DATASHEET - T8-3-8212/E/HI12

Changeoverswitches, T8, 315 A, flush mounting, 3 contact unit(s), Contacts: 9, 60 °, maintained, With 0 (Off) position, 1-0-2, Design number 8212

Part no.	**T8-3-8212/E/HI12**
	214782
EL Number (Norway)	**1456954**

Product name	Eaton Moeller® series T8 Changeover switch
Part no.	T8-3-8212/E/HI12
EAN	4015082147822
Product Length/Depth	130 millimetre
Product height	210 millimetre
Product width	130 millimetre
Product weight	3.02 kilogram
Compliances	Contact Manufacturer
Certifications	IEC/EN 60204 VDE 0660 IEC/EN 60947-3 IEC/EN 60947
Product Tradename	T8
Product Type	Changeover switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Enclosure material	Plastic
Fitted with:	0 (off) position Black thumb grip and front plate
Inscription	1-0-2
Number of poles	3
Degree of protection	IP65
Degree of protection (front side)	IP65 NEMA 12
Lifespan, mechanical	100,000 Operations
Model	Reverser
Mounting method	Flush mounting
Mounting position	As required
Number of contact units	3
Operating frequency	50 Operations/h
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage (Uimp)	8000 V AC
Safe isolation	440 V AC, Between the contacts, According to EN 61140
Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Suitable for	Front mounting
Switching angle	60 °
Type	Changeover switch
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	50 °C
Ambient operating temperature (enclosed) - min	-25 °C
Ambient operating temperature (enclosed) - max	40 °C
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Terminal capacity (busbar)	2 x (20 x 3) mm, Flat conductor connection with busbars 1 x (25 x 5) mm, Flat conductor connection with busbars
Terminal capacity (solid/stranded)	185 mm^2
Screw size	M12, Terminal screw
Tightening torque	125 lb-in, Screw terminals 14 Nm, Screw terminals
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	1910 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	1800 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	1200 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	420 A
Rated operational current (Ie)	105 A at AC-3, 400 V star-delta 78 A at AC-3, 500 V star-delta
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	126 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	105 A
Rated operational current (Ie) at AC-3, 500 V	78 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	42 A
Rated operational current (Ie) at AC-21, 440 V	315 A
Rated operational current (Ie) at AC-23A, 230 V	239 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	245 A
Rated operational current (Ie) at AC-23A, 500 V	184 A
Rated operational current (Ie) at AC-23A, 690 V	42 A
Rated operational current (Ie) at DC-1, load-break switches l/r = 1 ms	315 A
Rated operational current (Ie) at DC-13, control switches L/R = 50 ms	250 A
Rated operational current (Ie) at DC-23A, 24 V	250 A
Rated operational current (Ie) at DC-23A, 48 V	250 A
Rated operational current (Ie) at DC-23A, 60 V	125 A
Rated operational current (Ie) at DC-23A, 120 V	50 A
Rated operational power at AC-3, 380/400 V, 50 Hz	55 kW
Rated operational power at AC-3, 415 V, 50 Hz	55 kW
Rated operational power at AC-3, 690 V, 50 Hz	37 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	75 kW
Rated operational power at AC-23A, 400 V, 50 Hz	132 kW
Rated operational power at AC-23A, 500 V, 50 Hz	132 kW
Rated operational power at AC-23A, 690 V, 50 Hz	37 kW
Rated operational power star-delta at 220/230 V, 50 Hz	37 kW
Rated operational power star-delta at 380/400 V, 50 Hz	55 kW
Rated operational power star-delta at 500 V, 50 Hz	37 kW
Rated operational power star-delta at 690 V, 50 Hz	37 kW
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	315 A
Uninterrupted current	315 A (open), 275 A (enclosed) Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	5 kA
Rated short-time withstand current (Icw)	4,2 kA, Contacts, 1 second
Short-circuit protection rating	315 A gG/gL, Fuse, Contacts
Load rating	2 x I# (with intermittent operation class 12, 25 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % duty factor)
Number of contacts in series at DC-23A, 24 V	1
Number of contacts in series at DC-23A, 48 V	2
Number of contacts in series at DC-23A, 60 V	3
Number of contacts in series at DC-23A, 120 V	3
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	2390 A
Voltage per contact pair in series	42 V

Control circuit reliability		1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Number of auxiliary contacts (change-over contacts)		0
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		0
Number of contacts		9
Actuator function		Maintained With 0 (Off) position
Actuator type		Short thumb-grip
Equipment heat dissipation, current-dependent Pvid		0 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		11 W
Rated operational current for specified heat dissipation (In)		315 A
Static heat dissipation, non-current-dependent Pvs		0 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		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.
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 8.0

Low-voltage industrial components (EG000017) / Off-load switch (EC001105)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Changeover switch (ecl@ss10.0.1-27-37-14-05 [AKF062013])

Model		Reverser
Number of poles		3
With zero (off) position		Yes
With retraction in 0-position		No
Rated permanent current Iu	A	315
Rated operation current Ie at AC-3, 400 V	A	105
Rated operation power at AC-3, 400 V	kW	55
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0

Suitable for floor mounting	No
Suitable for front mounting	Yes
Suitable for distribution board installation	No
Suitable for intermediate mounting	No
Complete device in housing	No
Material housing	Plastic
Type of control element	Short thumb-grip
Type of electrical connection of main circuit	Screw connection

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