# **DATASHEET - STI2,0(400/230)**



Control transformer, 2 kVA, Rated input voltage 400 $\pm$  5 % V, Rated output voltage 230 V



STI2,0(400/230) Part no. 035258 Catalog No. **Alternate Catalog** STI002-I2-G2

No.

| 110 | 11/0/  |          | gram |
|-----|--------|----------|------|
| 112 | IIVEIV | , ,,,,,, |      |
|     |        |          |      |
|     |        |          |      |

| 2.1                                   |     |  |
|---------------------------------------|-----|--|
| Product range                         |     | Single-phase control transformers ST                             |
| Basic function                        |     | Single-phase control, isolating and safety transformers STI, STZ |
| Rated input voltage                   | V   | 400± 5 %   |
| Rated output voltage                  | V   | 230  |
| Rated power                           | kVA | 2  |
| Short-time rating                     | kVA | 7  |
| Terminal diagram / contact assignment |     |  |
| Cu factor 4,00                        |     |  |

#### **Technical data**

#### General

| Standards                  |      |   |
|----------------------------|------|---|
| Built and tested to        |      | IEC/EN 61558-2-2/2-4/2-6<br>VDE 0570 Part 2-2<br>VDE 0570 Part 2-6 (safety transformers)<br>VDE 0570 Part 2-4 (isolating transformer) |
| Suitable for use to        |      | IEC/EN 60204-1, ÖVE-EN 13<br>VDE 0113, VDE 0100 Part 410  |
| Ambient temperature        |      | -25 - 40  |
| Characteristics            |      |   |
| Terminations               |      | ● (< 115 A)   |
| Connection lugs            |      | ● (> 115 A)   |
| Insulation class           |      | В   |
| Rated frequency            | Hz   | 50 - 60   |
| Primary tapping            |      | ± 5 %   |
| Degree of Protection       |      | IP00  |
| Separate windings          |      | •   |
| Fully vacuum-impregnated   |      | •   |
| Reinforced insulation      |      | •   |
| Rated duty factor          | % DF | 100   |
| Electrical characteristics |      |   |

| Note                 |    | The following applies for the no-load loss, short-circuit loss (copper losses), short-circuit voltage and efficiency values: all details relate to a temperature of 20 $^{\circ}\text{C}$ |
|----------------------|----|---|
| Total weight         | kg | 21.5  |
| No-load losses       | W  | 27  |
| Short-circuit losses | W  | 33  |
| Shortcircuit voltage | %  | 2   |
| Efficiency           |    | 0.97  |

#### Design verification as per IEC/EN 61439

| Technical data for design verification                   |                   |   |    |
|--|-------------------|---|----|
| •  |                   |   |    |
| Rated operational current for specified heat dissipation | In                | Α | 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           | $P_{vs}$          | W | 60 |
| 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  | ŭ  | 70   |
| 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<br>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) / One-phase control transformer (EC002486)

Flectric engineering, automation, process control engineering / Transformer converter, coil / Control transformer / One-phase control transformer (ecl@ss10.01-27-03-13-02 [AABf

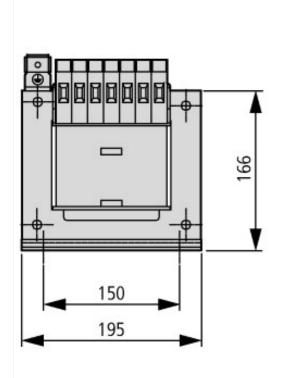
| Electric engineering, automation, process control engineering / Transformer, conv | erter, coil / Control tr | ansformer / One-phase control transformer (ecl@ss10.0.1-27-03-13-02 [AAB620015]) |
|---|--------------------------|--|
| Built as safety transformer   |                          | Yes  |
| Built as isolating transformer  |                          | Yes  |
| Built as energy saving transformer  |                          | No   |
| Primary voltage 1   | V                        | 400 - 400  |
| Primary voltage 2   | V                        | 0 - 0  |
| Primary voltage 3   | V                        | 0 - 0  |
| Primary voltage 4   | V                        | 0 - 0  |
| Primary voltage 5   | V                        | 0 - 0  |
| Primary voltage 6   | V                        | 0 - 0  |
| 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                        | 230 - 230  |
| Secondary voltage 2   | V                        | 0 - 0  |
| Secondary voltage 3   | V                        | 0 - 0  |
| Secondary voltage 4   | V                        | 0 - 0  |
| Secondary voltage 5   | V                        | 0 - 0  |
| Secondary voltage 6   | V                        | 0 - 0  |
| Secondary voltage 7   | V                        | 0 - 0  |
| Secondary voltage 8   | V                        | 0 - 0  |
| Secondary voltage 9   | V                        | 0 - 0  |

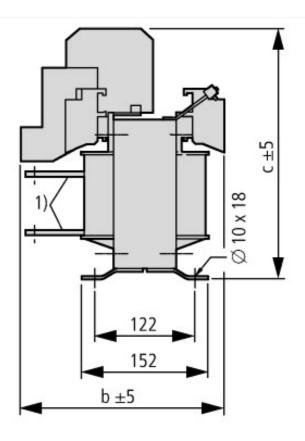
| Secondary voltage 10                    | V  | 0 - 0  |
|---|----|--------|
| Rated apparent power                    | VA | 2000   |
| Type of insulation material acc. IEC 85 |    | В      |
| Short-circuit-proof                     |    | No     |
| Relative short circuit voltage          | %  | 2      |
| Width                                   | mm | 195    |
| Height                                  | mm | 170    |
| Depth                                   | mm | 154    |
| Degree of protection (IP)               |    | IP00   |
| Ring core                               |    | No     |
| Suitable for mounting on PCB            |    | No     |
| Modular version                         |    | No     |
| Conductor material                      |    | Copper |

# 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   | С   |
|-------|-----|-----|
| 12 V  | -   | -   |
| 24 V  | 154 | 240 |
| 42 V  | 161 | 186 |
| 110 V | 154 | 174 |
| 230 V | 154 | 174 |

## **Assets (links)**

**Declaration of CE Conformity** 00002800

① Connection lugs ② With STI/STZ0.06 ... 0.16 ground connection at bottom