DATASHEET - T3-2-2092CH/I2/SVB-SI-CHD-24V

SUVA safety switches, T3, 32 A, surface mounting, 2 N/O, 2 N/C, Emergency switching off function, with warning label „safety switch", Indicator light 24 V

Part no. T3-2-2092CH/I2/SVB-SI-CHD-24V
172957

General specifications	
Product name	Eaton Moeller® series T3 SUVA safety switch
Part no.	T3-2-2092CH/I2/SVB-SI-CHD-24V
EAN	4015081695454
Product Length/Depth	185 millimetre
Product height	124 millimetre
Product width	108 millimetre
Product weight	0.5 kilogram
Certifications	IEC/EN 60204 IEC/EN 60947 IEC/EN 60947-3 VDE 0660
Product Tradename	T3
Product Type	SUVA safety switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions	
Features	Version as safety switch Version as main switch Version as emergency stop installation
Fitted with:	Red rotary handle and yellow locking ring Warning label "Safety switch"
Functions	Emergency switching off function Interlockable
Locking facility	Lockable in the 0 (Off) position (cover interlock)
Number of poles	2
General information	
Accessories	Indicator light 24 V included with supplied equipment.
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	500,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Number of contact units	2
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	12 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Suitable for	Ground mounting
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	40 °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	2 x (1 - 6) mm^2, solid or stranded 1 x (1 - 6) mm^2, solid or stranded 2 x (0.75 - 4) mm^2, flexible with ferrules to DIN 46228 1 x (0.75 - 4) mm^2, flexible with ferrules to DIN 46228
Screw size	M4, Terminal screw
Tightening torque	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) 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 current (Ie) star-delta at AC-3, 220/230 V	32 A
Rated operational current (Ie) star-delta at AC-3, 380/400 V	32 A
Rated operational current (Ie) star-delta at AC-3, 500 V	32 A
Rated operational current (Ie) star-delta at AC-3, 690 V	25.5 A
Rated operational power at AC-3, 380/400 V, 50 Hz	11 kW
Rated operational power at AC-3, 415 V, 50 Hz	11 kW
Rated operational power at AC-3, 500 V, 50 Hz	15 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)	0.65 kA 650 A, Contacts, 1 second
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
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	320 A
Voltage per contact pair in series	60 V

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)	2
Number of auxiliary contacts (normally open contacts)	2

Actuator

Actuator color	Red
Actuator type	Door coupling rotary drive

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) / Switch disconnector (low voltage) (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss13-27-37-14-03 [AKF060018])

Version as main switch	Yes
Version as maintenance-/service switch	No
Version as safety switch	Yes
Version as emergency stop installation	Yes
Version as reversing switch	No

Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	32
Rated permanent current at AC-23, 400 V	A	32
Rated permanent current at AC-21, 400 V	A	32
Rated operation power at AC-3, 400 V	kW	11
Rated short-time withstand current Icw	kA	0.65
Rated operation power at AC-23, 400 V	kW	15
Switching power at 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	1
Number of poles		2
Number of auxiliary contacts as normally closed contact		2
Number of auxiliary contacts as normally open contact		2
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
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		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
With pre-assembled cabling		No
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12
Width	mm	108
Height	mm	124
Depth	mm	185
Width in number of modular spacings		

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