



## Power Factor Correction

20 kvar Harmonic Filter Reactor 440V 50Hz

**Series/Type:** B44066D\*\*\*E\*\*\*  
**Ordering code:** B44066D7020E440  
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 $Q_C$	20	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.)	305.81	µF
Inductivity L	3 · 2.32	mH
Fundamental current $I_1$ <sup>3)</sup>	27.81	A
Linear up to <sup>4)</sup>	45.40	A
Effective current $I_{RMS}$ <sup>2)</sup>	29.79	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 $P_D$	105	W
Total weight	16	kg

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

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

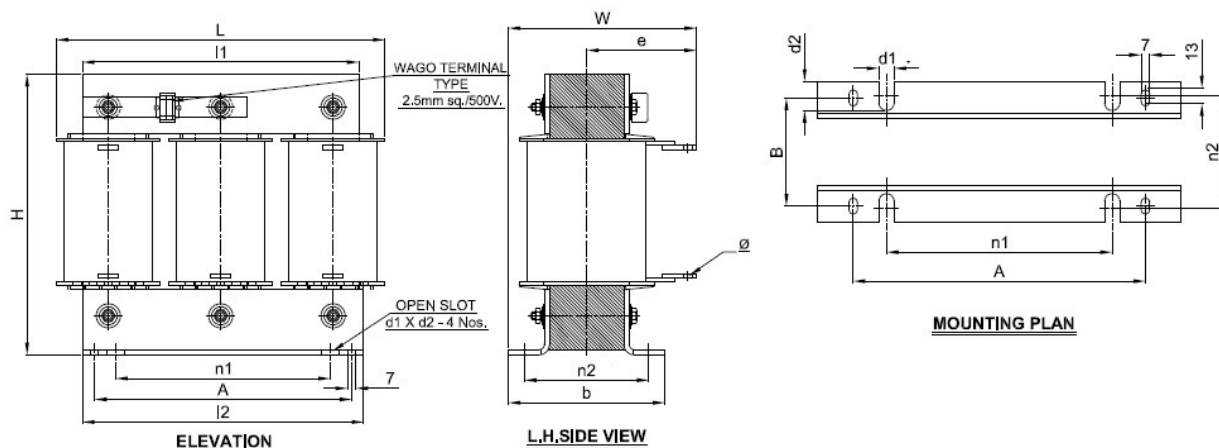
<sup>3)</sup>  $I_1 = 1.06 \cdot I_R$  ( $I_R$  = Capacitor current 50Hz)

<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	225	b/mm	112
H/mm	205	e/mm	84±5
W/mm	140±5	d1/mm	10.8
I1/mm	190	d2/mm	15.5
I2/mm	190	A	175
n1/mm	150	B	95
n2/mm	97.8±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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