

Control transformer, 0.1 kVA, Rated input voltage $400 \pm 5\%$ V, Rated output voltage 24 V

Part no. STI0,1(400/24)
Catalog No. 046631
Alternate Catalog No. STI0P1-I2-B2

Delivery program

Product range		Single-phase control transformers ST...	
Basic function		Single-phase control, isolating and safety transformers STI, STZ	
Rated input voltage	V	400 \pm 5 %	
Rated output voltage	V	24	
Rated power	kVA	0.1	
Short-time rating	kVA	0.24	
Cu factor 0,25			

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		● (< 115 A)
Connection lugs		● (> 115 A)
Insulation class		B
Rated frequency	Hz	50 - 60
Primary tapping		$\pm 5\%$
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 °C
Total weight	kg	2
No-load losses	W	7
Short-circuit losses	W	8
Shortcircuit voltage	%	6.9
Efficiency		0.87

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	15
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 8.0

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	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	24 - 24
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	100
Type of insulation material according to IEC 85		B

Short-circuit-proof		No
Relative short circuit voltage	%	6.9
Width	mm	85
Height	mm	91
Depth	mm	89
Degree of protection (IP)		IP00
Ring core		No
Suitable for mounting on PCB		No
Modular version		No
Conductor material		Copper