DATASHEET - STN0,06(*/*)



Control transformer, 0.06 kVA, Rated input voltage 100 - 690 \pm 5 % V, Rated output voltage 12 - 250 V



Part no. STN0,06(*/*)
Catalog No. 204938
Alternate Catalog -

No

Delivery program

71 0		
Product range		Single-phase control transformers ST
Basic function		Single-phase STN control transformers
Rated input voltage	V	$100 - 690 \pm 5 \%$
Rated output voltage	V	12 – 250
Rated power	kVA	0.06
Short-time rating	kVA	0.095
Cu factor 0,20		

Notes

- The STN transformers are suitable for use in control circuits to VDE 0113 or IEC/EN 60204.
- UL/CSA only up to primary and secondary 600 V (incl. tappings).
- . When ordering, the type reference must include the following details:

STN0,1(*/*)

1st wildcard ≙ Nominal input voltage

2nd wildcard ≙ Rated output voltage

Ordering example

- Desired part no.: STN0,1
- Desired rated input voltage 200 V
- Desired rated output voltage 18.5 V

The correct type reference is

STN0,1(200/18,5)

Transformer-protective circuit-breaker \longrightarrow #088907

Technical data

General

No-load losses Short-circuit losses

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		В
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 $^{\circ}\text{C}$
Total weight	kg	1

W

W

7

10

Shortcircuit voltage	%	11
Efficiency		0.79

Design verification as per IEC/EN 61439

Design vermeation as per 120/214 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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	17
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 7.0

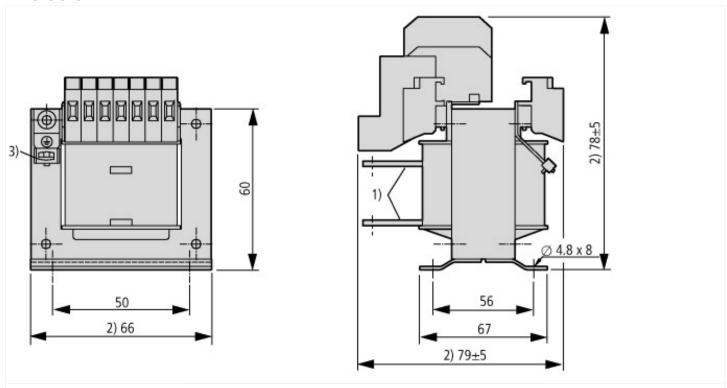
Low-voltage industrial components (EG000017) / One-phase control transformer (E	C002486)	
Electric engineering, automation, process control engineering / Transformer, conv	erter, coil / Control trans	former / One-phase control transformer (ecl@ss10.0.1-27-03-13-02 [AAB620015])
uilt as safety transformer No		
Built as isolating transformer		No
Built as energy saving transformer		No
Primary voltage 1	V	100 - 690
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

Secondary voltage 1 V 12 - 250 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 60 Type of insulation material acc. IEC 85 B No Short-circuit-proof No No Relative short circuit voltage % 11 Width mm 85 Height mm 91 Depth mm 79 Degree of protection (IP) No No Ring core No No Suitable for mounting on PCB No No Modular version No No	Primary voltage 10	V	0 - 0
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 9 V 0 - 0 Secondary voltage 10 V 0 - 0 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B 8 Short-circuit-proof No No Relative short circuit voltage % 1 Width mm 85 Height mm 9 Depth mm 9 Degree of protection (IP) mm 9 Ring core No No Suitable for mounting on PCB No No Modular version No No	, ,		
Secondary voltage 3 V 0 - 0 Secondary voltage 4 V 0 - 0 Secondary voltage 5 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 V 0 - 0 Type of insulation material acc. IEC 85 B 8 Short-circuit-proof No No Relative short circuit voltage M 1 Width mm 85 Height mm 9 Depth mm 9 Degree of protection (IP) Image: Protection (IP) No Ring core No No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 1	V	12 - 250
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 60 Type of insulation material acc. IEC 85 B No Short-circuit-proof No No Relative short circuit voltage % 11 Width mm 85 Height mm 91 Degree of protection (IP) mm 79 Degree of protection (IP) POO No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 2	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 VA 60 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B Short-circuit-proof No No Relative short circuit voltage % 11 Width mm 85 Height mm 9 Degree of protection (IP) mm 79 Degree of protection (IP) No No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 3	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 VA 60 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B No Short-circuit-proof No 11 Width mm 85 Width mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 4	V	0 - 0
Secondary voltage 7 V 0 - 0 Secondary voltage 8 V 0 - 0 Secondary voltage 9 V 0 - 0 Secondary voltage 10 VA 0 - 0 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B No Short-circuit-proof No 11 Width mm 85 Height mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No Suitable for mounting on PCB No Modular version IV No	Secondary voltage 5	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 60 Type of insulation material acc. IEC 85 B B Short-circuit-proof No No Relative short circuit voltage % 11 Width mm 85 Height mm 91 Depth mm 79 Degree of protection (IP) IPO0 Ring core No No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 6	V	0 - 0
Secondary voltage 9 V 0 - 0 Secondary voltage 10 V 0 - 0 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B No Short-circuit-proof No 11 Relative short circuit voltage Mm 85 Width mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No Suitable for mounting on PCB No Modular version No	Secondary voltage 7	V	0 - 0
Secondary voltage 10 V 0 - 0 Rated apparent power VA 60 Type of insulation material acc. IEC 85 B Short-circuit-proof No No Relative short circuit voltage % 11 Width mm 85 Height mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No No Suitable for mounting on PCB No No Modular version No No	Secondary voltage 8	V	0 - 0
Rated apparent power Type of insulation material acc. IEC 85 Short-circuit-proof Relative short circuit voltage No Relative short circuit voltage No Moth Moth Moth Moth Moth Moth Moth Mot	Secondary voltage 9	V	0 - 0
Type of insulation material acc. IEC 85 Short-circuit-proof Relative short circuit voltage Width mm 85 Height Depth Depth Degree of protection (IP) Ring core Suitable for mounting on PCB Modular version Modular version B No No No No No No No No No	Secondary voltage 10	V	0 - 0
Short-circuit-proof Relative short circuit voltage Width Width Height Depth Degree of protection (IP) Ring core Suitable for mounting on PCB Modular version No 1 1 1 2 1 3 1 3 1 3 1 3 1 3 1 3	Rated apparent power	VA	60
Relative short circuit voltage Width mm 85 Height Depth Degree of protection (IP) Ring core Suitable for mounting on PCB Modular version 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19	Type of insulation material acc. IEC 85		В
Width mm 85 Height mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No Suitable for mounting on PCB No Modular version No	Short-circuit-proof		No
Height mm 91 Depth mm 79 Degree of protection (IP) IP00 Ring core No Suitable for mounting on PCB No Modular version No	Relative short circuit voltage	%	11
Depth mm 79 Degree of protection (IP) IP00 Ring core No Suitable for mounting on PCB No Modular version No	Width	mm	85
Degree of protection (IP) Ring core No Suitable for mounting on PCB Modular version IP00 No No	Height	mm	91
Ring core No Suitable for mounting on PCB No Modular version No	Depth	mm	79
Suitable for mounting on PCB No Modular version No	Degree of protection (IP)		IP00
Modular version No	Ring core		No
	Suitable for mounting on PCB		No
Conductor material Copper	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



- Connection lugs
 Maximum space requirement
 with STN0,06-02 ground connection at bottom