DATASHEET - T3-5-15178/EZ

Voltage current measuring switch, T3, 32 A, center mounting, 5 contact unit(s), Contacts: 10, 90 °, maintained, With 0 (Off) position, 0-1-2-3, Design number 15178

Part no. **T3-5-15178/EZ**
020659

Product name	Eaton Moeller® series T3 Voltage current measuring switch
Part no.	T3-5-15178/EZ
EAN	4015080206590
Product Length/Depth	147 millimetre
Product height	54 millimetre
Product width	61 millimetre
Product weight	0.32 kilogram
Certifications	CSA IEC/EN 60204 CE UL IEC/EN 60947-3 CSA File No.: 012528 UL Category Control No.: NLRV CSA-C22.2 No. 94 UL 60947-4-1 CSA Class No.: 3211-05 CSA-C22.2 No. 60947-4-1-14 IEC/EN 60947 UL File No.: E36332 VDE 0660
Product Tradename	T3
Product Type	Voltage current measuring switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Fitted with:	Control unit 0 (off) position Black thumb grip and front plate
Functions	Measuring between phase and N-neutral possible Measurement between phases possible
Inscription	0-1-2-3
Number of poles	5
Switch function type	3 converters
Degree of protection	IP55 NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	500,000 Operations
Mounting method	Center mounting
Mounting position	As required
Number of contact units	5
Operating frequency	1200 Operations/h
Overvoltage 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)
Switching angle	90 °
Type	Voltage current measuring 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 (flexible with ferrule)	1 x (0.75 - 4) mm^2, ferrules to DIN 46228 2 x (0.75 - 4) mm^2, ferrules to DIN 46228
Terminal capacity (solid/flexible with ferrule AWG)	14 - 10
Terminal capacity (solid/stranded)	2 x (1 - 6) mm^2 1 x (1 - 6) mm^2
Screw size	M4, Terminal screw
Tightening torque	1.6 Nm, Screw terminals 17.7 lb-in, Screw terminals
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 l/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, 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.
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)	10 kA, SCCR (UL/CSA) 40 A, Class J, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating	35 A gG/gL, Fuse, Contacts
Load rating	1.6 x I# (with intermittent operation class 12, 40 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor) 2 x I# (with intermittent operation class 12, 25 % 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)	P600 (UL/CSA) A600 (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
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
Control circuit reliability	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Number of contacts	10
Actuator function	Maintained With 0 (Off) position
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 8.0

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
Measurement between phase and neutral conductor possible			Yes
With zero (off) position			Yes
Device construction			Front installation
Modular version			No
With control element			Yes
Degree of protection (IP)			IP55
Degree of protection (NEMA)			12

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