# **DATASHEET - STZ3,0(\*/\*)**



## Control transformer, 3 kVA, Rated input voltage $50 - 950 \pm 5 \%$ V, Rated output voltage 12 – 1000 V



Part no. STZ3,0(\*/\*) Catalog No. 914776 **Alternate Catalog** 

**Delivery program** 

71 0		
Product range		Single-phase control transformers ST
Basic function		Single-phase control, isolating and safety transformers STI, STZ
Rated input voltage	V	50 - 950 ± 5 %
Rated output voltage	V	12 – 1000
Rated power	kVA	3
Short-time rating	kVA	11.5
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).

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

### STZ0,06(\*/\*)

1st wildcard ≙ Nominal input voltage

2nd wildcard ≙ Rated output voltage

### Ordering example

- Desired part no. STZ0,06
- Desired rated input voltage 230 V
  Desired rated output voltage 12 V

The correct type reference is

## STZ0,06(230/12)

Additional tappings → 931897

# **Technical data**

## General

Standards		
Built and tested to		IEC/EN 61558-2-2/2-4/2-6 VDE 0570 Part 2-2 VDE 0570 Part 2-6 (safety transformers) VDE 0570 Part 2-4 (isolating transformer)
Suitable for use to		IEC/EN 60204-1, ÖVE-EN 13 VDE 0113, VDE 0100 Part 410
Ambient temperature		-25 - 40
Characteristics		
Terminations		● (< 63 A)
Connection lugs		● (< 63 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	% D	F 100
Electrical characteristics		

### 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 °C

Total weight	kg	26
No-load losses	W	30
Short-circuit losses	W	55
Shortcircuit voltage	%	2.1
Efficiency		0.97

# Design verification as per IEC/EN 61439

Design vermountion as per 120/214 01403			
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 <sub>vs</sub>	W	85
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 switch gear must be observed. $\label{eq:constraint}$
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)

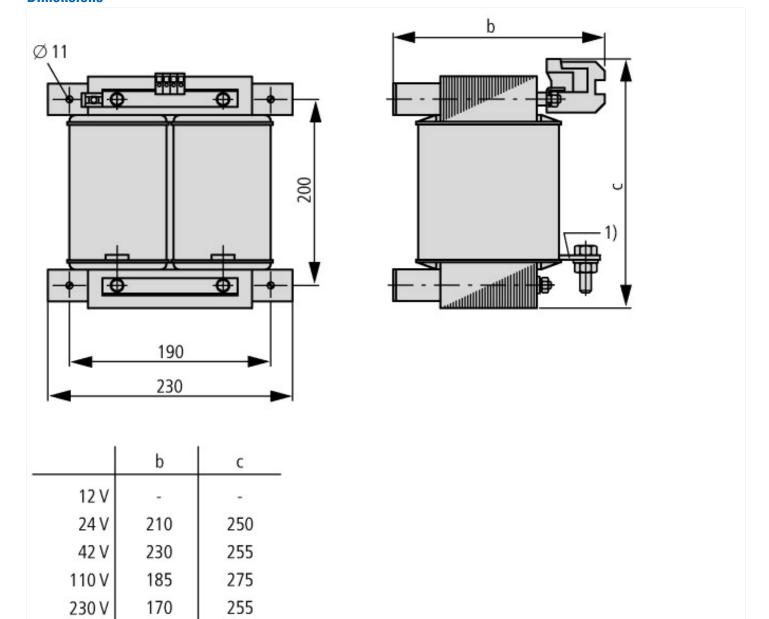
Electric engineering, automation, process control engineering / Transformer, converter, coil / Control transformer / One-phase control transformer (ecl@ss10.0.1-27-03-13-02 [AAB620015])		
Built as safety transformer		Yes
Built as isolating transformer		Yes
Built as energy saving transformer		No
Primary voltage 1	V	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	12 - 1000
Secondary voltage 2		V	12 - 1000
Secondary voltage 3		V	12 - 1000
Secondary voltage 4		V	12 - 1000
Secondary voltage 5		V	12 - 1000
Secondary voltage 6		V	12 - 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
Rated apparent power		VA	3000
Type of insulation material acc. IEC 85			В
Short-circuit-proof			No
Relative short circuit voltage		%	2.1
Width		mm	230
Height		mm	290
Depth		mm	170
Degree of protection (IP)			IP00
Ring core			No
Suitable for mounting on PCB			No
Modular version			No
Conductor material			Copper

# **Approvals**

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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**



# **Assets (links)**

**Declaration of CE Conformity** 

00003100

Connection lugs
 With STI/STZ0.06 ... 0.16 ground connection at bottom
 The higher rated operating voltage applies