



**Three-phase control isolating safety transformer, 12.5 kVA, Rated input voltage 50 – 950 ± 5 % V, Rated output voltage 18.5 – 1000 V**

**Part no.** DTZ12,5(\*/\*)\*  
**Catalog No.** 914813  
**Alternate Catalog No.** -

### Delivery program

|                      |     |                                      |
|----------------------|-----|--------------------------------------|
| Product range        |     | Three-phase DTZ control transformers |
| Rated input voltage  | V   | 50 – 950 ± 5 %                       |
| Rated output voltage | V   | 18.5 – 1000                          |
| Rated power          | kVA | 12.5                                 |
| Short-time rating    | kVA | 31                                   |
| Cu factor 35,00      |     |                                      |

**Notes**

- Transformers with the rated output voltages ≤ 50 V can be used as safety transformers to IEC/EN 61558.
- Enclosure IP65 on request.

When ordering, the part no. must include the following details:

**DTZ0.1(\*/\*)\***

- 1. Wildcard ≙ Nominal input voltage
- 2nd Wildcard ≙ Nominal output voltage
- 3rd Wildcard ≙ Configuration

**Ordering example**

- desired part no. DTZ0.1
- Desired rated input voltage 200 V
- Desired rated output voltage 18.5 V
- Desired configuration Dy(n)5

The correct part no. is

**DTZ0.1(200/18.5)DY(N)5**

Additional tappings → 931897

### Design verification as per IEC/EN 61439

| Technical data for design verification   |                   |    |  |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation   | I <sub>n</sub>    | A  | 0  |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 395  |
| Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.   |                   | °C | -25  |
| Operating ambient temperature max.   |                   | °C | 40   |
| IEC/EN 61439 design verification   |                   |    |  |
| 10.2 Strength of materials and parts   |                   |    |  |
| 10.2.2 Corrosion resistance  |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.2.3.1 Verification of thermal stability of enclosures   |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat   |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.2.4 Resistance to ultra-violet (UV) radiation   |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.2.5 Lifting   |                   |    |  |
|  |                   |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact   |                   |    |  |
|  |                   |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions  |                   |    |  |
|  |                   |    | Meets the product standard's requirements.                         |
| 10.3 Degree of protection of ASSEMBLIES  |                   |    |  |
|  |                   |    | Does not apply, since the entire switchgear needs to be evaluated. |

|  |  |  |
|--|--|--|
| 10.4 Clearances and creepage distances                   |  | Meets the product standard's requirements.   |
| 10.5 Protection against electric shock                   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.6 Incorporation of switching devices and components   |  | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.7 Internal electrical circuits and connections        |  | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors                 |  | Is the panel builder's responsibility.   |
| 10.9 Insulation properties                               |  |  |
| 10.9.2 Power-frequency electric strength                 |  | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage                         |  | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material |  | Is the panel builder's responsibility.   |
| 10.10 Temperature rise                                   |  | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating                               |  | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.12 Electromagnetic compatibility                      |  | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 Mechanical function                                |  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

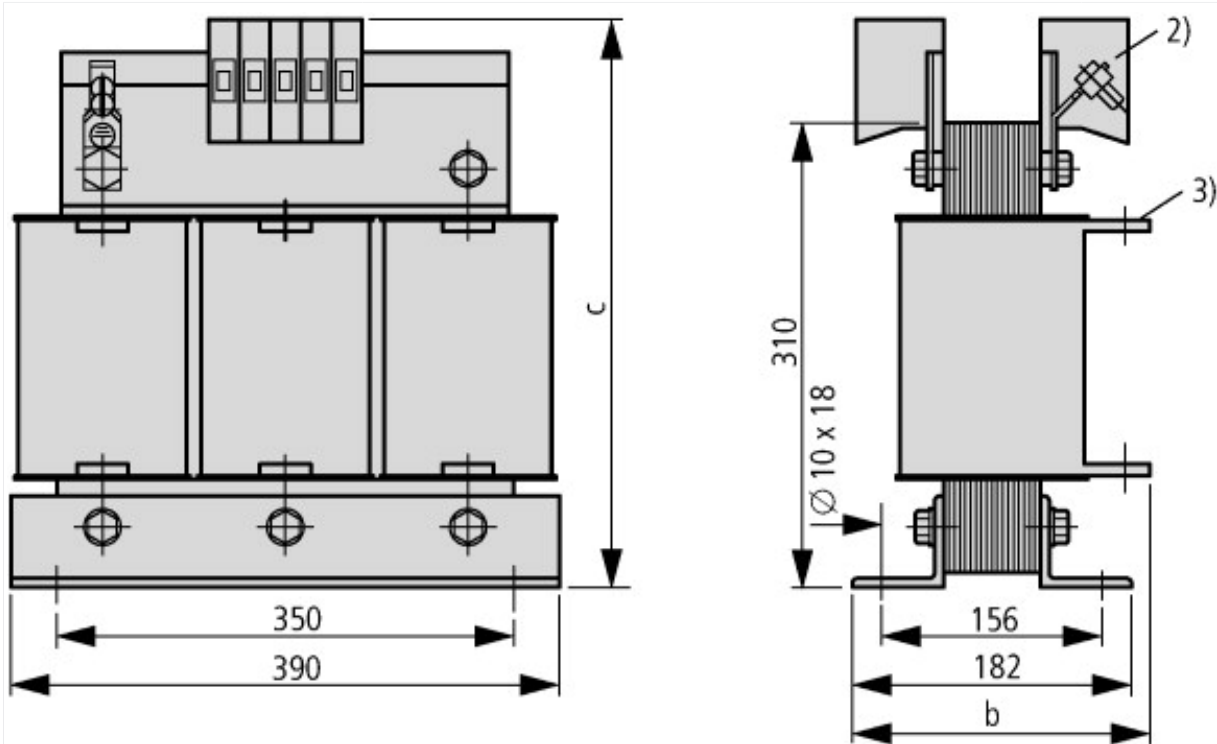
## Technical data ETIM 7.0

|   |    |  |             |
|---|----|--|-------------|
| Low-voltage industrial components (EG000017) / Three-phase control transformer (EC002485)   |    |  |             |
| Electric engineering, automation, process control engineering / Transformer, converter, coil / Control transformer / Three-phase control transformer (ecl@ss10.0.1-27-03-13-01 [AAB619015]) |    |  |             |
| Built as safety transformer   |    |  | Yes         |
| Built as isolating transformer  |    |  | Yes         |
| Built as energy saving transformer  |    |  | No          |
| Primary voltage 1   | V  |  | 50 - 950    |
| Primary voltage 2   | V  |  | 50 - 950    |
| Primary voltage 3   | V  |  | 50 - 950    |
| Primary voltage 4   | V  |  | 50 - 950    |
| Primary voltage 5   | V  |  | 50 - 950    |
| Primary voltage 6   | V  |  | 50 - 950    |
| Primary voltage 7   | V  |  | 0 - 0       |
| Primary voltage 8   | V  |  | 0 - 0       |
| Primary voltage 9   | V  |  | 0 - 0       |
| Primary voltage 10  | V  |  | 0 - 0       |
| Secondary voltage 1   | V  |  | 18.5 - 1000 |
| Secondary voltage 2   | V  |  | 18.5 - 1000 |
| Secondary voltage 3   | V  |  | 18.5 - 1000 |
| Secondary voltage 4   | V  |  | 18.5 - 1000 |
| Secondary voltage 5   | V  |  | 18.5 - 1000 |
| Secondary voltage 6   | V  |  | 18.5 - 1000 |
| Secondary voltage 7   | V  |  | 0 - 0       |
| Secondary voltage 8   | V  |  | 0 - 0       |
| Secondary voltage 9   | V  |  | 0 - 0       |
| Secondary voltage 10  | V  |  | 0 - 0       |
| Wiring system   |    |  | Other       |
| Rated power   | VA |  | 12500       |
| Type of insulation material acc. IEC 85   |    |  | B           |
| Short-circuit-proof   |    |  | No          |
| Relative short circuit voltage  | %  |  | 4           |
| Conductor material  |    |  | Copper      |
| Width   | mm |  | 390         |
| Height  | mm |  | 374         |
| Depth   | mm |  | 231         |
| Degree of protection (IP)   |    |  | IP00        |
| Degree of protection (NEMA)   |    |  | Other       |

## Approvals

|                                      |  |                              |
|--------------------------------------|--|------------------------------|
| Product Standards                    |  | IEC/EN 61558-2-2; CE marking |
| UL File No.                          |  | -                            |
| UL Category Control No.              |  | XPTQ2, XPTQ8                 |
| CSA File No.                         |  | -                            |
| CSA Class No.                        |  | -                            |
| North America Certification          |  | -                            |
| Specially designed for North America |  | No                           |
| Suitable for                         |  | Branch circuits              |
| Max. Voltage Rating                  |  | 600 V AC                     |
| Degree of Protection                 |  | IEC: IP00, UL/CSA Type: -    |

## Dimensions



|           | b   | c   |
|-----------|-----|-----|
| 18.5 V    | -   | -   |
| 24 V      | 231 | 374 |
| 42 V      | 231 | 374 |
| 110 V     | 214 | 374 |
| 230-690 V | 214 | 374 |

① The higher rated operating voltage applies

② Terminals  $\leq 25$  A

③ Connection lugs  $> 63$  A

## Assets (links)

### Declaration of CE Conformity

00003099