

Control transformer, 0.4 kVA, Rated input voltage 400± 5 % V, Rated output voltage 24 V



Powering Business Worldwide™

Part no. **STN0,4(400/24)**  
**221514**

General specifications		
Product name		Eaton Moeller® series STN Control transformer
Part no.		STN0,4(400/24)
EAN		4015082215149
Product Length/Depth		88 millimetre
Product height		124 millimetre
Product width		121 millimetre
Product weight		5.07 kilogram
Certifications		IEC/EN 61558-2-2 CSA-C22.2 No. 66.2-06 VDE 0570 Part 2-2 UL 506 UL report applies to both US and Canada CE IEC/EN 60204-1, ÖVE-EN 13 UL5085-1 CSA-C22.2 No. 66.1-06 UL File No.: E167225 CSA-C22.2 No. 66 UL Recognized UL 5085-2 VDE 0113, VDE 0100 Part 410 UL Category Control No.: XPTQ2, XPTQ8 Certified by UL for use in Canada
Product Tradename		STN
Product Type		Control transformer
Product Sub Type		None
Catalog Notes		Electrical characteristics: all details for no-load loss, short-circuit loss (copper losses), short-circuit voltage and efficiency values relate to a temperature of 20 °C
Features & Functions		
Features		Separate windings Fully Vacuum-impregnated
General information		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		40 °C
Connection lug		Yes for > 115 A
Connection type		Terminations, < 115 A
Degree of protection		IP00
Duty factor		100 %
Insulation class		B
Primary tapping		± 5 %
Product category		Single-phase control transformers ST
Suitable for		Branch circuits, (UL/CSA)
Type		Single-phase STN control transformers
Electrical rating		
Efficiency		92 %
No-load losses		12 W
Rated frequency - min		50 Hz
Rated frequency - max		60 Hz
Rated power		0.4 V·A
Relative short-circuit voltage		5.3 %
Short-circuit losses		27 W
Short-time rating		0.62 kV·A
Voltage rating - max		600 V

## Design verification

Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		0 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		39 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

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@ss13-27-03-13-02 [AAB620020])

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	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	400
Power	W	
Power consumption in standby mode	W	11
Type of insulation material according to IEC 85		B
Short-circuit-proof		No
Relative short circuit voltage	%	5.3
Width	mm	121
Height	mm	124
Depth	mm	88
Degree of protection (IP)		IP00
Ring core		No
Suitable for mounting on PCB		No
Modular version		No
Conductor material		Copper