

Control transformer, 0.5 kVA, Rated input voltage $400 \pm 5\%$ V, Rated output voltage 230 V

Part no. STN0,5(400/230)
Catalog No. 204986
Alternate Catalog No. STN0P5-I2-G2

Delivery program

Product range		Single-phase control transformers ST...
Basic function		Single-phase STN control transformers
Rated input voltage	V	$400 \pm 5\%$
Rated output voltage	V	230
Rated power	kVA	0.5
Short-time rating	kVA	0.88
Cu factor 1,15		

Technical data

General

Standards		
Built and tested to		IEC/EN 61558-2-2 VDE 0570 Part 2-2
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		●
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	5.1
No-load losses	W	15
Short-circuit losses	W	27
Shortcircuit voltage	%	4.1
Efficiency		0.93

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	42
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 (ec1@ss10.0.1-27-03-13-02 [AAB620015])

Built as safety transformer		No
Built as isolating transformer		No
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	500
Type of insulation material according to IEC 85		B
Short-circuit-proof		No
Relative short circuit voltage	%	4.1

Width	mm	121
Height	mm	124
Depth	mm	100
Degree of protection (IP)		IP00
Ring core		No
Suitable for mounting on PCB		No
Modular version		No
Conductor material		Copper