

#### **Current transformers with converter**

# TC 020 / TC 420

Narrow-profile current transformer with a built-in converter, with an output of 0...20 mA / 4...20 mA



# Description

#### TC 020 Series

- Self-powered: does not need an auxiliary power supply.
- Primary current: from 50 to 1500 A ac, depending on the type
- Secondary current: 0..20 mA
- Internal diameter: from 28 to 44 mm, depending on the type
- Busbar dimensions: from 40 x 10 mm to 60 x 12 mm

### TC 420 series

- Needs an output power supply of 7.5...36 V dc
- Primary current: from 5 to 1500 A ac, depending on the type
- Secondary current: 4..20 mA
- Internal diameter: from 20 to 44 mm, depending on the type
- Busbar dimensions: from 25 x 5 mm to 60 x 12 mm

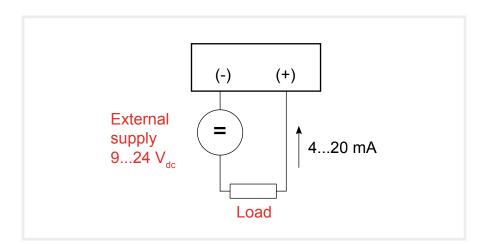
#### **Application**

Used in power lines to obtain a current proportional to the primary current rated at 0..20 mA / 4...20 mA in the secondary

#### **Features**

| Frequency                                   | 50 / 60 Hz                    |
|---|-------------------------------|
| Isolation voltage                           | 3 kV ac                       |
| Thermal short-circuit current, $I_{\rm th}$ | 60 I <sub>n</sub>             |
| Dynamic current, $I_{\rm dyn}$              | 2.5 I <sub>th</sub>           |
| Highest current in the material             | 0.72 kV ac                    |
| Thermal class                               | B (130 °C)                    |
| Type of encapsulation                       | VO self-extinguishing plastic |
| Safety factor                               | F <sub>s</sub> < 5            |
| Secondary sealable terminals                | Yes                           |
| Standards                                   |                               |
| IEC 44-1, B5 2627                           |                               |

#### Connection







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# References

| Туре            | TC 420   |                  |                   | TC 020           |                   |
|-----------------|--|------------------|-------------------|------------------|-------------------|
|                 | TC 5,420                                       | TC 6,420         | TC 8,420          | TC 6 020A        | TC 8,020A         |
| inner Ø (mm)    | 20   | 28               | 44                | 28               | 44                |
| Busbar (mm)     | 25 x 5   | 40 x 10          | 60 x 12           | 40 x 10          | 60 x 12           |
| Dimensions (mm) |  |                  |                   |                  |                   |
| a b c           | 70<br>58<br>32                                 | 80,5<br>64<br>44 | 102<br>84,5<br>50 | 80,5<br>64<br>44 | 102<br>84,5<br>50 |
| A               | Output 420 mA, external power supply 7.536 Vdc |                  |                   | Output 020 mA    |                   |
|                 | Code   |                  |                   | Code             |                   |
| 5               | [1] M72112                                     |                  |                   |                  |                   |
| 10              | [1] M72113                                     |                  |                   |                  |                   |
| 20              | [1] M72114                                     |                  |                   |                  |                   |
| 50              |  | [1] M72131       |                   | [1] M72031       |                   |
| 100             |  | [1] M72132       |                   | [1] M72032       |                   |
| 200             |  | [1] M72134       |                   | [1] M72034       |                   |
| 300             |  | [1] M72136       |                   | [1] M72036       |                   |
| 500             |  |                  | [1] M72151        |                  | [1] M72051        |
| 1 000           |  |                  | [1] M72152        |                  | [1] M72052        |
| 1 500           |  |                  | [1] M72153        |                  | [1] M72053        |

# Dimensions

