



## Power Factor Correction

100 kvar Harmonic Filter Reactor 440V 50Hz

**Series/Type:** B44066D\*\*\*E\*\*\*  
**Ordering code:** B44066D51005E440  
**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	5.67	%
Effective filter output Q <sub>C</sub>	100	kvar
Rated voltage V <sub>R</sub> <sup>1)</sup>	440	V
Rated frequency f	50	Hz
Ambient temperature / Insulation class	40 / H	°C
Capacitance C delta (tot.)	1550.94	µF
Inductivity L	3 · 0.37	mH
Fundamental current I <sub>1</sub> <sup>3)</sup>	139.09	A
Linear up to <sup>4)</sup>	272.92	A
Effective current I <sub>RMS</sub> <sup>2)</sup>	167.42	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 <sub>D</sub>	360	W
Total weight	42	kg

<sup>1)</sup> Voltage rise up to 106% of rated voltage is considered in current I<sub>eff</sub>.

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

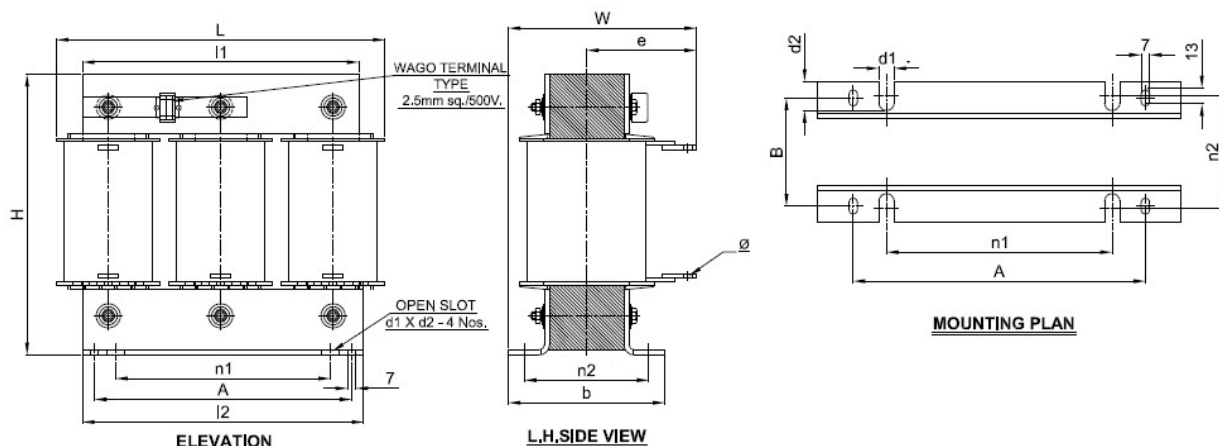
<sup>3)</sup>  $I_1 = 1.06 \cdot I_R$  (I<sub>R</sub> = Capacitor current 50Hz)

<sup>4)</sup> Linear current = 2.08 · I<sub>R</sub> (I<sub>R</sub> = 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	330	b/mm	155
H/mm	270	e/mm	97±5
W/mm	180±5	d1/mm	10.8
l1/mm	285	d2/mm	15.5
l2/mm	285	A	175
n1/mm	150	B	132
n2/mm	132±3	∅	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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