CleanPower

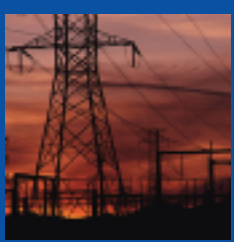
Filter *RANGE*

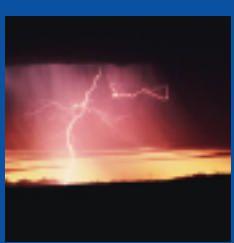
Designed for

- **screened rooms, enclosures, cabinets, industrial power and equipment applications**
- **versatility of chassis or bulkhead mounting**
- **high quality, high reliability, ruggedness, safety and corrosion resistance**
- **single box solution to EMC requirements**
- **full frequency spectrum performance- incorporates MPE feedthrough capacitors**
- **optimum performance for unit cost**

Designed to

- **eliminate EMI from power supply lines**
- **have minimum losses for supply frequencies DC - 400Hz**
- **provide full performance to beyond 1GHz**
- **ensure very high attenuation to symmetric and asymmetric EMI**
- **protect against conducted emissions and lightning**
- **reduce susceptibility of equipment to EMI**
- **provide enclosed terminals for maximum personnel safety**





MPE

MPE is a leading European designer and manufacturer of high performance electrical filters and capacitors.

Established over 70 years ago, originally as the Dubilier Condenser Company, MPE provides a **World Of Solutions** to your individual interference problems.

MPE has unrivalled experience in designing and supplying high performance products to major European equipment manufacturers. Having ISO9001 factory approval, and several product approvals, MPE is the leader in providing practical solutions for **EMC/EMI/ EMP/TEMPEST** problems in demanding applications. These include telecommunications, specialist vehicles, industrial process equipment, computer and test facilities.

With more than 20,000 custom filter designs, MPE has the best experience to enable you to achieve your EMC requirements.

THE PRODUCT RANGE

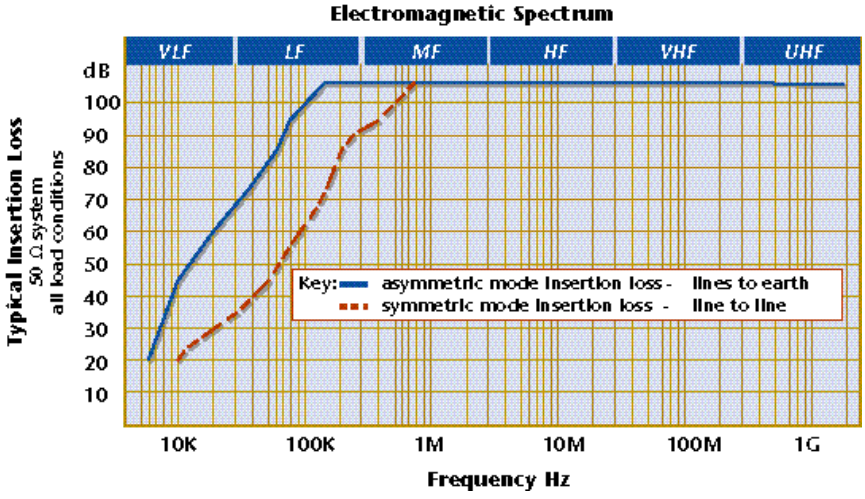
For any EMC strategy applied to a system design, the selection of the appropriate EMI filter is of prime importance. The MPE CleanPower range of EMI filters attenuates interference in the form of conducted emissions. It will also limit radiated emissions in a properly shielded system. The filters are bi-directional and are designed to reduce equipment generated EMI from emanating into the environment as well as protecting the integrity of the installation against hostile incident EMI. The terminal compartments of the filter are fully gasketed and EMI sealed and are designed to allow the filter to be mounted either internal or external to the equipment boundary.

High reliability and safety characteristics are inherent in the CleanPower range of EMI filters. The filters use proprietary self healing metallised plastic film feedthrough capacitors. The filters are designed to comply with the appropriate safety requirements of EN60950 and relevant insulating components are made from UL listed material to flammability class UL 94V-0. The filter case is manufactured from corrosion resistant stainless steel.

General Technical Specification

Operating temperature range	-45°C to +85°C
Maximum temperature rise on full load	20°C
Storage temperature	-55°C to +100°C
Filter capacitor discharge time to <30V	30s maximum
Current overload rating	10x rated current for 1 second 1.5x rated current for 15 minutes
Voltage overload rating (not appropriate to transient suppressed filters)	1.1x rated voltage continuously 1.5x rated voltage for 1 minute
Proof voltage test	2250VDC line to line and line to earth
Protection index guide	IP64
Flammability- appropriate components	UL 94V-0
Transient suppression - when specified	Peak surge current 10kA 8/20µs Peak energy absorption 270J 2ms

Insertion Loss Performance



Installation and Safety

For full safety and optimum performance the filter must be SOLIDLY and PERMANENTLY earthed in accordance with current safety regulations. The filter includes an integral safety earth, and the terminal compartments are fully enclosed. A true low impedance earth bond should be made between the filter enclosure and a clean paint free metal surface of a chassis or bulkhead. The filter is self discharging, but usual industry safety practice of confirmation of discharge by short circuiting after power supply is removed should be observed.

CleanPower Filters

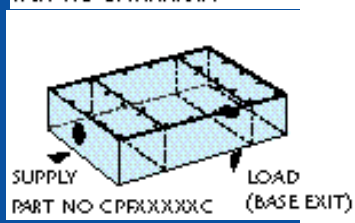
MPE

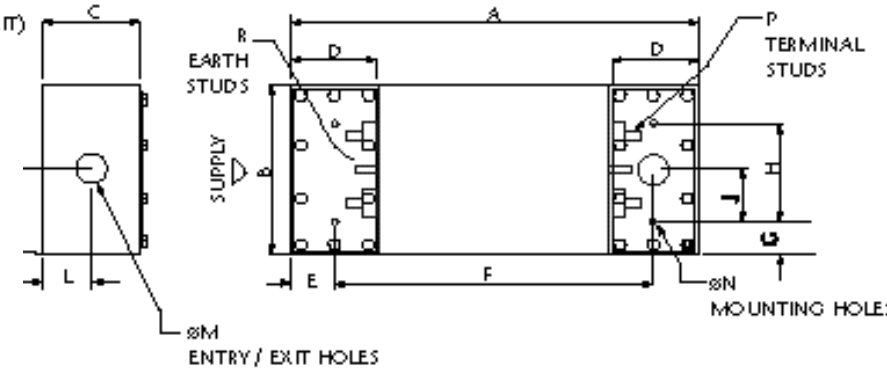
Interference solutions

RATINGS

SINGLE PHASE & NEUTRAL 250VAC 50Hz SPN Also suitable for: 300VAC 50/60Hz SPN 300/520VAC 50/60Hz 2-Phase 115VAC 400Hz SPN 400VDC 2-Line				LINE CURRENT RATING AT 50°C	THREE PHASE & NEUTRAL 250/440VAC 50Hz TPN Also suitable for: 300/520VAC 50/60Hz TPN 115/200VAC 400Hz TPN			
Part Number	Volt Drop	Power Loss	Leakage		**Part Number**	Volt Drop	Power Loss	Leakage
CPF41006	400mV	5W	100mA	**6A**	**CPF43006**	300mV	10W	200mA
CPF41016	300mV	10W	200mA	**16A**	**CPF43016**	200mV	15W	300mA
CPF41032	200mV	15W	300mA	**32A**	**CPF43032**	150mV	20W	500mA
CPF41063	100mV	20W	400mA	**63A**	**CPF43063**	80mV	25W	700mA
CPF41100	80mV	25W	600mA	**100A**	**CPF43100**	60mV	30W	1000mA
CPF41160	60mV	30W	800mA	**160A**	**CPF43160**	40mV	40W	1300mA

CABLE ENTRY OPTIONS

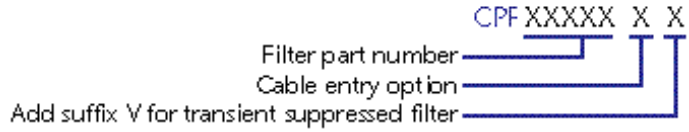




DIMENSIONS & WEIGHTS (mm & kg)

Part Number	A Length	B Width	C Height	D	E	F	G	H	J	K	L	M	N	P	R	Weight
CPF41006	220	80	45	60	20	180	15	50	25	40	20	16	7	M4	M5	2
CPF43006	220	150	45	60	20	180	25	100	50	75	20	16	7	M4	M5	3
CPF41016	250	110	50	60	25	200	25	60	30	55	25	20	7	M4	M5	3
CPF43016	250	180	50	60	25	200	25	130	65	90	25	20	7	M4	M5	4
CPF41032	350	120	60	70	30	290	25	70	35	60	30	20	9	M5	M6	5
CPF43032	350	200	60	70	30	290	25	150	75	100	30	25	9	M5	M6	8
CPF41063	400	140	75	80	35	330	25	90	45	70	35	25	9	M6	M8	8
CPF43063	400	230	75	80	35	330	25	180	90	115	35	32	9	M6	M8	12
CPF41100	500	200	90	100	40	420	25	150	75	100	45	32	11	M8	M10	18
CPF43100	500	240	90	100	40	420	25	190	95	120	45	32	11	M8	M10	20
CPF41160	600	210	105	110	45	510	25	160	80	105	50	32	11	M10	M12	25
CPF43160	600	250	105	110	45	510	25	200	100	125	50	40	11	M10	M12	30

ORDERING INFORMATION



MPE Ltd
Hammond Road
Knowsley Industrial Park
Liverpool L33 7UL. UK

Sales telephone +44 (0) 151 632 9100
Fax +44 (0) 151 632 9112
Technical helpline +44 (0) 151 632 9199
E-mail sales@mpe.co.uk
Web site www.mpe.co.uk