



Reversing switches, T3, 32 A, rear mounting, 3 contact unit(s), Contacts: 5, 60 °, maintained, With 0 (Off) position, 1-0-2, Design number 8401

Part no. T3-3-8401/Z
035739

General specifications

Product name	Eaton Moeller® series T3 Reversing switch
Part no.	T3-3-8401/Z
EAN	4015080357391
Product Length/Depth	144 millimetre
Product height	54 millimetre
Product width	61 millimetre
Product weight	0.237 kilogram
Certifications	CSA-C22.2 No. 94 UL CSA File No.: 012528 CSA CSA-C22.2 No. 60947-4-1-14 CE CSA Class No.: 3211-05 UL File No.: E36332 IEC/EN 60204 IEC/EN 60947 VDE 0660 UL 60947-4-1 UL Category Control No.: NLRV IEC/EN 60947-3
Product Tradename	T3
Product Type	Reversing switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second

Features & Functions

Enclosure material	Plastic
Fitted with:	Black thumb grip and front plate 0 (off) position
Inscription	1-0-2
Number of poles	3

General information

Degree of protection	NEMA 1 IP65 NEMA 12
Degree of protection (front side)	NEMA 12 IP65
Lifespan, mechanical	500,000 Operations
Model	Reversing switch
Mounting method	Rear mounting
Mounting position	As required
Number of contact units	3
Operating frequency	1200 Operations/h
Overtvoltage category	III
Pollution degree	3
Rated impulse withstand voltage (Uimp)	6000 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
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Suitable for	Branch circuits, suitable as motor disconnect, (UL/CSA) Ground mounting Intermediate mounting
Switching angle	60 °
Type	Reversing switch

Climatic environmental conditions

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, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

Terminal capacities

Terminal capacity (flexible with ferrule)	2 x (0.75 - 4) mm ² , ferrules to DIN 46228 1 x (0.75 - 4) mm ² , ferrules to DIN 46228
Terminal capacity (solid/flexible with ferrule AWG)	14 - 10
Terminal capacity (solid/stranded)	1 x (1 - 6) mm ² 2 x (1 - 6) mm ²
Screw size	M4, Terminal screw
Tightening torque	17.7 lb-in, Screw terminals 1.6 Nm, Screw terminals

Electrical rating

Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	260 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	260 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	240 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	170 A
Rated operational current (Ie)	32 A at AC-3, 500 V star-delta 32 A at AC-3, 230 V star-delta 32 A at AC-3, 400 V star-delta 25.5 A at AC-3, 690 V star-delta
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	23.7 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	23.7 A
Rated operational current (Ie) at AC-3, 500 V	23.7 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	14.7 A
Rated operational current (Ie) at AC-21, 440 V	32 A
Rated operational current (Ie) at AC-23A, 230 V	32 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	32 A
Rated operational current (Ie) at AC-23A, 500 V	26.4 A
Rated operational current (Ie) at AC-23A, 690 V	17 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	25 A
Rated operational current (Ie) at DC-13, control switches L/R = 50 ms	20 A
Rated operational current (Ie) at DC-21, 240 V	1 A
Rated operational current (Ie) at DC-23A, 24 V	25 A
Rated operational current (Ie) at DC-23A, 48 V	25 A
Rated operational current (Ie) at DC-23A, 60 V	25 A
Rated operational current (Ie) at DC-23A, 120 V	12 A
Rated operational current (Ie) at DC-23A, 240 V	5 A
Rated operational power at AC-3, 380/400 V, 50 Hz	12 kW
Rated operational power at AC-3, 415 V, 50 Hz	11 kW
Rated operational power at AC-3, 690 V, 50 Hz	11 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	7.5 kW
Rated operational power at AC-23A, 400 V, 50 Hz	15 kW
Rated operational power at AC-23A, 500 V, 50 Hz	15 kW
Rated operational power at AC-23A, 690 V, 50 Hz	15 kW
Rated operational power star-delta at 220/230 V, 50 Hz	7.5 kW
Rated operational power star-delta at 380/400 V, 50 Hz	15 kW
Rated operational power star-delta at 500 V, 50 Hz	18.5 kW
Rated operational power star-delta at 690 V, 50 Hz	22 kW
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	32 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.

Short-circuit rating

Rated conditional short-circuit current (Iq)	1 kA
Rated short-time withstand current (Icw)	650 A, Contacts, 1 second
Short-circuit current rating (basic rating)	5 kA, SCCR (UL/CSA) 40A, max. Fuse, SCCR (UL/CSA)
Short-circuit current rating (high fault)	40 A, Class J, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
Short-circuit protection rating	35 A gG/gL, Fuse, Contacts
Switching capacity	
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-21A, 240 V	1
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
Number of contacts in series at DC-23A, 240 V	5
Switching capacity (main contacts, general use)	25 A, Rated uninterrupted current max. (UL/CSA)
Switching capacity (auxiliary contacts, general use)	10A, IU, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	A600 (UL/CSA) P600 (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	320 A
Voltage per contact pair in series	60 V
Motor rating	
Assigned motor power at 115/120 V, 60 Hz, 1-phase	1.5 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase	3 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase	3 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	3 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	3 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase	7.5 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase	10 HP
Contacts	
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	5
Actuator	
Actuator function	With 0 (Off) position Maintained
Actuator type	Short thumb-grip
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	1.1 W
Rated operational current for specified heat dissipation (In)	32 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 9.0

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 / Load-break switch (ecl@ss13-27-37-14-05 [AKF062018])	
Model	Reversing switch
Number of poles	3
With zero (off) position	Yes
With retraction in 0-position	No
Rated permanent current I_{p}	A 32
Rated operation current I_{e} at AC-3, 400 V	A 23.7
Rated operation power at AC-3, 400 V	kW 12
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	Yes
Suitable for front mounting	No
Suitable for distribution board installation	No
Suitable for intermediate mounting	Yes
Complete device in housing	No
Housing material	Plastic
Type of control element	Short thumb-grip
Type of electrical connection of main circuit	Screw connection