



## TDH10 1200/5A

TDH10 1200/5A, High precision current transformers

Code: M7707H.

- > Flat strip(mm): 50 x 50 | 60 x 30 | 80 x 30
- > Inner diameter (mm): 63
- > System: Single-phase
- > Class 0,2 Power (VA): 3,75
- > Class 0,2S Power (VA): 2,5
- > Class 0,5S Power (VA): 3,75
- > Measurement Range (A): 1200/5
- > Input current: 1200A
- > Transformer type: Closed core

### Description

The **TDH** series transformers are high precision current transformers with an improved design that meet all the needs of today's installations. They are versatile devices when it comes to mounting and fixing, and they are sealable, with the aim of avoiding any manipulation.

Main features:

- Type: bar entrance
- From 60 to 4000 A
- Test Report
- DIN rail fixing accessory
- Sealable
- Secondary .../5 A, .../1 A and .../250 mA (consult availability)
- Diameters from 20 to 63 mm

### Application

These transformers have been conceived to convert nominal currents in any installation to current values adjusted to measurement devices.



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### Specifications

#### Electrical characteristics

|  |   |
|--|---|
| Safety factor (SF)                         | 5   |
| Power                                      | 3,75 VA (Class0.2) , 2,5 VA (Class0.2S) , 3,75 VA (Class0.5S) |
| Insulation voltage between terminals S1-S2 | 3 kV  |

#### Mechanical characteristics

|                                  |   |
|----------------------------------|---|
| Size (mm) width x height x depth | 108 x 131 x 69 (mm)                       |
| Envelope                         | Plastic wrap V0 self-extinguishing, UL 94 |
| Fastening                        | DIN rail with accessory                   |
| Weight (kg)                      | 0,8                                       |

#### Environmental characteristics

|  |                   |
|--|-------------------|
| Thermal Class                            | Class B (+130 °C) |
| Protection class                         | IP 20             |
| Relative humidity (without condensation) | 15 ... 95 %       |
| Storage temperature                      | -40 ... +85 °C    |
| Working temperature                      | -5 ... +40 °C     |

#### Specific technical characteristics of current sensors

|                   |               |
|-------------------|---------------|
| Operating voltage | 0,72 kV~ máx. |
|-------------------|---------------|

#### Current measurement circuit

|  |                     |
|--|---------------------|
| Nominal frequency                                | 50 / 60 Hz          |
| Primary current measurement                      | 1200 A              |
| Dynamic current (I <sub>dyn</sub> )              | 2,5 I <sub>th</sub> |
| Thermal short-circuit current (I <sub>th</sub> ) | 60 I <sub>n</sub>   |
| Transformation ratio                             | ... / 5 A           |

#### Standards

|                                       |                          |
|---------------------------------------|--------------------------|
| Electrical safety, Maximum height (m) | 2000                     |
| Standards                             | IEC 61869-1, IEC 61869-2 |

#### TDH

High precision current transformer

| CODE | TYPE | Input current | Inner diameter (mm) | Class 0,2 Power (VA) | Class 0,5S Power (VA) | Class 0,2S Power (VA) | Flat strip(mm) |
|------|------|---------------|---------------------|----------------------|-----------------------|-----------------------|----------------|
| TDH4 |      |               |                     |                      |                       |                       |                |



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|---------------|---------------|---------------|---------------------|----------------------|-----------------------|-----------------------|-----------------------------|
| M77013.       | TDH4 60/5A    | 60 A          | 20                  | 0,5                  | 0,5                   |                       |                             |
| M77014.       | TDH4 75/5A    | 75 A          | 20                  | 0,75                 | 0,75                  | 0,5                   |                             |
| M77015.       | TDH4 100/5A   | 100 A         | 20                  | 1                    | 1                     | 0,5                   |                             |
| M77016.       | TDH4 125/5A   | 125 A         | 20                  | 1,5                  | 1,5                   | 1                     |                             |
| M77017.       | TDH4 150/5A   | 150 A         | 20                  | 2,5                  | 2,5                   | 2                     |                             |
| M77018.       | TDH4 200/5A   | 200 A         | 20                  | 3,5                  | 3,5                   | 3                     |                             |
| <b>TDH5</b>   |               |               |                     |                      |                       |                       |                             |
| M77023.       | TDH5 60/5A    | 60 A          | 20                  | 0,5                  | 0,5                   |                       | 15 x 15   20 x 10   25 x 5  |
| M77024.       | TDH5 75/5A    | 75 A          | 20                  | 1                    | 1                     | 0,5                   | 15 x 15   20 x 10   25 x 5  |
| M77025.       | TDH5 100/5A   | 100 A         | 20                  | 1,5                  | 1,5                   | 0,75                  | 15 x 15   20 x 10   25 x 5  |
| M77026.       | TDH5 125/5A   | 125 A         | 20                  | 1,5                  | 1,5                   | 0,75                  | 15 x 15   20 x 10   25 x 5  |
| M77027.       | TDH5 150/5A   | 150 A         | 20                  | 1,5                  | 1,5                   | 1                     | 15 x 15   20 x 10   25 x 5  |
| M77028.       | TDH5 200/5A   | 200 A         | 20                  | 2,5                  | 2,5                   | 2                     | 15 x 15   20 x 10   25 x 5  |
| M77029.       | TDH5 250/5A   | 250 A         | 20                  | 2,5                  | 2,5                   | 2                     | 15 x 15   20 x 10   25 x 5  |
| <b>TDH5.2</b> |               |               |                     |                      |                       |                       |                             |
| M770A5.       | TDH5.2 100/5A | 100 A         | 22                  | 0,5                  | 0,5                   |                       | 25 x 10   30 x 10   20 x 12 |
| M770A6.       | TDH5.2 125/5A | 125 A         | 22                  | 0,75                 | 0,75                  | 0,5                   | 25 x 10   30 x 10   20 x 12 |
| M770A7.       | TDH5.2 150/5A | 150 A         | 22                  | 1                    | 1                     | 0,5                   | 25 x 10   30 x 10   20 x 12 |
| M770A8.       | TDH5.2 200/5A | 200 A         | 22                  | 1,5                  | 1,5                   | 1                     | 25 x 10   30 x 10   20 x 12 |
| M770A9.       | TDH5.2 250/5A | 250 A         | 22                  | 2                    | 2                     | 1,5                   | 25 x 10   30 x 10   20 x 12 |
| M770AA.       | TDH5.2 300/5A | 300 A         | 22                  | 1,5                  | 1,5                   | 1                     | 25 x 10   30 x 10   20 x 12 |
| M770AB.       | TDH5.2 400/5A | 400 A         | 22                  | 2,5                  | 2,5                   | 2                     | 25 x 10   30 x 10   20 x 12 |
| M770AC.       | TDH5.2 500/5A | 500 A         | 22                  | 5                    | 5                     | 2                     | 25 x 10   30 x 10   20 x 12 |
| M770AD.       | TDH5.2 600/5A | 600 A         | 22                  | 5                    | 5                     | 2                     | 25 x 10   30 x 10   20 x 12 |
| <b>TDH6.2</b> |               |               |                     |                      |                       |                       |                             |
| M77055.       | TDH6.2 100/5A | 100 A         | 25                  | 1                    | 1                     | 0,5                   | 25 x 12   30 x 10   20 x 20 |
| M77056.       | TDH6.2 125/5A | 125 A         | 25                  | 2                    | 2                     | 1                     | 25 x 12   30 x 10   20 x 20 |
| M77057.       | TDH6.2 150/5A | 150 A         | 25                  | 3                    | 3                     | 1,5                   | 25 x 12   30 x 10   20 x 20 |
| M77058.       | TDH6.2 200/5A | 200 A         | 25                  | 3,5                  | 3,5                   | 2,5                   | 25 x 12   30 x 10   20 x 20 |
| M77059.       | TDH6.2 250/5A | 250 A         | 25                  | 3,5                  | 3,5                   | 2,5                   | 25 x 12   30 x 10   20 x 20 |
| M7705A.       | TDH6.2 300/5A | 300 A         | 25                  | 7,5                  | 7,5                   | 5                     | 25 x 12   30 x 10   20 x 20 |
| M7705B.       | TDH6.2 400/5A | 400 A         | 25                  | 7,5                  | 7,5                   | 5                     | 25 x 12   30 x 10   20 x 20 |
| M7705C.       | TDH6.2 500/5A | 500 A         | 25                  | 7,5                  | 7,5                   | 5                     | 25 x 12   30 x 10   20 x 20 |
| M7705D.       | TDH6.2 600/5A | 600 A         | 25                  | 7,5                  | 7,5                   | 5                     | 25 x 12   30 x 10   20 x 20 |
| <b>TDH6</b>   |               |               |                     |                      |                       |                       |                             |
| M77047.       | TDH6 150/5A   | 150 A         | 28                  | 1                    | 1                     | 0,5                   | 20 x 25   30 x 15   40 x 10 |
| M77048.       | TDH6 200/5A   | 200 A         | 28                  | 2                    | 2                     | 1                     | 20 x 25   30 x 15   40 x 10 |
| M77049.       | TDH6 250/5A   | 250 A         | 28                  | 2,5                  | 2,5                   | 1,5                   | 20 x 25   30 x 15   40 x 10 |



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|--------------|---------------|---------------|---------------------|----------------------|-----------------------|-----------------------|-----------------------------|
| M7704A.      | TDH6 300/5A   | 300 A         | 28                  | 3,5                  | 3,5                   | 2,5                   | 20 x 25   30 x 15   40 x 10 |
| M7704B.      | TDH6 400/5A   | 400 A         | 28                  | 3,5                  | 3,5                   | 2,5                   | 20 x 25   30 x 15   40 x 10 |
| M7704C.      | TDH6 500/5A   | 500 A         | 28                  | 5                    | 5                     | 3,5                   | 20 x 25   30 x 15   40 x 10 |
| M7704D.      | TDH6 600/5A   | 600 A         | 28                  | 5                    | 5                     | 3,5                   | 20 x 25   30 x 15   40 x 10 |
| M7704E.      | TDH6 750/5A   | 750 A         | 28                  | 5                    | 5                     | 3,5                   | 20 x 25   30 x 15   40 x 10 |
| M7704F.      | TDH6 800/5A   | 800 A         | 28                  | 5                    | 5                     | 3,5                   | 20 x 25   30 x 15   40 x 10 |
| <b>TDH8</b>  |               |               |                     |                      |                       |                       |                             |
| M7706A.      | TDH8 300/5A   | 300 A         | 43                  | 2                    | 2                     | 1                     | 50 x 30   60 x 12   13 x 45 |
| M7706B.      | TDH8 400/5A   | 400 A         | 43                  | 2                    | 2                     | 1                     | 50 x 30   60 x 12   13 x 45 |
| M7706C.      | TDH8 500/5A   | 500 A         | 43                  | 3,5                  | 3,5                   | 2                     | 50 x 30   60 x 12   13 x 45 |
| M7706D.      | TDH8 600/5A   | 600 A         | 43                  | 3,5                  | 3,5                   | 2                     | 50 x 30   60 x 12   13 x 45 |
| M7706E.      | TDH8 750/5A   | 750 A         | 43                  | 3,5                  | 3,5                   | 2                     | 50 x 30   60 x 12   13 x 45 |
| M7706F.      | TDH8 800/5A   | 800 A         | 43                  | 3,5                  | 3,5                   | 2                     | 50 x 30   60 x 12   13 x 45 |
| M7706G.      | TDH8 1000/5A  | 1000 A        | 43                  | 5                    | 5                     | 3,5                   | 50 x 30   60 x 12   13 x 45 |
| M7706H.      | TDH8 1200/5A  | 1200 A        | 43                  | 5                    | 5                     | 3,5                   | 50 x 30   60 x 12   13 x 45 |
| M7706J.      | TDH8 1250/5A  | 1250 A        | 43                  | 7,5                  | 7,5                   | 5                     | 50 x 30   60 x 12   13 x 45 |
| M7706K.      | TDH8 1500/5A  | 1500 A        | 43                  | 7,5                  | 7,5                   | 5                     | 50 x 30   60 x 12   13 x 45 |
| M7706L.      | TDH8 1600/5A  | 1600 A        | 43                  | 7,5                  | 7,5                   | 5                     | 50 x 30   60 x 12   13 x 45 |
| <b>TDH10</b> |               |               |                     |                      |                       |                       |                             |
| M7707D.      | TDH10 600/5A  | 600A          | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707E.      | TDH10 750/5A  | 750A          | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707F.      | TDH10 800/5A  | 800A          | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707G.      | TDH10 1000/5A | 1000A         | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707H.      | TDH10 1200/5A | 1200A         | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707J.      | TDH10 1250/5A | 1250A         | 63                  | 3,75                 | 3,75                  | 2,5                   | 50 x 50   60 x 30   80 x 30 |
| M7707K.      | TDH10 1500/5A | 1500A         | 63                  | 7,5                  | 7,5                   | 5                     | 50 x 50   60 x 30   80 x 30 |
| M7707L.      | TDH10 1600/5A | 1600A         | 63                  | 7,5                  | 7,5                   | 5                     | 50 x 50   60 x 30   80 x 30 |
| M7707M.      | TDH10 2000/5A | 2000A         | 63                  | 7,5                  | 7,5                   | 5                     | 50 x 50   60 x 30   80 x 30 |
| M7707N.      | TDH10 2500/5A | 2500A         | 63                  | 7,5                  | 7,5                   | 5                     | 50 x 50   60 x 30   80 x 30 |
| M7707P.      | TDH10 3000/5A | 3000A         | 63                  | 7,5                  | 7,5                   | 5                     | 50 x 50   60 x 30   80 x 30 |
| <b>TDH12</b> |               |               |                     |                      |                       |                       |                             |
| M7708F.      | TDH12 800/5A  | 800A          | 50                  | 2,5                  | 2,5                   |                       | 100 x 50                    |
| M7708G.      | TDH12 1000/5A | 1000A         | 50                  | 2,5                  | 2,5                   | 1,25                  | 100 x 50                    |
| M7708H.      | TDH12 1200/5A | 1200A         | 50                  | 5                    | 5                     | 3,5                   | 100 x 50                    |
| M7708J.      | TDH12 1250/5A | 1250A         | 50                  | 5                    | 5                     | 3,5                   | 100 x 50                    |
| M7708K.      | TDH12 1500/5A | 1500A         | 50                  | 7,5                  | 7,5                   | 5                     | 100 x 50                    |
| M7708L.      | TDH12 1600/5A | 1600A         | 50                  | 7,5                  | 7,5                   | 5                     | 100 x 50                    |
| M7708M.      | TDH12 2000/5A | 2000A         | 50                  | 10                   | 10                    | 7,5                   | 100 x 50                    |



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|---------|---------------|---------------|---------------------|----------------------|-----------------------|-----------------------|----------------|
| M7708N. | TDH12 2500/5A | 2500A         | 50                  | 10                   | 10                    | 7,5                   | 100 x 50       |
| M7708P. | TDH12 3000/5A | 3000A         | 50                  | 15                   | 15                    | 10                    | 100 x 50       |
| M7708Q. | TDH12 4000/5A | 4000A         | 50                  | 20                   | 20                    | 15                    | 100 x 50       |

For other configurations see table of additional features



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## Dimensions



| Pletina / Flat strip (mm) | ∅ Max (mm) |
|---------------------------|------------|
| 50 x 50                   | 63         |
| 60 x 30                   |            |
| 80 x 30                   |            |

## Connections

