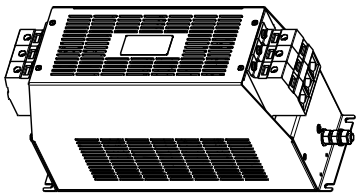
Datasheet



3-line filters

for converters and power electronics

305/530 V, 50/60 Hz, 220 A, 50 °C

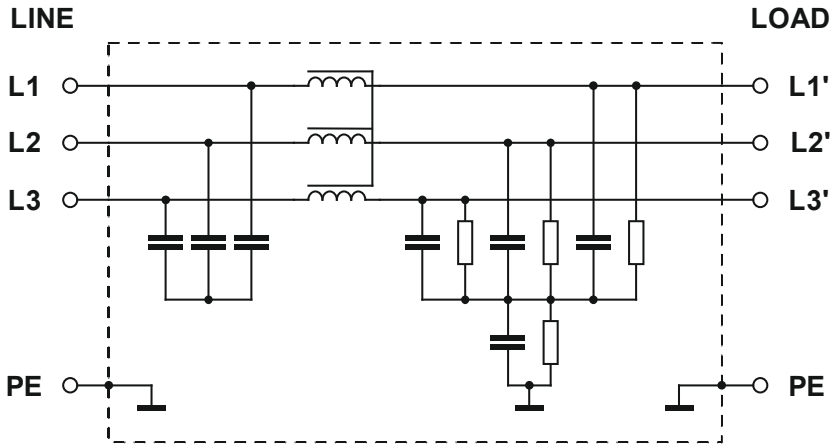
Ordering code:	**B84243A6220B220**
Date:	**2018-07-11**
Version:	01

Customer release

Company	Date
Name	Expected date of first delivery (optional)
Function	Signature

Please send back to EPCOS MAG PEMC or to your EPCOS sales representative

Typical circuit diagram



Technical data and measuring conditions

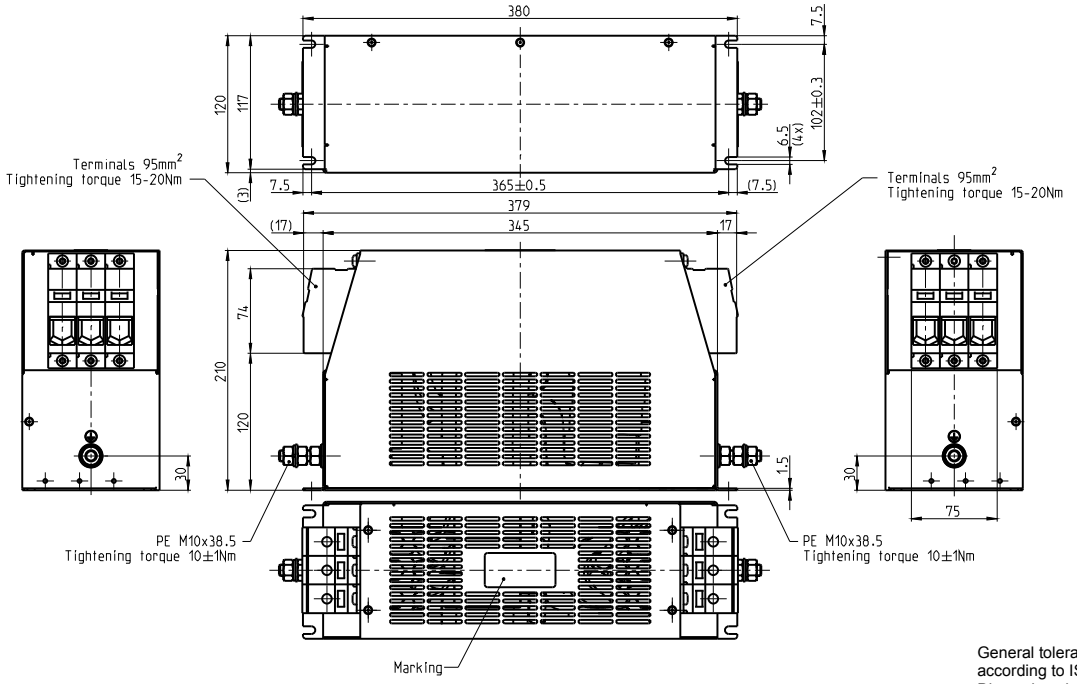
Rated voltage	U_R [L–PE / L–L]	305/530 V AC (50/60 Hz)
Test voltage line to line for 2 s	U_{test}	1770 V DC
Test voltage line to case for 2 s	U_{test}	2700 V DC
Rated temperature	T_R	50 °C
Overload capability (thermal)		1.5 x I_R for 3 min per hour or 2.5 x I_R for 30 s per hour
Leakage current (IEC 60939−1: 2010, Annex A)	I_{LK}	At U_R and 50 Hz
Climatic category (IEC 60068-1: 1992)		25/100/21
Degree of protection (IEC 60529: 2013)		IP 00
MTBF of U_R, T_R		>300000 h

Characteristics and ordering codes

I_R at 50 °C (at 40 °C)	Terminal cross section	I_{LK} [1] U_R =530V (U_R =400V)	I_{LK} [1] (only one Phase connected) at 305V (230V)	R_{typ}	P_v at 50 °C	Approx. weight	**Hitachi-Number** / Ordering code / *(Preliminary code *)*	Approvals [2]		
								IEC 60939	UL 1283	CSA C22.2 No.8
A	mm^2	mA	mA	mΩ	W	kg				
220(230)	95	17 (13)	774 (584)	0.5	77	15	**BPF-P1340-230** B84243A6220B220 *(P30198M001)*	D	D	D

1) **X** = approval granted **P** = pending **D** = designed with reference to **-** = none
*: Development Number

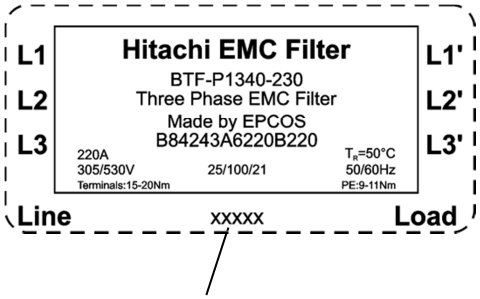
Dimensional drawings



General tolerances
according to ISO 2768-cL
Dimensions in mm

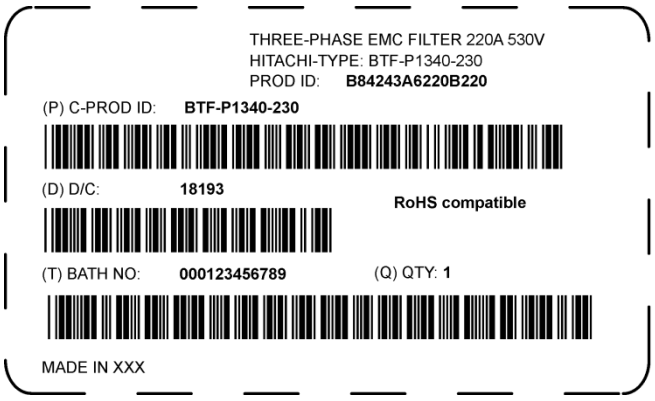
Customer specific labeling

Type label



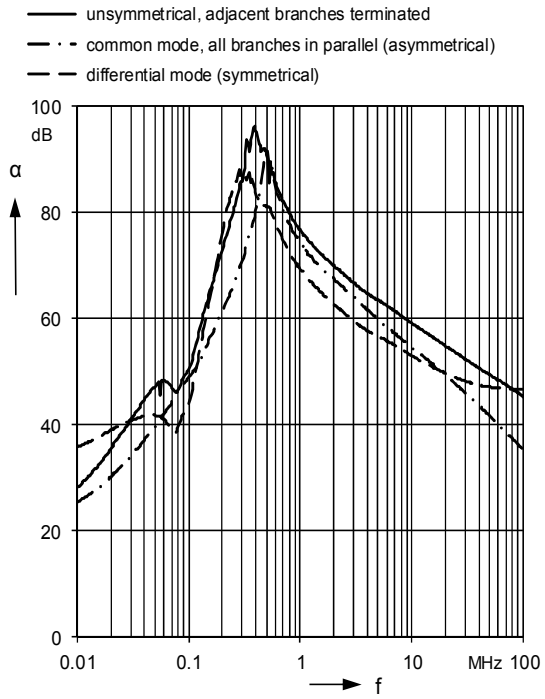
Manufacturing date CYCWD

Packing label (delivery label SAP debitor 122876)



Barcodes only samples!

Insertion loss (typical values at Z = 50 Ω)



Cautions and warnings

- Please note the advices in our data book “EMC Filters” (latest edition); attention should be paid to the chapter “General safety notes”.
- It shall be ensured that only qualified persons (electricity specialists) are engaged on work such as planning, assembly, installation, operation, repair and maintenance. They must be provided with the corresponding documentation.
- Danger of electric shock: Filters contain components that store an electric charge. Dangerous voltages can continue to exist at the filter terminals for longer than five minutes even after the power has been switched off.
- The protective earth connections shall be the first to be made when the filter is installed and the last to be disconnected. Depending on the magnitude of the leakage currents, the particular specifications for making the protective−earth connection must be observed.
- Impermissible overloading of the filter, such as with circuits able to cause resonances, impermissible voltages at higher frequencies etc. can lead to bodily injury and death as well as cause substantial material damages (e.g. destruction of the filter housing).
- Filters must be protected in the application against impermissible exceeding of the rated currents by overcurrent protective devices.
- In case of leakage currents > 3.5 mA you shall mount the PE conductor stationary with the required cross section before beginning of operation and save it against disconnecting. For leakage currents I_L [a)] ≤10 mA the PE conductor must have a KU value [b)] of 4.5; for leakage currents I_{LK} > 10 mA the PE conductor must have a KU value of 6.
- Output chokes and output filters must be protected in the application against impermissible exceeding of the component temperature.
- The converter output frequency must be within the specified range to avoid resonances and uncontrolled warming of the output chokes and output filters.
- Because the product can become very hot during operation, there is the risk of burns if touched. The product can remain hot for some time after the power is switched off!

a) I_L = Leakage current let−go
b) The KU value (symbol KU) is a classification parameter of safety−referred failure types designed to ensure protection against hazardous body currents and excessive heating.(DIN VDE 0800-1, 0800-8, 0800-9)
A value of KU = 4.5 with respect to interruptions is attained:
− with a permanently connected protective earth connections ≥ 1.5 mm^2
− with a protective earth connection ≥ 2.5 mm^2 via connectors for industrial equipment (IEC 60309−2).
KU = 6 with respect to interruptions is achieved for fixed-connection lines ≥ 10 mm^2, where the type of connection and installation is conform to the specification for PEN conductors according to DIN VDE 0100-540.

Display of ordering codes for EPCOS products

The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products**. Detailed information can be found on the Internet under www.epcos.com/orderingcodes

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1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.

2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified.** In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.

3. **The warnings, cautions and product-specific notes must be observed.**

4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous)**. Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.

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