DATASHEET - T5-1-102/E-RT

On-Off switch, T5, 100 A, flush mounting, 1 contact unit(s), 2 pole, Emergency switching off function, with red thumb grip and yellow front plate

Part no. **T5-1-102/E-RT**
098809

Product name	Eaton Moeller® series T5 On-Off switch
Part no.	T5-1-102/E-RT
EAN	4015080988090
Product Length/Depth	91 millimetre
Product height	88 millimetre
Product width	88 millimetre
Product weight	0.329 kilogram
Certifications	VDE 0660 IEC/EN 60204 IEC/EN 60947 IEC/EN 60947-3
Product Tradename	T5
Product Type	On-Off switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features	Version as emergency stop installation
Fitted with:	Red thumb grip and yellow front plate
Functions	Emergency switching off function
Inscription	0-1
Number of poles	2
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	500,000 Operations
Mounting method	Flush mounting
Mounting position	As required
Number of contact units	1
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	Front mounting 4-hole
Switching angle	90 °
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 capacity	2 x (2.5 - 16) mm^2, solid or stranded 1 x (2.5 - 35) mm^2, solid or stranded 2 x (1.5 - 10) mm^2, flexible with ferrule to DIN 46228 1 x (1 - 25) mm^2, flexible with ferrules to DIN 46228

Screw size	M6, Terminal screw
Tightening torque	4 Nm, Screw terminals
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	760 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	740 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	590 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	420 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	71 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	55 A
Rated operational current (Ie) at AC-3, 500 V	44 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	17 A
Rated operational current (Ie) at AC-21, 440 V	100 A
Rated operational current (Ie) at AC-23A, 230 V	100 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	100 A
Rated operational current (Ie) at AC-23A, 500 V	55 A
Rated operational current (Ie) at AC-23A, 690 V	32 A
Rated operational current (Ie) at DC-1, load-break switches l/r = 1 ms	80 A
Rated operational current (Ie) star-delta at AC-3, 220/230 V	100 A
Rated operational current (Ie) star-delta at AC-3, 380/400 V	95.3 A
Rated operational current (Ie) star-delta at AC-3, 500 V	76.2 A
Rated operational current (Ie) star-delta at AC-3, 690 V	29.4 A
Rated operational power at AC-3, 380/400 V, 50 Hz	30 kW
Rated operational power at AC-3, 415 V, 50 Hz	30 kW
Rated operational power at AC-3, 500 V, 50 Hz	30 kW
Rated operational power at AC-3, 690 V, 50 Hz	15 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	30 kW
Rated operational power at AC-23A, 400 V, 50 Hz	55 kW
Rated operational power at AC-23A, 500 V, 50 Hz	37 kW
Rated operational power at AC-23A, 690 V, 50 Hz	30 kW
Rated operational power star-delta at 220/230 V, 50 Hz	30 kW
Rated operational power star-delta at 380/400 V, 50 Hz	45 kW
Rated operational power star-delta at 500 V, 50 Hz	45 kW
Rated operational power star-delta at 690 V, 50 Hz	22 kW
Rated operational voltage (Ue) at AC - min	690 V
Rated operational voltage (Ue) at AC - max	600 V
Rated uninterrupted current (Iu)	100 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	2 kA
Rated short-time withstand current (Icw)	1.7 kA 1,7 kA, Contacts, 1 second
Short-circuit protection rating	100 A gG/gL, Fuse, Contacts
Load rating	2 x I# (with intermittent operation class 12, 25 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor)
Switching capacity (main contacts, general use)	63 A, Rated uninterrupted current max. (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	950 A
Voltage per contact pair in series	60 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
Actuator color	Red

Actuator function			Maintained
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			7.5 W
Rated operational current for specified heat dissipation (In)			100 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) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC		V	600
Rated operating voltage		V	690
Rated permanent current Iu		A	100
Rated permanent current at AC-23, 400 V		A	
Rated permanent current at AC-21, 400 V		A	100
Rated operation power at AC-3, 400 V		kW	30
Rated short-time withstand current Icw		kA	1.7
Rated operation power at AC-23, 400 V		kW	55
Switching power at 400 V		kW	55
Conditioned rated short-circuit current Iq		kA	2
Number of poles			2
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
Motor drive optional	No
Motor drive integrated	No
Voltage release optional	No
Device construction	Built-in device fixed built-in technique
Suitable for floor mounting	No
Suitable for front mounting 4-hole	Yes
Suitable for front mounting centre	No
Suitable for distribution board installation	No
Suitable for intermediate mounting	No
Colour control element	Red
Type of control element	Short thumb-grip
Interlockable	No
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65
Degree of protection (NEMA)	12

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