# **DATASHEET - DTZ0,5(\*/\*)\***



Three-phase control isolating safety transformer, 0.5 kVA, Rated input voltage 50 - 950  $\pm$  5 % V, Rated output voltage 18.5 - 1000 V



Part no. DTZ0,5(\*/\*)\*
Catalog No. 914803
Alternate Catalog -

No

### **Delivery program**

Zonio, program		
Product range		Three-phase DTZ control transformers
Rated input voltage	V	$50 - 950 \pm 5 \%$
Rated output voltage	V	18.5 – 1000
Rated power	kVA	0.5
Short-time rating	kVA	1
Cu factor 1,40		

### Notes

- UL/CSA only up to primary and secondary 600 V (incl. tapping).
- Enclosures IP65 on request.

When ordering, the type reference must include the following details:

### DTZ0,1(\*/\*)\*

1st wildcard ≙ Nominal input voltage

2nd wildcard  $\triangleq$  Rated output voltage

3rd wildcard ≙ Configuration

### Ordering example

- Desired part no. DTZ0,1
- Desired rated input voltage 200 V
- ullet Desired rated output voltage 18.5 V
- Desired configuration Dy(n)5

The correct type reference is

### DTZ0,1(200/18,5)DY(N)5

Additional tappings → 931897

# **Design verification as per IEC/EN 61439**

Rated operational current for specified heat dissipation In A 0  Heat dissipation per pole, current-dependent P <sub>vid</sub> W 0  Equipment heat dissipation, current-dependent P <sub>vid</sub> W 0  Static heat dissipation, non-current-dependent P <sub>vs</sub> W 55  Heat dissipation capacity P <sub>diss</sub> W 0  Operating ambient temperature min. °C -25  Operating ambient temperature max. °C 40				
Heat dissipation per pole, current-dependent  Equipment heat dissipation, current-dependent  Pvid W 0  Static heat dissipation, non-current-dependent  Pvs W 55  Heat dissipation capacity  Pdiss W 0  Operating ambient temperature min.  Operating ambient temperature max.  Operating ambient temperature max.  **C	Technical data for design verification			
Equipment heat dissipation, current-dependent Pvid W 0 Static heat dissipation, non-current-dependent Pvs W 55  Heat dissipation capacity Pdiss 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 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects 10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Rated operational current for specified heat dissipation	In	Α	0
Static heat dissipation, non-current-dependent  Pys W 55  Heat dissipation capacity  Pdiss W 0  Operating ambient temperature min.  Operating ambient temperature min.  Operating ambient temperature max.  **C -25  Operating ambient temperature max.  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  Pys W 0  0  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  Operating ambient temperature max.  **C	Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Operating ambient temperature min.  Operating ambient temperature max.  CC 40  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  Operating ambient temperature min.  °C -25  40  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Static heat dissipation, non-current-dependent	$P_{vs}$	W	55
Operating ambient temperature max.  CC 40  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  PC 40  40  40  40  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Heat dissipation capacity	P <sub>diss</sub>	W	0
IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  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  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Operating ambient temperature min.		°C	-25
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.  10.2.4 Resistance to ultra-violet (UV) radiation  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	Operating ambient temperature max.		°C	40
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.  10.2.4 Resistance to ultra-violet (UV) radiation  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.	IEC/EN 61439 design verification			
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10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.				Meets the product standard's requirements.
10.2.6 Mechanical impact  Does not apply, since the entire switchgear needs to be evaluated.	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.
10.2.7 Inscriptions Meets the product standard's requirements.	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.

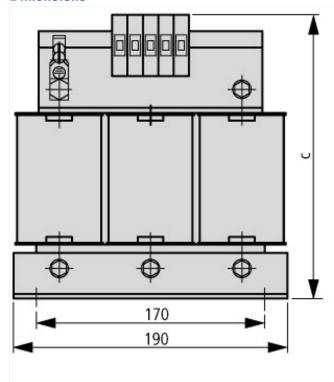
10.3 Degree of protection of ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances	Meets the product standard's requirements.
10.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation 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.

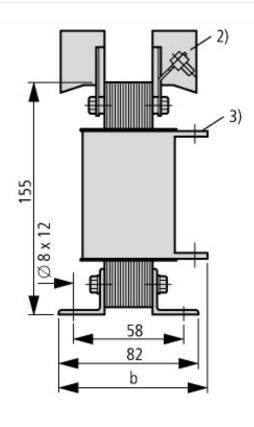
# **Technical data ETIM 7.0**

ICCIIIICAI UALA LIIIVI 7.0		
Low-voltage industrial components (EG000017) / Three-phase control transformer (EC0024	85)	
Electric engineering, automation, process control engineering / Transformer, converter, co	oil / Control transf	former / Three-phase control transformer (ecl@ss10.0.1-27-03-13-01 [AAB619015])
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 1	V	18.5 - 1000
Secondary voltage 2	V	18.5 - 1000
Secondary voltage 3	V	18.5 - 1000
Secondary voltage 4	V	18.5 - 1000
Secondary voltage 5	V	18.5 - 1000
Secondary voltage 6	V	18.5 - 1000
Secondary voltage 7	V	0 - 0
Secondary voltage 8	V	0 - 0
Secondary voltage 9	V	0 - 0
Secondary voltage 10	V	0 - 0
Wiring system		Other
Rated power	VA	500
Type of insulation material acc. IEC 85		В
Short-circuit-proof		No
Relative short circuit voltage	%	6
Conductor material		Copper
Width	mm	190
Height	mm	191
Depth	mm	112
Degree of protection (IP)		IP00
Degree of protection (NEMA)		Other

#### **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 E167225 UL File No. 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 Branch circuits Suitable for 600 V AC Max. Voltage Rating Degree of Protection IEC: IP00, UL/CSA Type: -

### **Dimensions**





	b	С
18,5 V	82	180
24 V	112	191
42 V	82	180
110 V	82	180
230-690 V	82	180

- ① The higher rated operating voltage applies ② Terminals ≦ 25 A ③ Connection lugs > 63 A