



**Three-phase control isolating safety transformer, 4 kVA, Rated input voltage 50 – 950 ± 5 % V, Rated output voltage 18.5 – 1000 V**

**Part no.** DTZ4,0(\*/\*)\*  
**Catalog No.** 914809  
**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 | 4                                    |
| Short-time rating    | kVA | 6.2                                  |
| Cu factor 9,50       |     |                                      |

**Notes**

- Transformers with the rated output voltages ≤ 50 V can be used as safety transformers to IEC/EN 61558.
- UL/CSA only up to primary and secondary 600 V (incl. tapping).
- Enclosures IP65 on request.

When ordering, the type reference must include the following details:

**DTZ0,1(\*/\*)\***

1st wildcard ≙ Nominal input voltage

2nd wildcard ≙ Rated 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 type reference 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  | 160  |
| 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.                         |

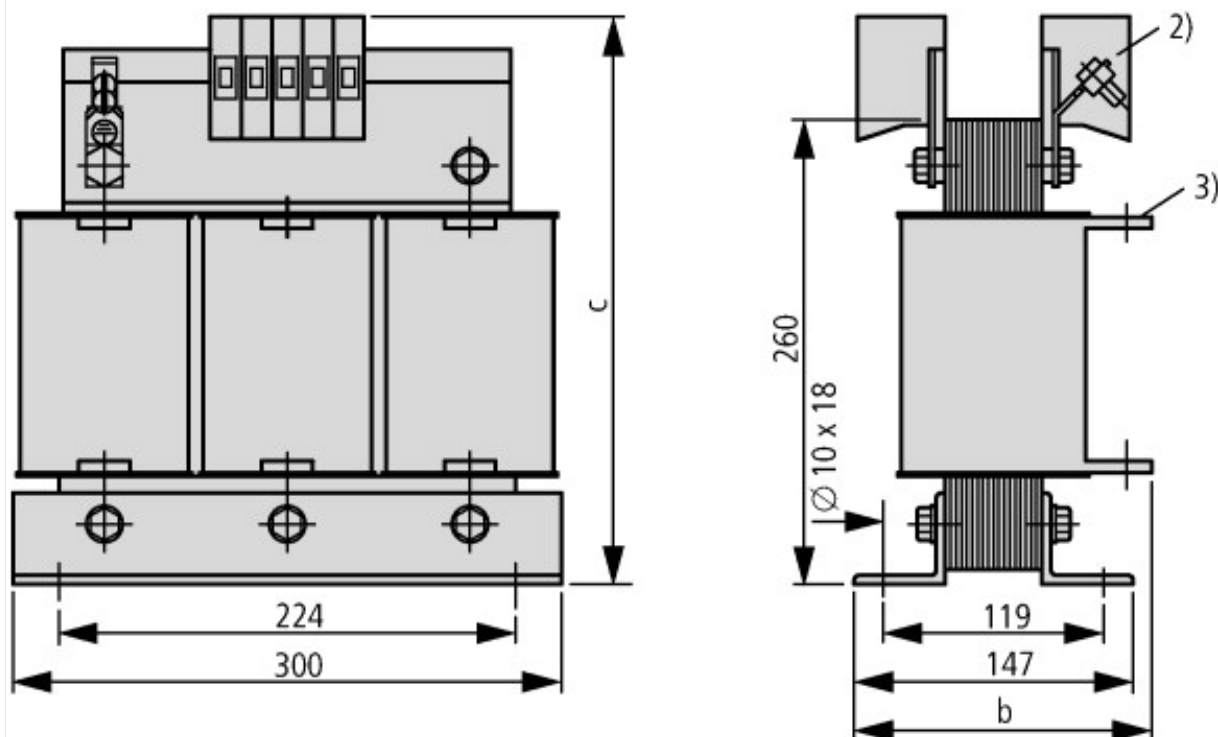
## Technical data ETIM 7.0

|   |    |  |             |
|---|----|--|-------------|
| 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 (ec1@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 |  | 4000        |
| Type of insulation material acc. IEC 85   |    |  | B           |
| Short-circuit-proof   |    |  | No          |
| Relative short circuit voltage  | %  |  | 2           |
| Conductor material  |    |  | Copper      |
| Width   | mm |  | 300         |
| Height  | mm |  | 333         |
| Depth   | mm |  | 166         |
| Degree of protection (IP)   |    |  | IP00        |
| Degree of protection (NEMA)   |    |  | Other       |

## Approvals

|                                      |   |
|--------------------------------------|---|
| Product Standards                    | UL 506; UL5085-1; UL 5085-2; CSA-C22.2 No. 66; CSA-C22.2 No. 66.1-06; CSA-C22.2 No. 66.2-06; IEC/EN 61558-2-2; CE marking |
| UL File No.                          | E167225   |
| UL Category Control No.              | XPTQ2, XPTQ8  |
| CSA File No.                         | UL report applies to both US and Canada   |
| CSA Class No.                        | -   |
| North America Certification          | UL recognized, certified by UL for use in Canada  |
| 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    | 166 | 317 |
| 24 V      | 166 | 333 |
| 42 V      | 147 | 333 |
| 110 V     | 157 | 296 |
| 230-690 V | 157 | 296 |

- ① The higher rated operating voltage applies
- ② Terminals  $\leq$  25 A
- ③ Connection lugs > 63 A

## Assets (links)

### Declaration of CE Conformity

00003099