DATASHEET - STN0,16(400/24)

Control transformer, 0.16 kVA, Rated input voltage 400 \pm 5 % V, Rated output voltage 24 V



Part no.

STN0,16(400/24) 204949

General specifications	
Product name	Eaton Moeller® series STN Control transformer
Part no.	STN0,16(400/24)
EAN	4015082049492
Product Length/Depth	97 millimetre
Product height	91 millimetre
Product width	85 millimetre
Product weight	2.358 kilogram
Certifications	Certified by UL for use in Canada VDE 0570 Part 2-2 UL report applies to both US and Canada CSA-C22.2 No. 66.2-06 UL5085-1 UL File No.: E167225 IEC/EN 60204-1, ÖVE-EN 13 UL 5085-2 CE UL Category Control No.: XPT02, XPT08 VDE 0113, VDE 0100 Part 410 UL Recognized UL 506 CSA-C22.2 No. 66.1-06 IEC/EN 61558-2-2 CSA-C22.2 No. 66
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	Fully Vacuum-impregnated Separate windings
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	IPOO
Duty factor	100 %
Insulation class	В
Primary tapping	± 5 %
Product category	Single-phase control transformers ST
Suitable for	Branch circuits, (UL/CSA)
Туре	Single-phase STN control transformers
Electrical rating	
Efficiency	87 %
No-load losses	11 W
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated power	0.16 V·A
Relative short-circuit voltage	6.7 %
Short-circuit losses	16 W
Short-time rating	0.32 kV·A

Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0 W
Rated operational current for specified heat dissipation (In)	0 A
Static heat dissipation, non-current-dependent Pvs	27 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 (EC	002486)			
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		

Rated apparent powerVAIOPowerWVPower consumption in standby modeW7Power consumption in standby modeWISpore of insulation material according to IEC 85IIShort-circuit-proofINoRelative short circuit voltageMSWidthImmSAeightImmIDepthImmIDegree of protection (IP)ImmImmShatable for mounting on PCBImmNoMudular versionImmNoMudular versionImmImmMudular versionImmImmMudular versionImmImmMudular versionImmImmMudular v			
Power W Power consumption in standby mode W 7 Power consumption in standby mode W 8 Store of insulation material according to IEC 85 I B Short-circuit-proof I N No Relative short circuit voltage I N S Midth mm S S Leight mm S S Depth mm S S Riag core mm S S Nitable for mounting on PCB M M M Stable for mounting on PCB M M M	Secondary voltage 10	V	0 - 0
Power consumption in standby mode W Prover consumption in standby mode Prover consumptin standby mode Prover consumptin standby mode <td>Rated apparent power</td> <td>VA</td> <td>100</td>	Rated apparent power	VA	100
Fyre of insulation material according to IEC 85 B Short-circuit-proof No Relative short circuit voltage % Nidth mm Height mm Depth mm Short-circuit (IP) mm Ring core Modular version	Power	W	
Short-circuit-proof Relative short circuit voltage M 5 Nidth M 10 5 Aeight Operation (IP) M 10 10 10 10 10 10 10 10 10 10 10 10 10	Power consumption in standby mode	W	27
Relative short circuit voltage % 6.7 Width mm 85 Height mm 91 Depth mm 97 Degree of protection (IP) mm 90 Suitable for mounting on PCB Mm No Modular version Mm No	Type of insulation material according to IEC 85		В
Vidth mm 85 Height mm 91 Depth mm 97 Degree of protection (IP) mm 1P00 Suitable for mounting on PCB M No Modular version M M	Short-circuit-proof		No
Heightmm91Depthmm97Degree of protection (IP)Mm100Ring coreMm100Suitable for mounting on PCBMmNoModular versionMmNo	Relative short circuit voltage	%	6.7
Depth may 97 Degree of protection (IP) Market and the second seco	Width	mm	85
Degree of protection (IP) IPO Ring core No Suitable for mounting on PCB No Modular version No	Height	mm	91
Ring core No Suitable for mounting on PCB No Modular version Modular version	Depth	mm	97
Suitable for mounting on PCB No Modular version No	Degree of protection (IP)		IPOO
Modular version No	Ring core		No
	Suitable for mounting on PCB		No
Conductor material Copper	Modular version		No
	Conductor material		Copper