ENERDOOR
Engineered by Finmotor

Filter Selection Guide Parallel Filters	Description	Voltage	CONNECTORS						FEATURES					APPLICATIONS					Approval
			Faston	Terminal Blocks	Screws	Bus Bar	Cables	IEC Connector/ Faston	DIN Rail Mount	Long Cable Applications	High Att. Low Frequency	Book Case Style	Low Leakage Current	Multiple Drives	Automation	Renewable Energy	Commercial Building	Recharging Station	
FIN130SP	3-phase	0-600		•					•	•	•				•		•		c UL us
FIN230SP	3-phase	0-600		•					•	•	•			•	•	•			c UL us
FIN730	3-phase	0-750		•					•		•			•	•	•		•	c UL us
FIN735	3-phase	0-650		•					•								•		c UL us
FIN740	3-phase plus neutral	0-480		•					•	•	•			•	•	•		•	c UL us

THREE-PHASE PARALLEL FILTERS

Enerdoor three-phase parallel filters stand as a formidable defense against electrical noise emanating from variable frequency drives, SCRs, controllers, and high-commutation electrical equipment.

Unlike other filters, only one parallel filter is needed for any current range, making it a versatile and cost-effective choice. Compact and uniquely designed, it attenuates RF noise in lower frequencies, ensuring comprehensive protection.

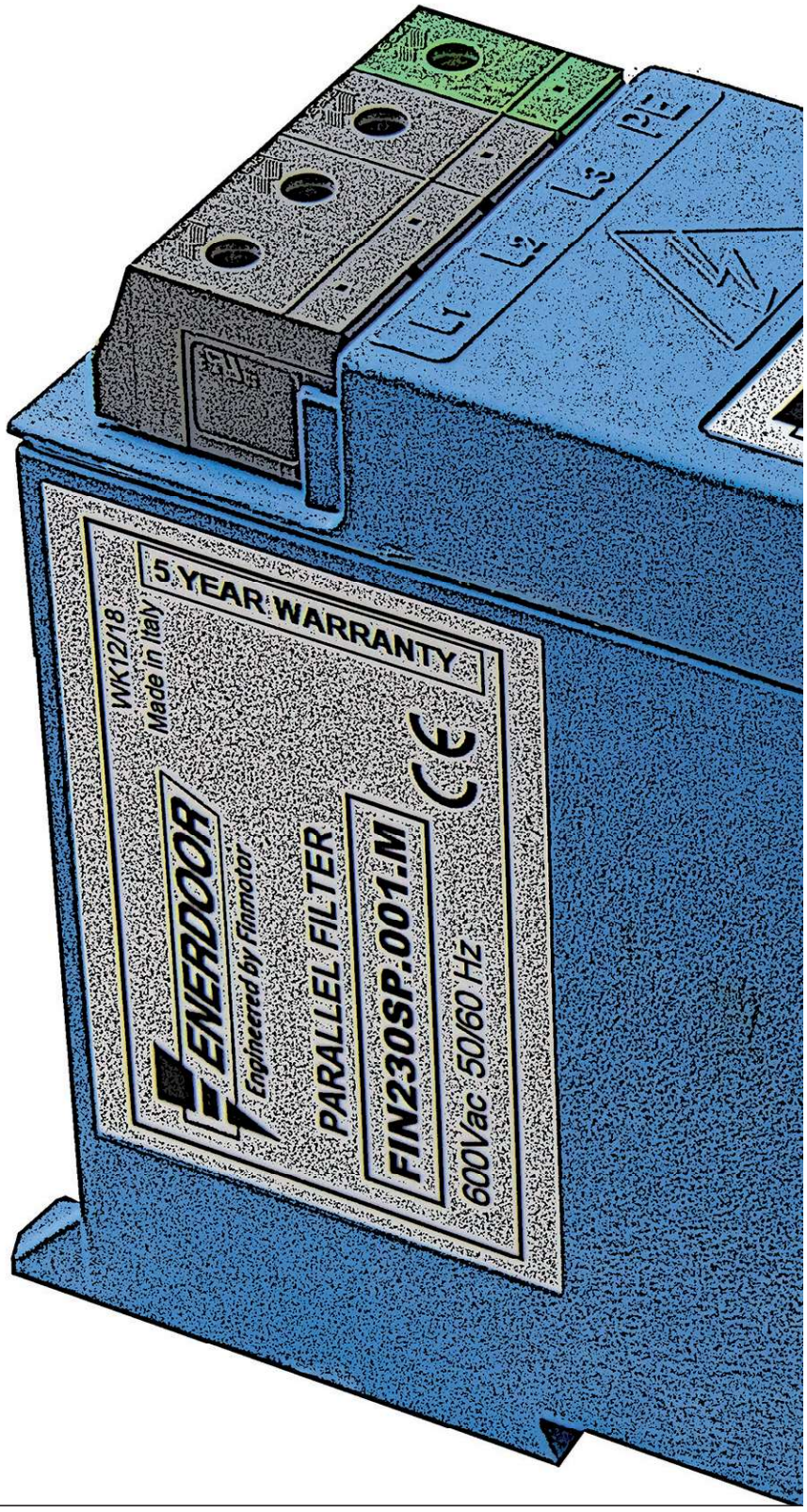
With high attenuation in the frequency range of 10 KHz to 10 MHz, this series addresses low to medium frequency concerns, providing a solution for diverse applications. The parallel filter series guarantees EMI/RFI protection in any environment, safeguarding equipment from malfunctions and minimizing production downtime.

Available with a nominal voltage of up to 750 Vac and adaptable to any current level thanks to its parallel connection, this series is offered in both 3-phase and 3-phase plus neutral configurations. With CE and UL approvals, it ensures easy installation using either panel or DIN rail mounting options.

The FIN230SP.001.M filter is a general-purpose choice for OEM equipment. The FIN730.001.M filter was designed specifically for regenerated systems and OEM equipment, targeting the low-frequency range of 10 kHz to 4 MHz.

Parallel filter applications include:

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



Datasheet 202405

Active PE ground noise reducer with excellent performance for industrial and residential applications.

APPROVALS:

CE RoHS UKCA

FIN E-CL

FEATURES

- Clean the PE
- Safety terminal block
- Over temperature protection
- Actively reduces noise on PE

BENEFITS

- Eliminates noise interference on PE ground
- Compact design

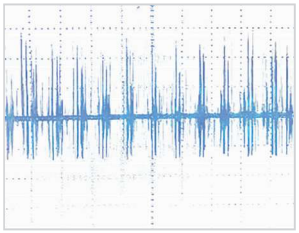
MARKETS

- Variable frequency drives
- Automated machinery
- Packaging machinery
- Processing equipment

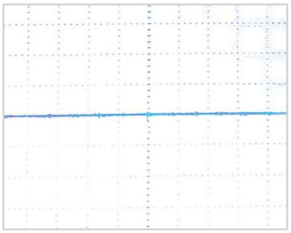
ORDERING CODE

ECL	.01	.M	.A
Model		Connection	Voltage supply
		M = Terminal block	A = 115/230 VAC B = 400/480 VAC

TYPICAL MEASUREMENT



Typical noise on ground busbar



Effect of E-Cleaner on ground busbar noise

TECHNICAL SPECIFICATIONS

Nominal voltage	115, 230, 400, 480 VAC
Frequency	50 - 60 Hz
Max power dissipation	10W
Fan dissipation	20W
IP protection	IP20
Climatic class	-40 to 85°C
MTBF at 40°C	250,000 Hours

E-CLEANER E-CL

Ground Noise Reducer

ELECTRICAL CHARACTERISTICS

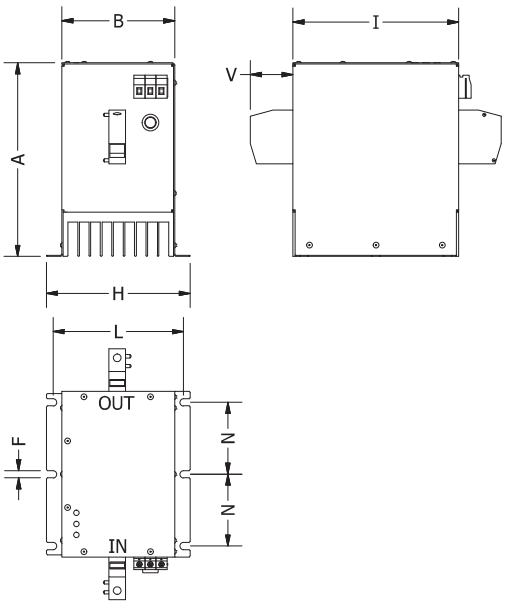
CONNECTIONS

E-CL	Nominal Voltage AC (Vac)	Power Loss (W)	INPUT			OUTPUT		
			Solid Cable (mm^2)	Stranded Cable (mm^2)	Terminal Torque (mm^2)	Solid Cable (mm^2)	Stranded Cable (mm^2)	Terminal Torque (mm^2)
.01.M.A	115/230	<5	6 - 16	10 - 35	4.5	6 - 35	4 - 25	4.5
.01.M.B	400/480	<6	6 - 16	10 - 35	4.5	6 - 35	4 - 25	4.5

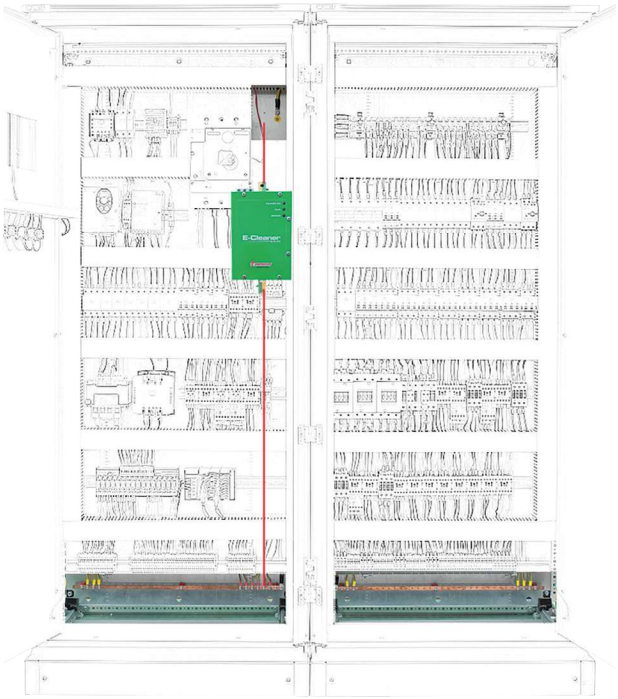
MECHANICAL DIMENSIONS mm

E-CL	A	B	F	H	I	L	N	V	Weight Kg.	Case
.01.M.A	175	102	6.5	130	150	118	65	38,5	2	1
.01.M.B	175	102	6.5	130	150	118	65	38,5	2	1

CASE 1



CONNECTIONS



Datasheet 202405

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

APPROVALS:

E215863

FIN130SP.001.M

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent differential and common mode attenuation in low frequency range (50 kHz - 5 MHz)

BENEFITS

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

MARKETS

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

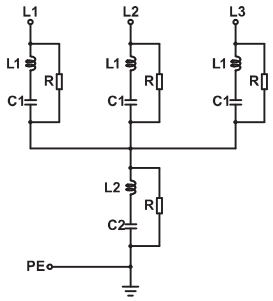
ORDERING CODE

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 to 85°C
MTBF at 40°C	250,000 Hours

* **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

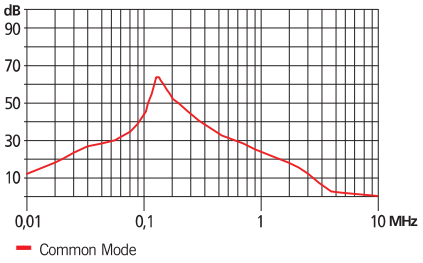
CONNECTIONS

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

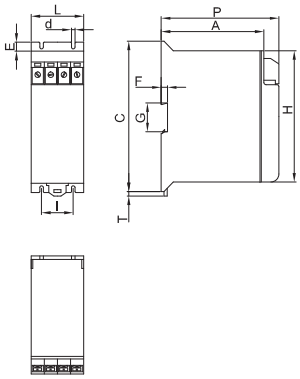
FIN230SP.001M / FIN735.001.M



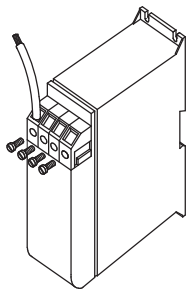
MECHANICAL DIMENSIONS mm

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"



Datasheet 202405

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

APPROVALS:

E215863

FIN730.001.M (C - LCP)

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent differential and common mode attenuation in low frequency range (30 kHz - 10 MHz)

BENEFITS

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

MARKETS

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

ORDERING CODE

FIN 730.001. .M

Model — Nominal voltage

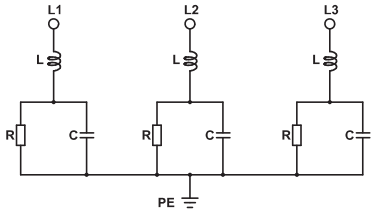
M = 750Vac

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 to 85°C
MTBF at 40°C	250,000 Hours

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

FIN730

Three-Phase Parallel Filter

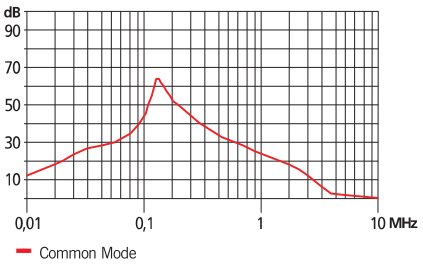
ELECTRICAL CHARACTERISTICS

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

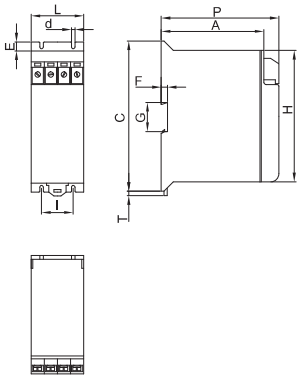
TYPICAL ATTENUATION



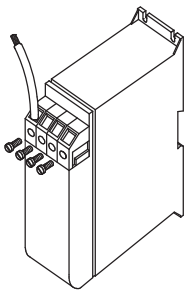
MECHANICAL DIMENSIONS mm

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"



Datasheet 202405

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

APPROVALS:

E215863

FIN740.068.M

FEATURES

- Independent from nominal current
- Low leakage current
- DIN rail or panel mounting
- Excellent differential and common mode attenuation in low frequency range (30 kHz - 10 MHz)

BENEFITS

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

MARKETS

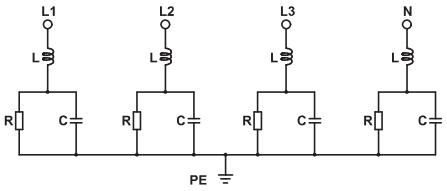
- CNC machinery
- Recharging stations
- Multiple drive applications
- Renewable energy

ORDERING CODE

FIN740	.068	.M
Model		Connection
		M = Terminal block

ATTENUATION INDICATOR

ELECTRIC DIAGRAM



TECHNICAL SPECIFICATIONS

Nominal voltage	0 - 480 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 to 85°C
MTBF at 40°C	250,000 Hours

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

FIN740

Three-Phase + Neutral Parallel Filter

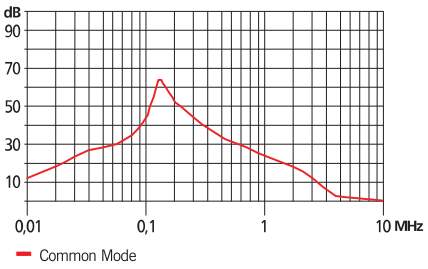
ELECTRICAL CHARACTERISTICS

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

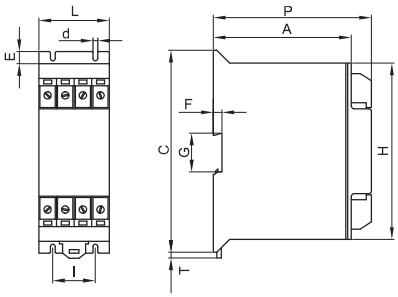
TYPICAL ATTENUATION



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"