

Footprint and Block RFI filters for
MOELLER
DF5, DV5, DF6 and DV6 motor inverters

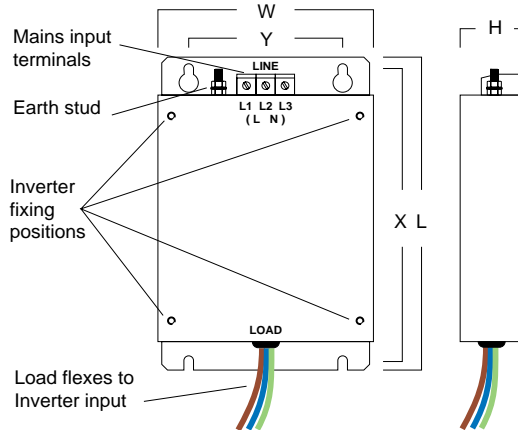


FP-100



- The **FP-100** range, especially for Moeller DF5 and DV5 Series inverters.
- Help to ensure EMC compliance of machinery and installations using DF5 and DV5 drives.
- Footprint filters mount between the inverter and the panel, saving valuable space inside wiring cabinets.
- All filters are designed and manufactured to UL requirements and are CE marked.

Footprint Type Dimensions



Applied DF5 Inverter	Applied DV5 Inverter	Filter Part No	Rated Current	Max Rated Voltage	Leakage current Nom / Max	External L x W x H (mm)	Mount Dims X x Y (mm)	Inverter Fixing	EMC Tested	UL
DF5 322 018 DF5 322 037	DV5 322 018 DV5 322 037 DV5 322 055	FP 1007 100	6A	1ph, 250V	3.5mA	156 x 83 x 30	146 x 60	2 x M4	✓	✓
DF5 322 055 DF5 322 075	DV5 322 075 DV5 322 1K1	FP 1012 100	10A	1ph, 250V	3.5mA	166 x 114 x 30	156 x 80	4 x M4	✓	✓
DF5 322 1K1 DF5 322 1K5 DF5 322 2K2	DV5 322 1K5 DV5 322 2K5	FP 1024 100	23A	1ph, 250V	3.5mA	220 x 146 x 35	210 x 100	4 x M5	✓	✓
DF5 340 037 DF5 340 075 DF5 340 1K5	DV5 340 037 DV5 340 075 DV5 340 1K5 DV5 340 2K2	FP 3007 100	6A	3ph, 480V	0.5 / 14mA	166 x 114 x 35	156 x 80	4 x M4	✓	●
DF5 340 2K2 DF5 340 3K0 DF5 340 4K0	DV5 340 3K0 DV5 340 4K0	FP 3012 100	12A	3ph, 480V	0.5 / 14mA	220 x 146 x 35	210 x 100	4 x M5	✓	●
DF5 340 5K5 DF5 340 7K5	DV5 340 5K5 DV5 340 7K5	FP 3022 100	22A	3ph, 480V	0.5 / 38mA	305 x 186 x 50	289 x 140	4 x M6	✓	●

UL Approval Status - ✓ Complete, ● Pending

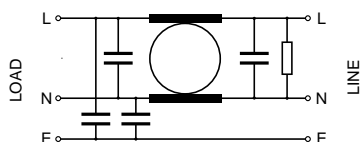
Earth Leakage Measurements

In single phase applications, the earth leakage current is present all of the time.

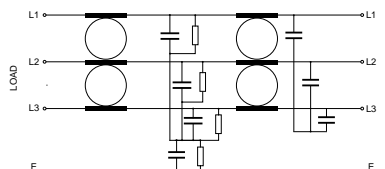
For three phase applications under normal conditions with the three phases balanced, earth leakage currents are extremely small - the max values stated are worst possible values such as would occur momentarily during switch on or failure of one or two phases.

Typical Circuit Schematics

Single Phase



Three Phase

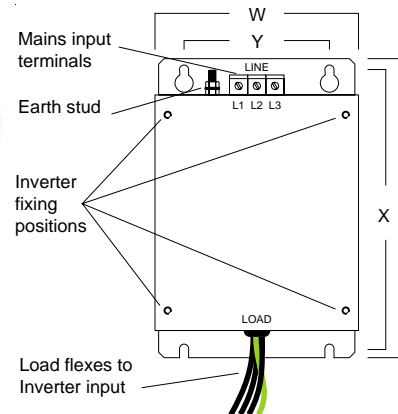


FP-300 RF-300

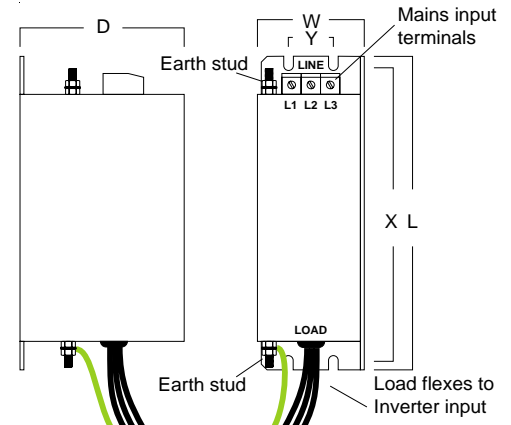


- The **FP-300** and **RF-300** ranges, especially for Moeller DF6 and DV6 Series inverters.
- Help to ensure EMC compliance of machinery and installations using DF6 and DV6 drives.
- Footprint filters mount between the inverter and the panel, saving valuable space inside wiring cabinets. Block filters mount beside the inverter.
- All filters are designed and manufactured to UL requirements and are CE marked.

FP Footprint Type Dimensions



RF Block Type Dimensions



Applied DF6 Inverter	Applied DV6 Inverter	Filter Part No	Rated Current	Max Rated Voltage	Leakage current Nom / Max	External L x W x H (mm)	Mount Dims X x Y (mm)	Inverter Fixing	EMC Tested	UL
-	DV6 340 075 DV6 340 1K5 DV6 340 2K2 DV6 340 4K0 DV6 340 5K5	FP 3016-300	16A	3ph, 480V	0.5 / 40mA	305 x 152 x 45	290 x 110	4 x M5	✓	●
DF6 340 11K DF6 340 15K	DV6 340 7K5 DV6 340 11K	FP 3040-300	40A	3ph, 480V	0.5 / 40mA	315 x 213 x 53	300 x 170	4 x M6	✓	●
DF6 340 18K5 DF6 340 22K DF6 340 30K	DV6 340 15K DV6 340 18K5 DV6 340 22K	FP 3077-300	77A	3ph, 480V	0.5 / 42mA	459 x 253 x 60	444 x 210	4 x M6	✓	●
DF6 340 37K	DV6 340 30K	RF 3092-300	92A	3ph, 480V	0.5 / 42mA	400 x 105 x 195	384 x 65	-	✓	●
DF6 340 45K DF6 340 55K	DV6 340 37K DV6 340 45K DV6 340 55K	RF 3150-300	150A	3ph, 480V	0.5 / 40mA	479 x 110 x 240	464 x 80	-	✓	●

UL Approval Status - ✓ Complete, ● Pending

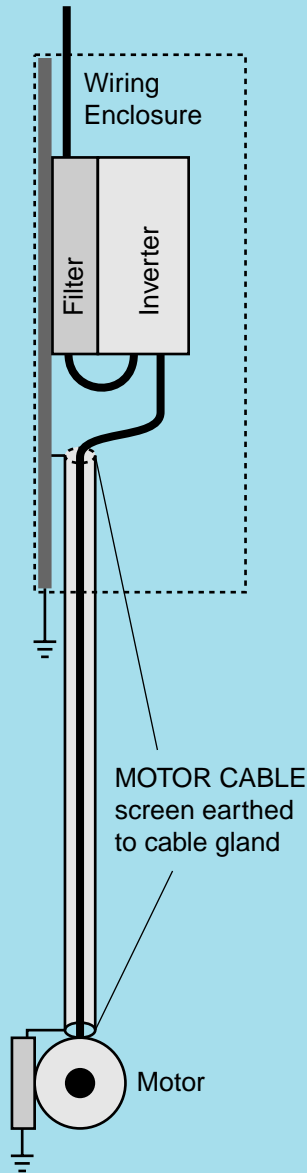
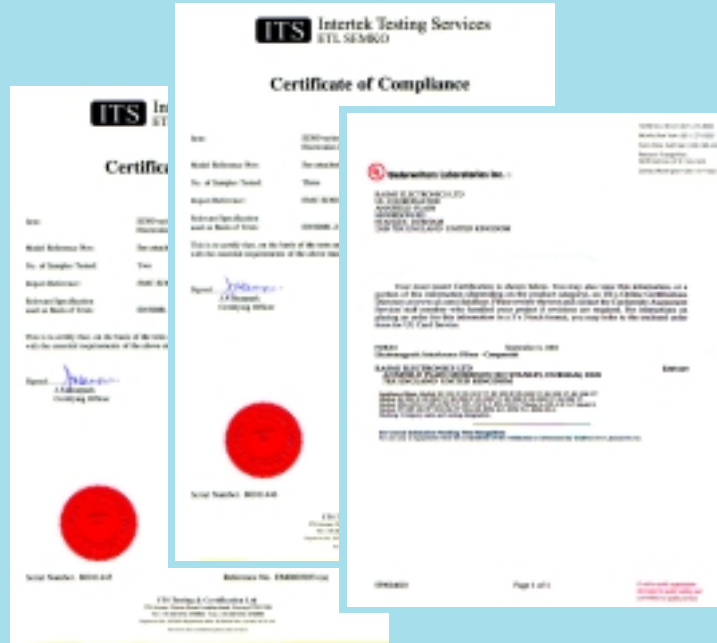
Design and Test Criteria

Generally with motor drive systems the emission levels are greatly affected by the length of the cable between the drive itself and the motor - longer cables will cause considerably higher emissions.

These inverter / filter combinations have been designed and tested to achieve compliance to :-

EN 55022:1994, Class B for use in domestic / light industrial environments (equivalent to the RF emissions tests of Power Drive Standard EN 61800-3:1996 for drives with <25A input current) when fitted with up to 25m motor output cable and to EN 55011:1991 Group 1, Class A for use in industrial environments (equivalent to the RF emissions tests of Power Drive Standard EN 61800-3:1996 for drives with >25A input current) when fitted with up to 50m motor output cable.

UL approval documentation and EMC Test Certificates from Independent Test House



Filter Installation Notes

To conform to EMC directives, it is essential that good wiring practice is observed and that all installation recommendations are followed.

- ◆ The usual safety procedures when working with electrical equipment must be followed and all electrical connections to the filter, inverter & motor must be made by a qualified electrical technician.
- ◆ Filters should be fitted as closely as possible to the incoming mains supply of the wiring enclosure, usually directly after the enclosures circuit breaker or supply switch.
- ◆ Care should be taken to remove any paint etc. from filter and inverter mounting holes and face area of the panel to ensure the best possible earthing of the units.
- ◆ All lead lengths should be kept as short as possible and incoming mains, outgoing motor cables and control cables should be kept well separated. Cable earth screens should only be stripped back as far as necessary to make connections - screens should be securely earth bonded to the wiring panel.

DUE TO CONTINUAL PRODUCT DEVELOPMENT, SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



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