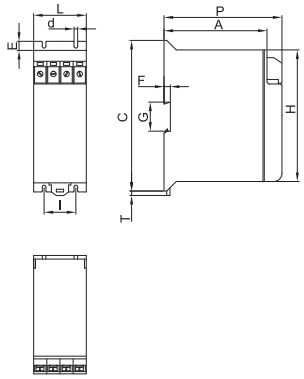
FIN230SP.001M / FIN735.001.M



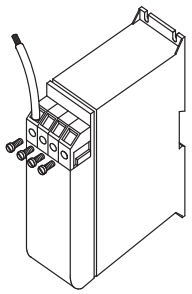
MECHANICAL DIMENSIONS mm

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
FIN735.001.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1.15	1

CASE 1



ASSEMBLY CONNECTION "M"



EMI/RFI Parallel filter with excellent attenuation in low frequency range

Datasheet 3/2017

APPROVALS:

c UL us E215863 UL1283 CSA C22.2 RoHS CE

FIN730.001.M (C - LCP)

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent attenuation in low frequency range

BENEFITS

- 5 Year warranty
- High differential and common mode attenuation
- Compact design
- Easy installation

MARKETS

- CNC machines
- Recharging stations
- Multiple drive applications
- Renewable energy

ORDERING CODE

FIN 730.001. .M

Model — Nominal voltage

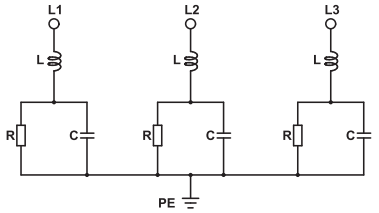
M = 750Vac

MC = 600Vac

MLCP = 480Vac

ATTENUATION INDICATOR

ELECTRIC DIAGRAM



TECHNICAL SPECIFICATIONS

Nominal voltage	See Electrical Characteristics
Frequency	50 – 60 Hz
Rated current	Unlimited
Potential test voltage phase to phase	2400 Vdc (2 sec.)
Potential test voltage phase to ground	3200 Vdc (2 sec.)
Leakage current normal conditions	< 25 mA *
Leakage current worst conditions	< 70 mA
IP Protection	IP20
Climatic class	-40 / +85° C
MTBF at 40°C	250.000 Hrs

* **Voltage 230 Vac phase to ground 50 Hz / 40°C**

ELECTRICAL CHARACTERISTICS

Model	Nominal Voltage AC (Vac)	Nominal Voltage DC (Vdc)	Power Loss (W)
FIN730.001.M	750	1200	10
FIN730.002.MC	600	1000	10
FIN730.001.MLCP	480	800	10

CONNECTIONS

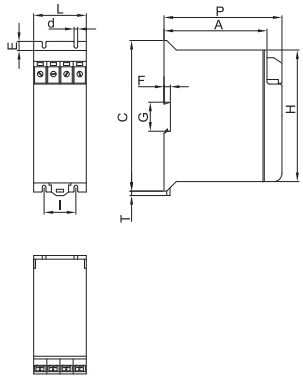
LINE			PE
Solid Cable (mm^2)	Stranded Cable (mm^2)	Terminal Block Torque (Nm)	Torque (Nm)
1 - 4	1 - 4	1.8	1.8
1 - 4	1 - 4	1.8	1.8
1 - 4	1 - 4	1.8	1.8

TYPICAL ATTENUATION

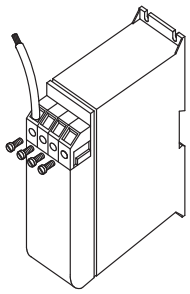
MECHANICAL DIMENSIONS mm

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

CASE 1



ASSEMBLY CONNECTION "M"

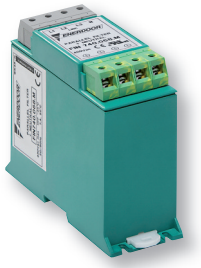


EMI/RFI Parallel filter with excellent attenuation in low frequency range

Datasheet 3/2017

APPROVALS:

c UL us E215863 UL1283 CSA C22.2 RoHS CE



FIN740.068.M

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent attenuation in low frequency range

BENEFITS

- 5 Year warranty
- High differential and common mode attenuation
- Compact design
- 3-phase plus neutral application

MARKETS

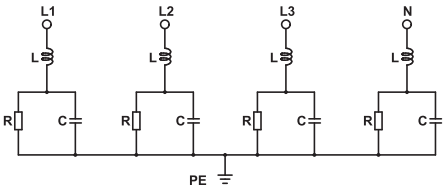
- CNC machines
- Recharging stations
- Multiple drive applications
- Renewable energy

ORDERING CODE

FIN740	.068	.M
Model		Connection
		M = Terminal block

ATTENUATION INDICATOR

ELECTRIC DIAGRAM



TECHNICAL SPECIFICATIONS

Nominal voltage	0 / 600 Vac
Frequency	50 – 60 Hz
Rated current	Unlimited
Potential test voltage phase to phase	2200 Vdc (2 sec.)
Potential test voltage phase to ground	2900 Vdc (2 sec.)
Leakage current normal conditions	<20 mA*
Leakage current worst conditions	<60 mA
IP Protection	IP20
Climatic class	-40 / +85° C
MTBF at 40°C	250.000 Hrs

* **Voltage 230 Vac phase to ground 50 Hz / 40°C**

FIN740

Three Phase + Neutral Parallel Filter

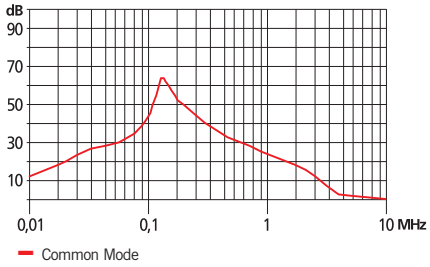
ELECTRICAL CHARACTERISTICS

Model	Nominal Voltage AC (Vac)	Nominal Voltage DC (Vdc)	Power Loss (W)
FIN740.068.M	480	800	10

CONNECTIONS

LINE			PE
Solid Cable (mm^2)	Stranded Cable (mm^2)	Terminal Block Torque (Nm)	Torque (Nm)
1 - 4	1 - 4	1.8	1.8

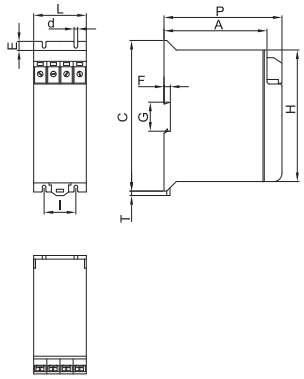
TYPICAL ATTENUATION



MECHANICAL DIMENSIONS mm

Model	L	d	E	I	P	A	C	T	G	F	H	Weight Kg.	Case
FIN740.068.M	59	4.5	10	35	130	112	166	4	37.5	7	146	1.15	1

CASE 1



ASSEMBLY CONNECTION "M"