



## Power Factor Correction

5 kvar Harmonic Filter Reactor 440V 50Hz

**Series/Type:** B44066D\*\*\*E\*\*\*  
**Ordering code:** B44066D7005E440  
Date: 2021-03-23  
Version: 1

**Characteristics**

- Highest linearity
- Temperature control via micro switch in inner coil
- Highest life time by high quality materials
- Low losses
- High overloading capability
- Safety device, temperature micro switch
- Aluminium foil winding
- Low noise


**Technical data**

|                                                                                                                  |                       |      |
|------------------------------------------------------------------------------------------------------------------|-----------------------|------|
| De-tuning factor p                                                                                               | 7                     | %    |
| Effective filter output $Q_C$                                                                                    | 5                     | kvar |
| Rated voltage $V_R$ <sup>1)</sup>                                                                                | 440                   | V    |
| Rated frequency f                                                                                                | 50                    | Hz   |
| Ambient temperature / Insulation class                                                                           | 40 / H                | °C   |
| Capacitance C delta (tot.)                                                                                       | 76.45                 | µF   |
| Inductivity L                                                                                                    | 3 · 9.27              | mH   |
| Fundamental current $I_1$ <sup>3)</sup>                                                                          | 6.91                  | A    |
| Linear up to <sup>4)</sup>                                                                                       | 11.35                 | A    |
| Effective current $I_{RMS}$ <sup>2)</sup>                                                                        | 7.45                  | A    |
| Rated harmonic voltages (3 <sup>rd</sup> /5 <sup>th</sup> /7 <sup>th</sup> /11 <sup>th</sup> /13 <sup>th</sup> ) | 0.5 / 6 / 5 / 3.5 / 3 | %    |
| Temperature protection (NC)                                                                                      | yes                   | -    |
| Total losses $P_D$                                                                                               | 45                    | W    |
| Total weight                                                                                                     | 6                     | kg   |

<sup>1)</sup> Voltage rise up to 106% of rated voltage is considered in current  $I_{eff}$ .

<sup>2)</sup>  $I_{eff} = \sqrt{I_1^2 + I_3^2 + \dots I_x^2}$

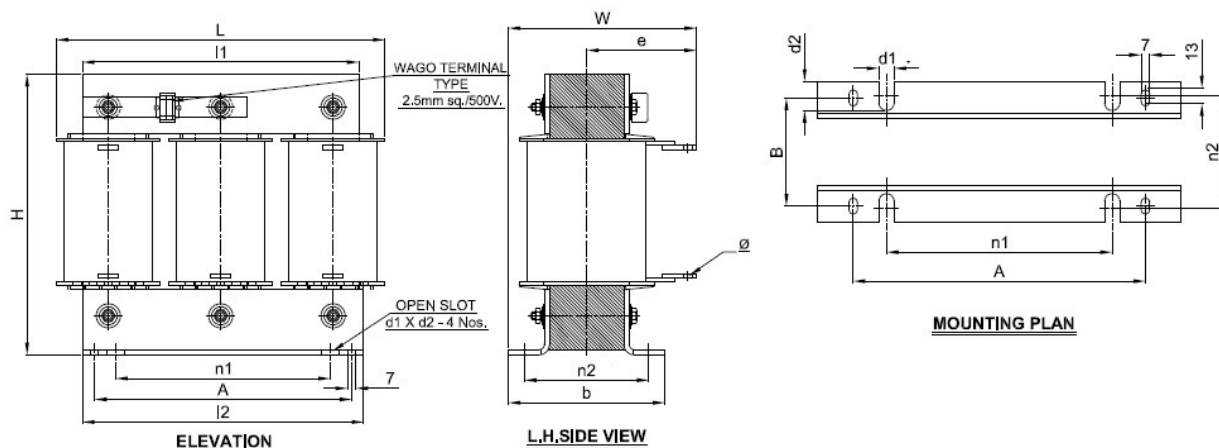
<sup>3)</sup>  $I_1 = 1.06 \cdot I_R$  ( $I_R$  = Capacitor current 50Hz)

<sup>4)</sup> Linear current =  $1.73 \cdot I_R$  ( $I_R$  = Capacitor current 50Hz)

**Connection**

|                     |             |
|---------------------|-------------|
| Line                | 1U1-1V1-1W1 |
| Capacitors          | 1U2-1V2-1W2 |
| Temperature control | 1-2         |

Reference standard IEC60076-6

**Dimensional drawings**

**Dimensions**

|       |        |       |      |
|-------|--------|-------|------|
| L/mm  | 175    | b/mm  | 78   |
| H/mm  | 100    | e/mm  | 62±5 |
| W/mm  | 158±5  | d1/mm | 10.8 |
| l1/mm | 150    | d2/mm | 15.5 |
| l2/mm | 150    | A     | 125  |
| n1/mm | 100    | B     | 58   |
| n2/mm | 61.5±3 | Ø     | 6.5  |

**Cautions and warnings**

- Do not install the reactor in case of any visible damages.
- Installation must be done by skilled personnel only.
- Do not use or store harmonic filter reactors in corrosive atmosphere, especially where chloride gas, sulphide gas, acid, alkali, salt or similar substances are present.
- Do not touch the device during operation: all electrically active parts of this equipment such as windings, electronic components, leads, fuses and terminals carry a dangerous voltage which can lead to burns or electric shock.
- Covers which protect these electrically active parts from being touched must not be opened or removed during operation.
- Before any assembly or maintenance work is started, all installations and equipment must be disconnected from the power source.
- Noncompliance with these instructions may lead to death, serious injury or major damage to equipment.

FAILURE TO FOLLOW CAUTIONS MAY RESULT, WORST CASE, IN PREMATURE FAILURES OR PHYSICAL INJURY.

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