

**DATASHEET - T0-3-8007/E**



**Voltmeter selector switches, T0, 20 A, flush mounting, 3 contact unit(s), Contacts: 6, 45 °, maintained, With 0 (Off) position, Phase/Phase-0-Phase/N, Design number 8007**

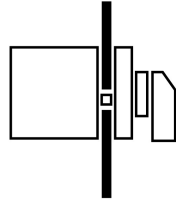
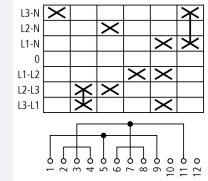
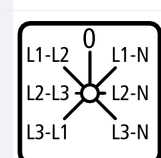


**Part no. T0-3-8007/E**  
**Catalog No. 095813**

**EL-Nummer 0001456302**  
**(Norway)**

Similar to illustration

**Delivery program**

Product range			Control switches
Part group reference			T0
Basic function			Voltmeter selector switches with black thumb grip and front plate
Contacts			6
Degree of Protection			Front IP65
Design			flush mounting 
Contact sequence			
switching function			3 x phase-phase 3 x phase-N
Switching angle		°	45
Switching performance			maintained With 0 (Off) position
Design number			8007
Front plate no.			 <b>FS 1410759</b>
front plate			Phase/Phase-0-Phase/N
<b>Motor rating AC-23A, 50 - 60 Hz</b>			
400 V	P	kW	5.5
Rated uninterrupted current	I <sub>u</sub>	A	20
Note on rated uninterrupted current I <sub>u</sub>			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Number of contact units		contact unit(s)	3

**Technical data**

<b>General</b>			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnector according to IEC/EN 60947-3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			

Open		°C	-25 - +50
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required

### Contacts

Electrical characteristics			
Rated operational voltage	$U_e$	V AC	690
Rated uninterrupted current	$I_u$	A	20
Note on rated uninterrupted current $I_u$			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		$\times I_e$	2
AB 40 % DF		$\times I_e$	1.6
AB 60 % DF		$\times I_e$	1.3
Short-circuit rating			
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	$I_{cw}$	$A_{rms}$	320
Note on rated short-time withstand current $I_{cw}$			Current for a time of 1 second
Rated conditional short-circuit current	$I_q$	kA	6

### Switching capacity

cos $\phi$ rated making capacity as per IEC 60947-3		A	130
Rated breaking capacity cos $\phi$ to IEC 60947-3		A	
230 V		A	100
400/415 V		A	110
500 V		A	80
690 V		A	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at $I_e$		W	0.6
Current heat loss per auxiliary circuit at $I_e$ (AC-15/230 V)		CO	0.6
Lifespan, mechanical	Operations	$\times 10^6$	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	3
230 V Star-delta	P	kW	5.5
400 V 415 V	P	kW	5.5
400 V Star-delta	P	kW	7.5
500 V	P	kW	5.5
500 V Star-delta	P	kW	7.5
690 V	P	kW	4
690 V Star-delta	P	kW	5.5
Rated operational current motor load switch			
230 V	$I_e$	A	11.5
230 V star-delta	$I_e$	A	20
400V 415 V	$I_e$	A	11.5
400 V star-delta	$I_e$	A	20
500 V	$I_e$	A	9
500 V star-delta	$I_e$	A	15.6
690 V	$I_e$	A	4.9
690 V star-delta	$I_e$	A	8.5
AC-21A			

Rated operational current switch			
440 V	$I_e$	A	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz			
230 V	P	kW	3
400 V 415 V	P	kW	5.5
500 V	P	kW	7.5
690 V	P	kW	5.5
Rated operational current motor load switch			
230 V	$I_e$	A	13.3
400 V 415 V	$I_e$	A	13.3
500 V	$I_e$	A	13.3
690 V	$I_e$	A	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	$I_e$	A	10
Voltage per contact pair in series		V	60
DC-21A			
Rated operational current	$I_e$	A	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	$I_e$	A	10
Contacts		Quantity	1
48 V			
Rated operational current	$I_e$	A	10
Contacts		Quantity	2
60 V			
Rated operational current	$I_e$	A	10
Contacts		Quantity	3
120 V			
Rated operational current	$I_e$	A	5
Contacts		Quantity	3
240 V			
Rated operational current	$I_e$	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	$I_e$	A	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	$H_F$	$< 10^{-5}$ , < 1 failure in 100,000 switching operations

### Terminal capacities

Solid or stranded		mm <sup>2</sup>	1 x (1 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Terminal screw			M3.5
Tightening torque for terminal screw		Nm	1

### Technical safety parameters:

<b>Notes</b>			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
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### Rating data for approved types

Contacts			
Rated operational voltage	$U_e$	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		A	16

<b>Auxiliary contacts</b>			
General Use	I <sub>U</sub>	A	10
Pilot Duty			A 600 P 300
<b>Switching capacity</b>			
<b>Maximum motor rating</b>			
<b>Single-phase</b>			
120 V AC		HP	0.5
200 V AC		HP	1
240 V AC		HP	1.5
<b>Three-phase</b>			
200 V AC		HP	3
240 V AC		HP	3
480 V AC		HP	7.5
600 V AC		HP	7.5
<b>Short Circuit Current Rating</b>			
		SCCR	
Basic Rating		kA	5
max. Fuse		A	50
High fault rating		kA	10
max. Fuse		A	20, Class J
<b>Terminal capacity</b>			
Solid or flexible conductor with ferrule		AWG	18 - 14
Terminal screw			M3.5
Tightening torque		lb-in	8.8

### Design verification as per IEC/EN 61439

<b>Technical data for design verification</b>			
Rated operational current for specified heat dissipation	I <sub>n</sub>	A	20
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.6
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
<b>IEC/EN 61439 design verification</b>			
<b>10.2 Strength of materials and parts</b>			
<b>10.2.2 Corrosion resistance</b>			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			UV resistance only in connection with protective shield.
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.
<b>10.9 Insulation properties</b>			
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

Low-voltage industrial components (EG000017) / Voltmeter selector switch (EC000911)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Volt meter switch (ecl@ss10.0.1-27-37-14-11 [AKF068013])		
Measurement between phases possible		Yes
Measuring between phase and N-neutral possible		Yes
With 0 (off) position		Yes
Device construction		Front installation
Modular version		No
With control unit		Yes
Degree of protection (IP)		IP65
Degree of protection (NEMA)		12

### Approvals

Product Standards		UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.		E36332
UL Category Control No.		NLRV
CSA File No.		12528
CSA Class No.		3211-05
North America Certification		UL listed, CSA certified
Suitable for		Branch circuits, suitable as motor disconnect
Degree of Protection		IEC: IP65; UL/CSA Type 1, 12

### Dimensions

② ZFS-... Label mount not included as standard



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