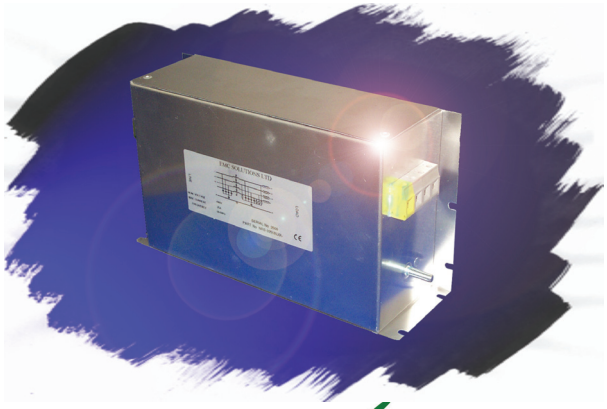
DC Drive Filters

Current Ratings: 5, 10, 15, 25, 32, 50, 80, 120, 150, 180 AMPS.
Operating Voltage: Single Phase, Two Phase & Three Phase. 230V to 520VA.C.

The u700 filter has been specifically designed to overcome EMC problems inherently caused by the DC drives in motor drive applications especially where size constraints are an issue.
This new range of micro size filters has 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 u700 series is a two-stage design in 2, 3 or 4 line formats, with output line inductors to suppress dI/dT switching currents that are harmful to capacitors that are present on the supply.
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 30 filter applications.



CE RoHS

TYPICAL APPLICATIONS

- DC Drive units
- 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 low frequency performance
- Insulated safety screw contacts
- Side or base mounting
- Optional input transient suppression to suit application

COMMERCIAL ADVANTAGES

- Assists compliance with the EMC directive
- State of the art technology ensures superior performance
- Competitively priced
- Micro size - Reduced weight - Cost effective component

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
5	2/3/4	Single Phase 230V Two Phase & Three Phase 230V – 520V	<1V/Line	2-5	5	75J Optional	-25 ~ +85°C	<40°C	Insulated Screw Terminal	170	80	50	150	160	36	50	70	5	M6 x 20mm
10																			
15																			
25				5-10	1.5					230	130	70	200	214	50	60	105	6	
32																			
50																			
80				10-20	0.8					300	200	100	260	276	80	20	180	6	M8 x 50mm
120																			
150				20-50	0.4					400	250	120	320	330	100	20	230	6	
180																			

STANDARDS

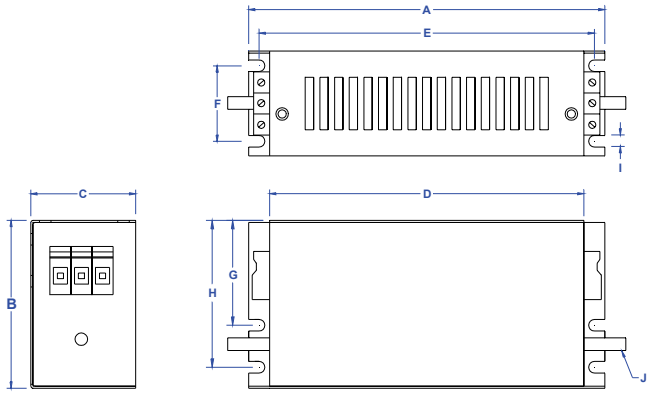
The u700 range of filters are built in accordance with the relevant BS, VDE, UL, CE & CSA safety standards.
All Total EMC Products Ltd filters & power supplies are designed to meet the latest requirements for Health and Safety, Particularly EN 60939-2-2005
The u700 range is specifically designed to assist AC input - DC 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.

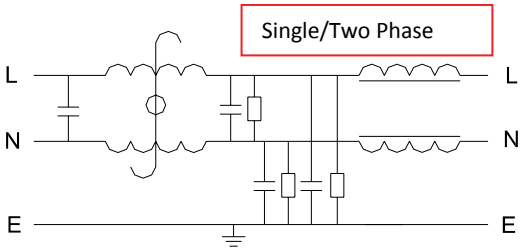
Unit 14 Birmingham Trade Park, Kingsbury Road, Erdington, Birmingham B24 9PS
www.totalemc.com ¦enquiry@totalemc.com ¦Tel: +44(0)121 384 4696

Dimensional Data

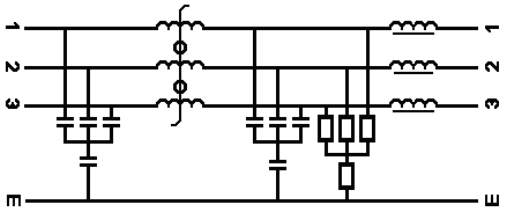


Schematic(s)

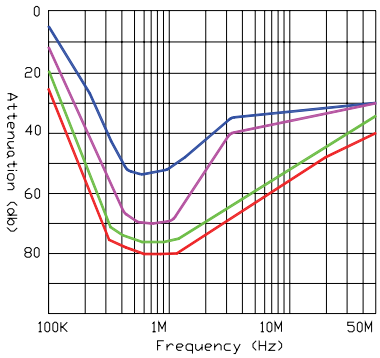
Single/Two Phase



Three Phase



Performance characteristics insertion loss curves



5A-15A
25A-50A
80A-120A
150A-180A

Part number / Ordering information

U700/*/*/2/***

U700 = Range of filter
*** = Amp Rating of filter
* = No of Lines on filter (2,3,4)
2 = No of Stages on filter
* = Options (listed below)

Options: T = Transient, H = High Transient, - = neither (no options)

Example: U700/025/3/2/- (This is a 25A 3 line two stage unit with 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.

© 10/2012 Total EMC Products Ltd. E & OE
The contents of the datasheet must not be copied by any means without prior written agreement.

Unit 14 Birmingham Trade Park, Kingsbury Road, Erdington, Birmingham B24 9PS
www.totalemc.com ¦enquiry@totalemc.com ¦Tel: +44(0)121 384 4696