

Control transformer, 0.315 kVA, Rated input voltage 230± 5 % V, Rated output voltage 24 V

Part no. STN0,315(230/24)
Catalog No. 221510
Alternate Catalog No. STNP32-G2-B2

Delivery program

Product range			Single-phase control transformers ST...
Basic function			Single-phase STN control transformers
Rated input voltage		V	230± 5 %
Rated output voltage		V	24
Rated power		kVA	0.315
Short-time rating		kVA	0.6
Cu factor 0,80			

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			± 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	3.5
No-load losses		W	11
Short-circuit losses		W	21
Shortcircuit voltage		%	5.3
Efficiency			0.91

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	32
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 (ecI@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	230 - 230
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	315
Type of insulation material according to IEC 85			B
Short-circuit-proof			No
Relative short circuit voltage		%	5.3

Width		mm	106
Height		mm	112
Depth		mm	91
Degree of protection (IP)			IP00
Ring core			No
Suitable for mounting on PCB			No
Modular version			No
Conductor material			Copper