

# Film Capacitors - Power Factor Correction

Harmonic Filter Reactor

Series/Type: B44066D7025M481 Ordering code: B44066D\*\*\*M\*\*\*

Date: April 2018

Version:

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# Film Capacitors - Power Factor Correction

B44066D\*\*\*M\*\*\*

# **Harmonic Filter Reactor**

B44066D7025M481

## **Characteristics**

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



#### **Technical Data**

| De-tuning factor p [%]:  | 7                           |
|--|-----------------------------|
| Effective filter output Q <sub>C</sub> [kvar]:   | 25                          |
| Rated voltage V <sub>R</sub> [V]: 1)   | 480                         |
| Rated frequency [Hz]:  | 60                          |
| Ambient temperature / Insulation class:  | T40/B                       |
| Capacitance C delta (tot.) [µF]:   | 267.5 (= 3 x C delta)       |
| Inductivity L [mH]:  | 3 x 1.841                   |
| Linear up to [A]:  | 58                          |
| Effective current I <sub>rms</sub> [A]: <sup>2)</sup>  | 34.1                        |
| Rated harmonic voltages (1 <sup>st</sup> /3 <sup>rd</sup> /5 <sup>th</sup> /7 <sup>th</sup> /11 <sup>th</sup> /13 <sup>th</sup> ) [%]: | 106 / 0.5 / 6 / 5 / 3.5 / 3 |
| Temperature protection (NC) :  | yes                         |
| Total losses P <sub>D</sub> [W]:   | 130                         |
| Total weight [kg]:   | 19                          |

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

#### Connection

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

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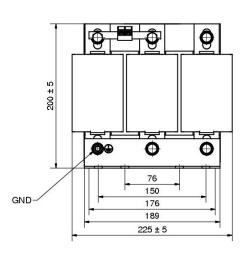
<sup>&</sup>lt;sup>2)</sup>  $I_{\text{eff}} = \sqrt{(I_1^2 + I_3^2 + ... I_x^2)}$ 

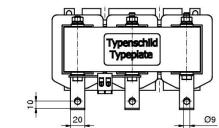
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#### **Harmonic Filter Reactor**

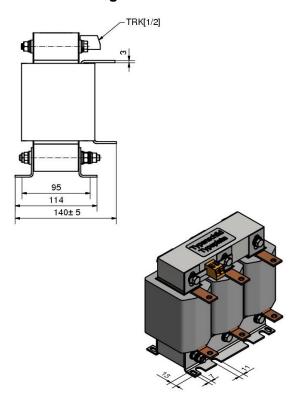
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## **Dimensional drawing (mm)**





#### **Connection diagram**



#### **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.

#### Note

For detailed information about PFC capacitors and cautions, refer to the latest version of EPCOS PFC Product Profile.

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