



Power Factor Correction

50 kvar Harmonic Filter Reactor 415V 50Hz

Series/Type: B44066D***J***
Ordering code: B44066D7050J415
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
- Copper winding
- Low noise


Technical data

| | | |
|--|-----------------------|------|
| De-tuning factor p | 7 | % |
| Effective filter output Q_C | 50 | kvar |
| Rated voltage V_R ¹⁾ | 415 | V |
| Rated frequency f | 50 | Hz |
| Ambient temperature / Insulation class | 40 / H | °C |
| Capacitance C delta (tot.) | 859.42 | µF |
| Inductivity L | 3 · 0.82 | mH |
| Fundamental current I_1 ³⁾ | 73.74 | A |
| Linear up to ⁴⁾ | 120.34 | A |
| Effective current I_{RMS} ²⁾ | 78.95 | A |
| Rated harmonic voltages (3 rd /5 th /7 th /11 th /13 th) | 0.5 / 6 / 5 / 3.5 / 3 | % |
| Temperature protection (NC) | yes | - |
| Total losses P_D | 195 | W |
| Total weight | 26 | kg |

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

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

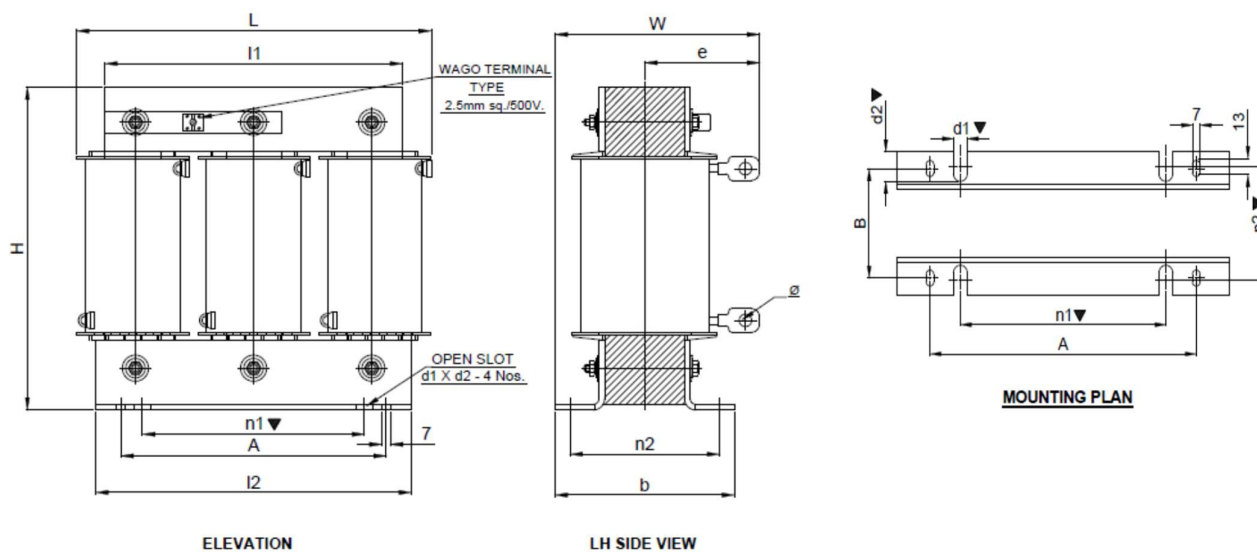
³⁾ $I_1 = 1.06 \cdot I_R$ (I_R = Capacitor current 50Hz)

⁴⁾ 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 | 260 | b/mm | 185 |
| H/mm | 240 | e/mm | 118±5 |
| W/mm | 215±5 | d1/mm | 10.8 |
| l1/mm | 220 | d2/mm | 15.5 |
| l2/mm | 220 | A | 175 |
| n1/mm | 150 | B | 165 |
| n2/mm | 168±3 | Ø | 8.5 |

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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