## Control transformer, 4 kVA, Rated input voltage 50 - 950 $\pm$ 5 % V, Rated output voltage 12 - 1000 V



Part no. STZ4,0(\*/\*) 914777

General specifications	
Product name	Eaton Moeller® series STZ Control transformer
Part no.	STZ4,0(*/*)
Product Length/Depth	200 millimetre
Product height	255 millimetre
Product width	230 millimetre
Product weight	35 kilogram
Certifications	UL File No.: E167225 CSA-C22.2 No. 66.1-06 VDE 0570 Part 2-4 (isolating transformer) UL Category Control No.: XPTQ2, XPTQ8 CE UL 506 IEC/EN 60204-1, ÖVE-EN 13 IEC/EN 61558-2-2 VDE 0570 Part 2-2 IEC/EN 61558-2-2/2-4/2-6 CSA-C22.2 No. 66.2-06 UL Recognized VDE 0570 Part 2-6 (safety transformers) Certified by UL for use in Canada CSA-C22.2 No. 66 VDE 0113, VDE 0100 Part 410 UL report applies to both US and Canada UL 5085-2
Product Tradename	STZ
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 Reinforced insulation Fully Vacuum-impregnated
General information	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	40 °C
Connection lug	Yes for < 63 A
Connection type	Terminations, < 63 A
Degree of protection	IP00
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 control, isolating and safety transformer
Electrical rating	
Efficiency	97 %
No-load losses	38 W
Rated frequency - min	50 VV
Rated frequency - max	60 Hz
Rated power	4 V-A
Relative short-circuit voltage	2.2 %
Short-circuit losses	2.2.70 88 W
Short-time rating	15 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	126 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**

Built as safety transformer         Yes           Built as isolating transformer         Yes           Built as energy saving transformer         No           Primary voltage 1         V         50 - 950           Primary voltage 2         V         50 - 950           Primary voltage 3         V         50 - 950           Primary voltage 4         V         50 - 950           Primary voltage 5         V         50 - 950           Primary voltage 6         V         50 - 950           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 2         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 6         V         12 - 1000<	16Cililical uata ETTIVI 3.0					
Built as safety transformer         Yes           Built as isolating transformer         Yes           Built as energy saving transformer         No           Primary voltage 1         V         50 - 950           Primary voltage 2         V         50 - 950           Primary voltage 3         V         50 - 950           Primary voltage 4         V         50 - 950           Primary voltage 5         V         50 - 950           Primary voltage 6         V         50 - 950           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 2         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 6         V         12 - 1000<	Low-voltage industrial components (EG000017) / One-phase control transformer (E	C002486)				
Built as isolating transformer         Yes           Built as energy saving transformer         No           Primary voltage 1         V         50 - 950           Primary voltage 2         V         50 - 950           Primary voltage 3         V         50 - 950           Primary voltage 4         V         50 - 950           Primary voltage 5         V         50 - 950           Primary voltage 6         V         50 - 950           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 2         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 7         V         12 - 1000	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 transformer         No           Primary voltage 1         V         50 - 950           Primary voltage 2         V         50 - 950           Primary voltage 3         V         50 - 950           Primary voltage 4         V         50 - 950           Primary voltage 5         V         50 - 950           Primary voltage 6         V         50 - 950           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 2         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 7         V         12 - 1000	Built as safety transformer		Yes			
Primary voltage 1         V         50 - 950           Primary voltage 2         V         50 - 950           Primary voltage 3         V         50 - 950           Primary voltage 4         V         50 - 950           Primary voltage 5         V         50 - 950           Primary voltage 6         V         50 - 950           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 2         V         12 - 1000           Secondary voltage 3         V         12 - 1000           Secondary voltage 4         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 7         V         0 - 0	Built as isolating transformer		Yes			
Primary voltage 2       V       50 - 950         Primary voltage 3       V       50 - 950         Primary voltage 4       V       50 - 950         Primary voltage 5       V       50 - 950         Primary voltage 6       V       50 - 950         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       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       12 - 1000	Built as energy saving transformer		No			
Primary voltage 3       V       50 - 950         Primary voltage 5       V       50 - 950         Primary voltage 6       V       50 - 950         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       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 1	V	50 - 950			
Primary voltage 4       V       50 - 950         Primary voltage 5       V       50 - 950         Primary voltage 6       V       50 - 950         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       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 2	V	50 - 950			
Primary voltage 5       V       50 - 950         Primary voltage 7       V       50 - 950         Primary voltage 8       V       0 - 0         Primary voltage 9       V       0 - 0         Primary voltage 10       V       0 - 0         Secondary voltage 1       V       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 3	V	50 - 950			
Primary voltage 6       V       50 - 950         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       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 4	V	50 - 950			
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       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 5	V	50 - 950			
Primary voltage 8       V       0 - 0         Primary voltage 9       V       0 - 0         Primary voltage 10       V       0 - 0         Secondary voltage 1       V       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 6	V	50 - 950			
Primary voltage 9       V       0 - 0         Primary voltage 10       V       0 - 0         Secondary voltage 1       V       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 7	V	0 - 0			
Primary voltage 10       V       0 - 0         Secondary voltage 1       V       12 - 1000         Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 8	V	0 - 0			
No.   12 - 1000	Primary voltage 9	V	0 - 0			
Secondary voltage 2       V       12 - 1000         Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Primary voltage 10	V	0 - 0			
Secondary voltage 3       V       12 - 1000         Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Secondary voltage 1	V	12 - 1000			
Secondary voltage 4       V       12 - 1000         Secondary voltage 5       V       12 - 1000         Secondary voltage 6       V       12 - 1000         Secondary voltage 7       V       0 - 0	Secondary voltage 2	V	12 - 1000			
Secondary voltage 5         V         12 - 1000           Secondary voltage 6         V         12 - 1000           Secondary voltage 7         V         0 - 0	Secondary voltage 3	V	12 - 1000			
Secondary voltage 6         V         12 - 1000           Secondary voltage 7         V         0 - 0	Secondary voltage 4	V	12 - 1000			
Secondary voltage 7 V 0 - 0	Secondary voltage 5	V	12 - 1000			
	Secondary voltage 6	V	12 - 1000			
Secondary voltage 8 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	4000
Power	W	
Power consumption in standby mode	W	11
Type of insulation material according to IEC 85		В
Short-circuit-proof		No
Relative short circuit voltage	%	2.2
Width	mm	230
Height	mm	255
Depth	mm	200
Degree of protection (IP)		IP00
Ring core		No
Suitable for mounting on PCB		No
Modular version		No
Conductor material		Copper