## DATASHEET - STN0,63(230/24)

Control transformer, 0.63 kVA, Rated input voltage 230  $\pm$  5 % V, Rated output voltage 24 V



Part no.

STN0,63(230/24) 221517

General specifications	
Product name	Eaton Moeller® series STN Control transformer
Part no.	STN0,63(230/24)
EAN	4015082215170
Product Length/Depth	121 millimetre
Product height	157 millimetre
Product width	151 millimetre
Product weight	7.816 kilogram
Certifications Product Tradename	<ul> <li>VDE 0570 Part 2-2</li> <li>UL Recognized</li> <li>UL report applies to both US and Canada</li> <li>UL5085-1</li> <li>UL File No.: E167225</li> <li>UL 5085-2</li> <li>VDE 0113, VDE 0100 Part 410</li> <li>CSA-C22.2 No. 66.1-06</li> <li>IEC/EN 60204-1, ÖVE-EN 13</li> <li>CE</li> <li>CSA-C22.2 No. 66</li> <li>Certified by UL for use in Canada</li> <li>UL 506</li> <li>CSA-C22.2 No. 66.2-06</li> <li>UL Category Control No.: XPT02, XPT08</li> <li>IEC/EN 61558-2-2</li> <li>STN</li> </ul>
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 °
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	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	93 %
No-load losses	21 W
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated power	0.63 V-A
Relative short-circuit voltage	3.8 %
-	3.8 % 32 W
Short-circuit losses	
Short-time rating	1.51 kV-A
Voltage rating - max	600 V

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	53 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**

Electric engineering, automation, process control engineering / Transformer, 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       30 - 230         Primary voltage 2       V       0         Primary voltage 3       V       0         Primary voltage 4       V       0         Primary voltage 5       V       0         Primary voltage 6       V       0	Low-voltage industrial components (EG000017) / One-phase control transformer (E	Low-voltage industrial components (EG000017) / One-phase control transformer (EC002486)				
Built as isolating transformer     No       Built as energy saving transformer     No       Primary voltage 1     V     30 - 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	Electric engineering, automation, process control engineering / Transformer, converter, coil / Control transformer / One-phase control transformer (ecl@ss13-27-03-13-02 [AAB620020])					
Built as energy saving transformerNoPrimary voltage 1V200 - 230 -	Built as safety transformer		No			
Primary voltage 1Image: Constraint of the second secon	Built as isolating transformer		No			
Primary voltage 2V0 - 0Primary voltage 3V0 - 0Primary voltage 4V0 - 0Primary voltage 5V0 - 0Primary voltage 6V0 - 0	Built as energy saving transformer		No			
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 1	V	230 - 230			
Primary voltage 4V0 - 0Primary voltage 5V0 - 0Primary voltage 6V0 - 0	Primary voltage 2	V	0 - 0			
Primary voltage 5     V     0 - 0       Primary voltage 6     V     0 - 0	Primary voltage 3	V	0 - 0			
Primary voltage 6 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 7	V	0 - 0			
Primary voltage 8 V 0 - 0	Primary voltage 8	V	0 - 0			
Primary voltage 9 V 0 - 0	Primary voltage 9	V	0 - 0			
Primary voltage 10 V 0 - 0	Primary voltage 10	V	0 - 0			
Secondary voltage 1 V 24 - 24	Secondary voltage 1	V	24 - 24			
Secondary voltage 2 V 0 - 0	Secondary voltage 2	V	0 - 0			
Secondary voltage 3 V 0 - 0	Secondary voltage 3	V	0 - 0			
Secondary voltage 4 V 0 - 0	Secondary voltage 4	V	0 - 0			
Secondary voltage 5 V 0 - 0	Secondary voltage 5	V	0 - 0			
Secondary voltage 6 V 0 - 0	Secondary voltage 6	V	0 - 0			
Secondary voltage 7 V 0 - 0	Secondary voltage 7	V	0 - 0			
Secondary voltage 8 V 0 - 0	Secondary voltage 8	V	0 - 0			
Secondary voltage 9 V 0 - 0	Secondary voltage 9	V	0 - 0			

Rated apparent power       VA       60         Power       W       V         Power consumption in standby mode       W       2         Power consumption in standby mode       W       8         Syne of insulation material according to IEC 85       M       8         Short-circuit-proof       M       No         Relative short circuit voltage       M       8         Vidth       mm       151         Depth       mm       121         Degree of protection (IP)       Mm       120         Rigt Gore       M       No         Rigt Gore       M       No         Mudular version       M       No			
Power         W           Power consumption in standby mode         W         32           Specie of insulation material according to IEC 85         M         B           Short-circuit-proof         M         S           Nealative short circuit voltage         M         S           Vidth         mm         151           Aeight         mm         152           Depth         mm         121           Reing core         mm         121           Ning core         M         M           Suitable for mounting on PCB         M         No	Secondary voltage 10	V	0 - 0
Power consumption in standby mode         W         32           iype of insulation material according to IEC 85         B         B           Short-circuit-proof         V         No           Relative short circuit voltage         M         Sa           Vidth         M         Sa           Height         Mm         Sa           Depth         MM         Sa           No         Sa         Sa           No         Sa         Sa           No         Sa         Sa           Adeight         Mm         Sa           Depth         Mm         Sa           Name         Sa         Sa           Sing core         MM         Sa           Suitable for mounting on PCB         Sa         Sa           Modular version         Sa         Sa	Rated apparent power	VA	630
Type 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)         Midentified for mounting on PCB           Suitable for mounting on PCB         Midentified for mounting on PCB	Power	W	
Short-circuit-proof Relative short circuit voltage	Power consumption in standby mode	W	32
Relative short circuit voltage     %     %       Width     mm     151       Height     mm     157       Depth     mm     121       Degree of protection (IP)     Mm     120       Suitable for mounting on PCB     Mm     No       Modular version     Mm     No	Type of insulation material according to IEC 85		В
Vidth     mm     151       Aeight     mm     157       Depth     mm     121       Degree of protection (IP)     IPO     IPO       Suitable for mounting on PCB     IPO     No       Moular version     IPO     No	Short-circuit-proof		No
Heightmm57Depthmm121Degree of protection (IP)MmIPORing coreMmNoSuitable for mounting on PCBMmNoModular versionMmNo	Relative short circuit voltage	%	3.8
Depth     mm     121       Degree of protection (IP)     IPO     IPO       Ning core     No     No       Suitable for mounting on PCB     ICO     No       Modular version     ICO     ICO	Width	mm	151
Degree of protection (IP)     IPO       Ring core     No       Suitable for mounting on PCB     IMO       Modular version     IMO	Height	mm	157
Ring core     No       Suitable for mounting on PCB     Image: Constant of the second	Depth	mm	121
Suitable for mounting on PCB     Mo       Modular version     Mo	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