DATASHEET - T6-160-6/I45/SVB/HI11

Main switch, T6, 160 A, surface mounting, 6 contact unit(s), 6 pole, 1 N/O, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

Powering Business Worldwide

Part no. T6-160-6/I45/SVB/HI11
201448

Product name	Eaton Moeller® series T6 Main switch
Part no.	T6-160-6/I45/SVB/HI11
EAN	4015082014483
Product Length/Depth	500 millimetre
Product height	285 millimetre
Product width	375 millimetre
Product weight	5.4 kilogram
Compliances	VDE
Certifications	EN 60947 IEC 60947 EN 60204 VDE IEC/EN 60204 VDE 0660 IEC/EN 60947 IEC/EN 60947-3
Product Tradename	T6
Product Type	Main switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features	Version as main switch Version as maintenance-/service switch
Fitted with:	Red rotary handle and yellow locking ring Connection terminal K95/1N/BR FL4… flanges order separately
Functions	Interlockable Emergency switching off function
Locking facility	Lockable in the 0 (Off) position
Number of poles	6
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	100,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Number of contact units	6
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	Ground mounting
Switching angle	90 °
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 capacity	2 x 25 mm², flexible with ferrules to DIN 46228 2 x 35 mm², solid or stranded 2 x 13 x 1.5 mm Number of segments x width x thickness, copper strip 1 x 13 x 3 mm Number of segments x width x thickness, copper strip 1 x 50 mm², flexible with ferrules to DIN 46228 1 x 70 mm², solid or stranded
Screw size	M5, Inbus, Terminal screw
Tightening torque	39.8 lb-in, Screw terminals 4.5 Nm, Screw terminals
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	1280 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	900 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	880 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	340 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	103 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	85 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	160 A
Rated operational current (Ie) at AC-23A, 230 V	103 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	105 A
Rated operational current (Ie) at AC-23A, 500 V	106 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	125 A
Rated operational current (Ie) at DC-13, control switches L/R = 50 ms	125 A
Rated operational current (Ie) at DC-23A, 24 V	125 A
Rated operational current (Ie) at DC-23A, 48 V	125 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 current (Ie) star-delta at AC-3, 220/230 V	103 A
Rated operational current (Ie) star-delta at AC-3, 380/400 V	85 A
Rated operational current (Ie) star-delta at AC-3, 500 V	78 A
Rated operational current (Ie) star-delta at AC-3, 690 V	42 A
Rated operational power at AC-3, 380/400 V, 50 Hz	45 kW
Rated operational power at AC-3, 415 V, 50 Hz	45 kW
Rated operational power at AC-3, 500 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	30 kW
Rated operational power at AC-23A, 400 V, 50 Hz	55 kW
Rated operational power at AC-23A, 500 V, 50 Hz	75 kW
Rated operational power at AC-23A, 690 V, 50 Hz	37 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	55 kW
Rated operational power star-delta at 690 V, 50 Hz	37 kW
Rated operational voltage (Ue) at AC - min	690 V
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	160 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	5 kA
Rated short-time withstand current (Icw)	3 kA 3 kA, Contacts, 1 second
Short-circuit protection rating	160 A gG/gL, Fuse, Contacts
Load rating	1.3 x I# (with intermittent operation class 12, 60 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % duty factor)

	2 x I# (with intermittent operation class 12, 25 % 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)	1600 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)	1
Number of auxiliary contacts (normally open contacts)	1
Actuator color	Red
Actuator type	Door coupling rotary drive
Equipment heat dissipation, current-dependent Pvid	11 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	11 W
Rated operational current for specified heat dissipation (In)	160 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	Yes
Version as maintenance-/service switch	Yes
Version as safety switch	No
Version as emergency stop installation	No
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	160
Rated permanent current at AC-23, 400 V		A	105
Rated permanent current at AC-21, 400 V		A	160
Rated operation power at AC-3, 400 V		kW	45
Rated short-time withstand current Icw		kA	3
Rated operation power at AC-23, 400 V		kW	55
Switching power at 400 V		kW	55
Conditioned rated short-circuit current Iq		kA	5
Number of poles			6
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
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
Degree of protection (IP), front side			IP65
Degree of protection (NEMA)			12

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