

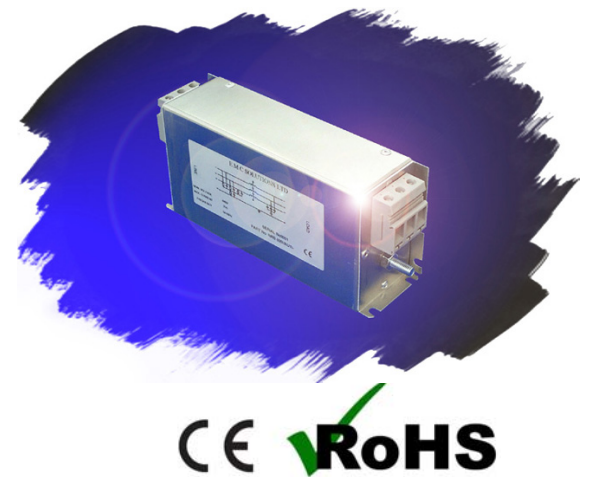
Micro Drive Filters

Current Ratings: **8, 16, 25, 36, 50, 80, 120, 150, 180, 225** AMPS.
Operating Voltage: Single Phase 230V, Two Phase & Three Phase 520V A.C.

The u100 filter has been specifically designed to overcome EMC problems inherently caused by the frequency converters in motor drive applications especially where size constraints are an issue.

This new range of micro size filters have high attenuation factors and high current capabilities without having a large profile. Motor drives electronically switch high voltages and currents to improve efficiency and reduce acoustic noise in the motor. This switching generates high levels of Radio Frequency Interference (RFI) and high energy surges which can disturb or damage other electronics circuits. The u100 series is a single stage design in 2, 3 or 4 line formats, with excellent suppression characteristics particularly at 3 - 10 MHz where filtered drives tend not to perform and require effective attenuation.

The filter components are housed in compact chassis mounted, aluminum enclosures that allows side or base mounting, it is then encapsulated in a polyurethane potting compound to give excellent protection against shock and vibration. These combinations give a total range of over 40 filter applications.



TYPICAL APPLICATIONS

- Variable speed motor controllers
- High current switch mode power supplies
- Thyristor driven equipment
- Air conditioners/Fan controllers
- Uninterruptible power supplies
- Pulse width modulation circuits

TECHNICAL ADVANTAGES

- High current capability
- Micro size
- High common & differential mode insertion loss
- Improved mid frequency performance
- Insulated safety screw contacts
- Side or base mounting
- Optional input transient suppression to suit application

COMMERCIAL ADVANTAGES

- High current capability
- Micro size
- High common & differential mode insertion loss
- Improved mid frequency performance
- Insulated safety screw contacts
- Side or base mounting
- Optional input transient suppression to suit application

Technical Specifications

Current (Amps)	No of Lines	Operating Voltage @ 50-60Hz	Max AC Volt Drop @ Full Load	Earth Leakage mA	Inductance Per Line (Typical) mH	Transient Energy Absorption (Typical)	Storage Temp Range	Temp Rise @ Full Load	Termination Type	Dimensions																							
										A	B	C	D	E	F	G	H	I	J														
8	2/3/4	230V – 520V	<0.6V/Line	2 - 10	1.4	75J Optional	-25 ~ +85°C	<40°C	Fast on termination	120	60	40	100	110	24	30	52	5	M4 x 15mm														
16										Insulated Screw Terminal (Phoenix Contact)	170	80	50	150	160	36	50	70	5	M6 x 20mm													
25											230	130	70	200	214	50	60	105	6														
36				10-20	0.7																												
50																																	
80																																	
120				30-50	0.4						300	200	100	260	276	80	20	180	6		M8 x 20mm												
150																																	
180																																	
225																																	

STANDARDS

The u100 range of filters is built in accordance with the relevant BS, VDE, UL, CE & CSA safety standards.

All Total EMC Products Ltd filters & power supplies are designed to meet the latest requirements for Health and Safety, Particularly EN 60939-2-2005

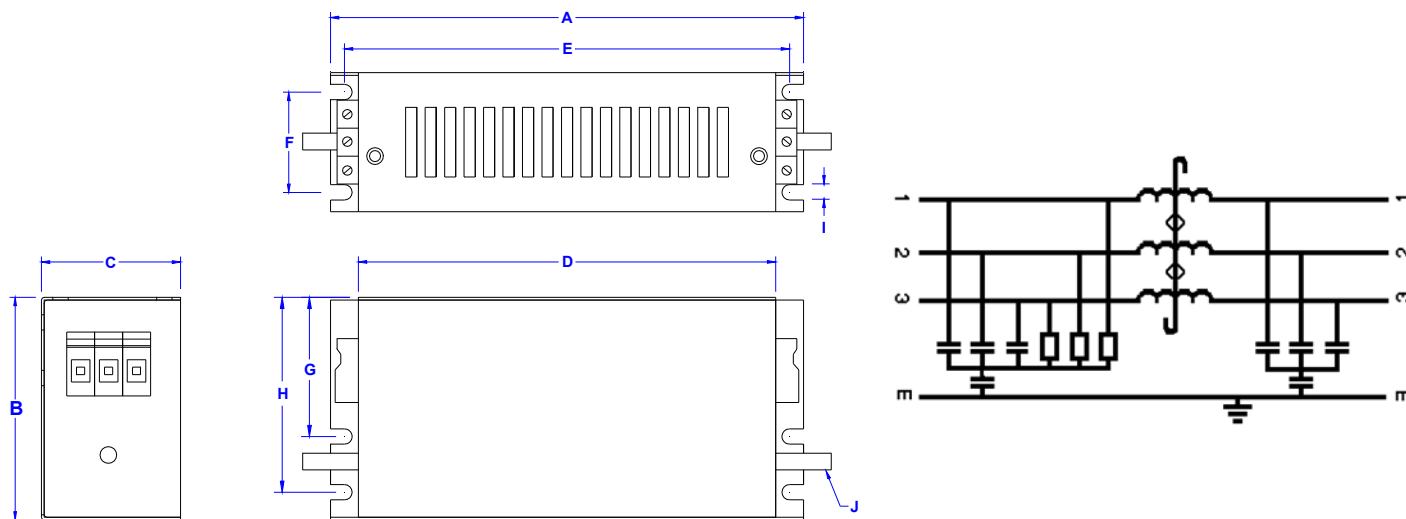
The u100 range is specifically designed to assist AC input - AC Output industrial frequency converters to meet European Emission standards. E.g. EN55011, EN55014, EN55022, EN50081-2 and EN50081-1.

REGULATIONS

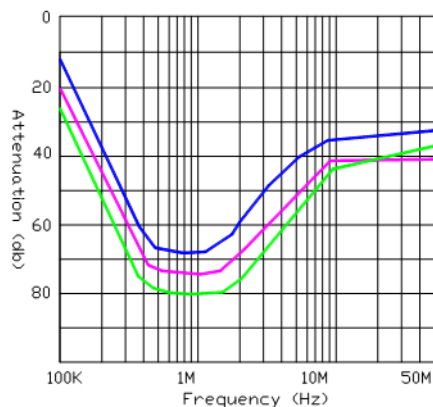
From the 15th of December 2004 all electrical/electronic apparatus - with few exceptions - sold or taken into service within the European Community must comply with the essential requirements of the EMC directive 2004/108/EC.

Failure to do so is a criminal offence in the U.K.

Dimensional Data & Schematic



Performance characteristics insertion loss curves



8A – 50A
80A – 150A
180A – 225A

Part number / Ordering information

U100/*/**/1/****

U100 = Range of filter

***** = No of Lines on filter (2,3,4)

***** = Options (listed below)

******* = Amp Rating of filter

1 = No of Stages on filter

Options: T = Transient, E = Earth Line Choke, H = High Transient,
M = Medical, - = Neither (no options)

In addition to the standard range of filters & power supplies, Total EMC Products specialize in the design and manufacture of filters to suit your specific requirements. Due to continuous development Total EMC Products Ltd reserve the right to amend any information contained within this datasheet without prior notice.

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