



## Three-phase control/isolation/safety transformer, 1.6kVA, non-standard voltage

**Part no.** DTZ16(\*/\*)\*  
**Article no.** 914814  
**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 | 16                                   |
| Short-time rating    | kVA | 40                                   |
| Cu factor 33,00      |     |                                      |

#### Notes

- Transformers with the rated output voltages  $\approx$  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(\*/\*)\*

- Wildcard  $\approx$  Nominal input voltage
- 2nd Wildcard  $\approx$  Nominal output voltage
- 3rd Wildcard  $\approx$  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   | $I_n$      | A  | 0  |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 0  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 520  |
| Heat dissipation capacity  | $P_{diss}$ | 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 6.0

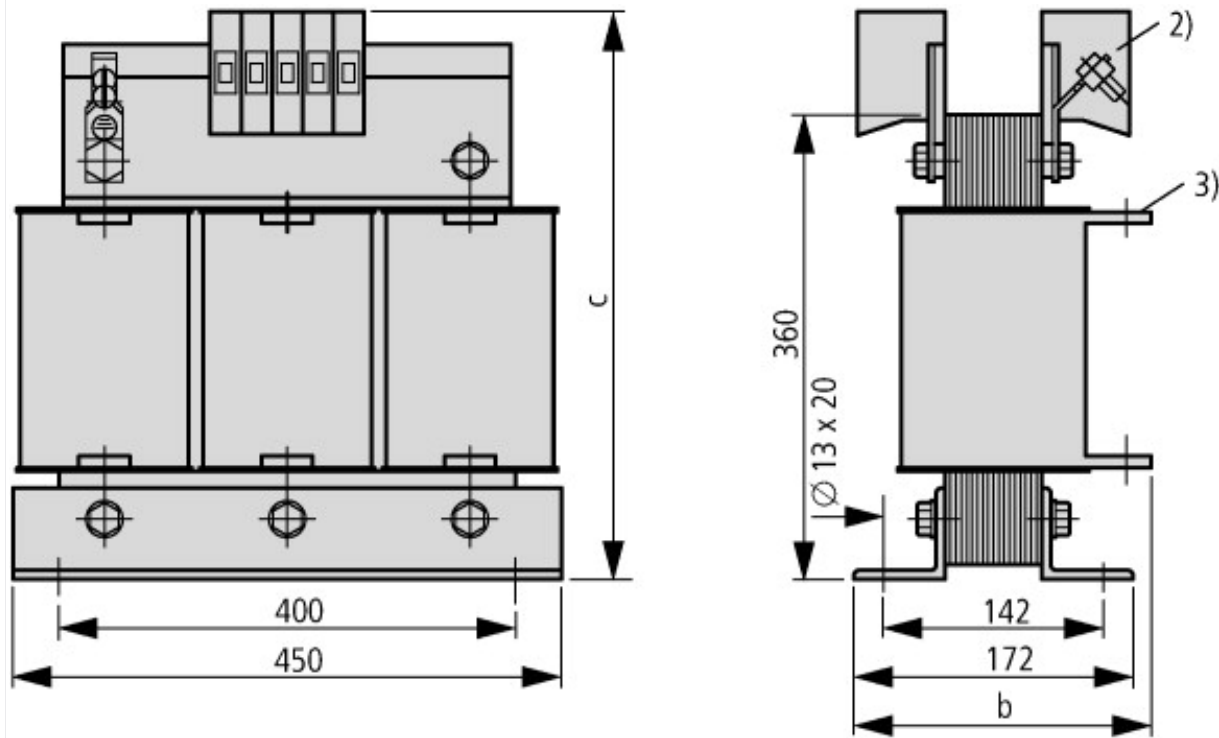
|  |    |             |
|--|----|-------------|
| Low-voltage industrial components (EG000017) / Three-phase control transformer (EC002485)  |    |             |
| Electric engineering, automation, process control engineering / Transformer, converter, coil / Control transformer / Three-phase control transformer (ec1@ss8.1-27-03-13-01 [AAB619012]) |    |             |
| 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  |    | -           |
| Rated power  | VA | 16000       |
| Type of insulation material acc. IEC 85  |    | B           |
| Short-circuit-proof  |    | No          |
| Relative short circuit voltage   | %  | 4.5         |
| Width  | mm | 450         |
| Height   | mm | 434         |
| Depth  | mm | 221         |
| Degree of protection (IP)  |    | IP00        |

## 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      | 221 | 434 |
| 42 V      | 221 | 434 |
| 110 V     | 204 | 434 |
| 230-690 V | 204 | 434 |

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