



Power Factor Correction

100 kvar Harmonic Filter Reactor 415V 50Hz

Series/Type: B44066D***J***
Ordering code: B44066D7100J415
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	100	kvar
Rated voltage V_R ¹⁾	415	V
Rated frequency f	50	Hz
Ambient temperature / Insulation class	40 / H	°C
Capacitance C delta (tot.)	1718.85	µF
Inductivity L	3 · 0.41	mH
Fundamental current I_1 ³⁾	147.47	A
Linear up to ⁴⁾	240.69	A
Effective current I_{RMS} ²⁾	157.90	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	330	W
Total weight	51	kg

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

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

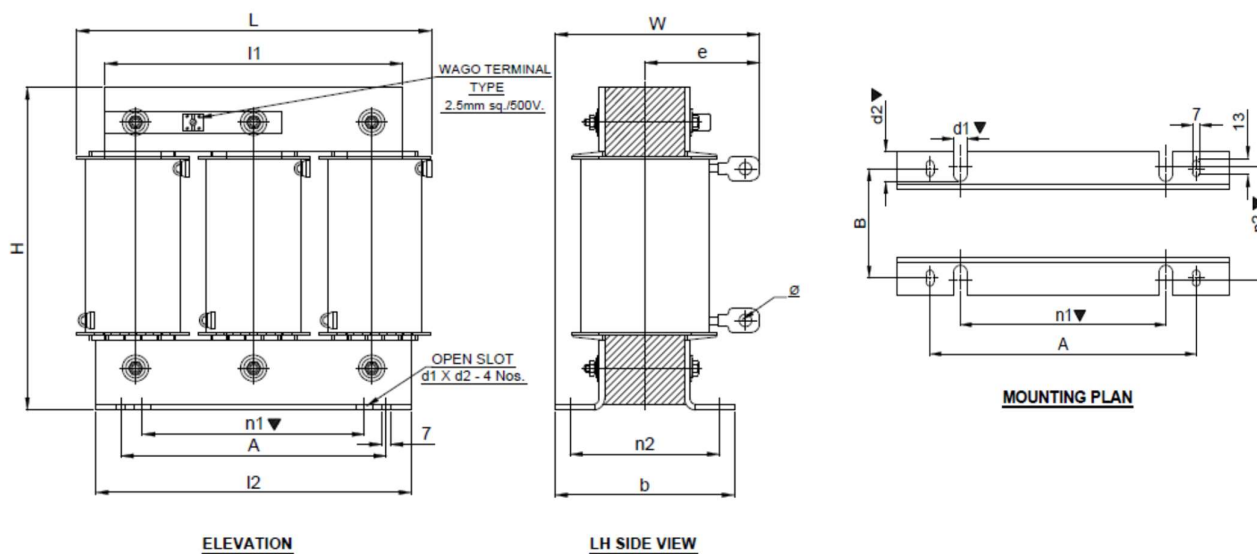
³⁾ $I_1 = 1.06 \cdot I_R$ (I_R = Capacitor current 50Hz)

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	310	b/mm	178
H/mm	270	e/mm	110±5
W/mm	205±5	d1/mm	10.8
l1/mm	265	d2/mm	15.5
l2/mm	265	A	175
n1/mm	150	B	159
n2/mm	162.5±3	Ø	10.5

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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