

Main switch, T6, 160 A, rear 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



**Part no. T6-160-6/V/SVB/HI11
200619**

General specifications		
Product name		Eaton Moeller® series T6 Main switch
Part no.		T6-160-6/V/SVB/HI11
EAN		4015082006198
Product Length/Depth		200 millimetre
Product height		140 millimetre
Product width		225 millimetre
Product weight		2.2 kilogram
Certifications		IEC/EN 60947-3 IEC/EN 60947 IEC/EN 60204 VDE 0660
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 & Functions		
Features		Version as maintenance-/service switch Version as main switch
Fitted with:		Red rotary handle and yellow locking ring
Functions		Interlockable Emergency switching off function
Locking facility		Lockable in the 0 (Off) position
Number of poles		6
General information		
Degree of protection		NEMA 12
Degree of protection (front side)		IP65
Lifespan, mechanical		100,000 Operations
Mounting method		Rear 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 Intermediate mounting
Switching angle		90 °
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		1 x 70 mm ² , solid or stranded 1 x 13 x 3 mm Number of segments x width x thickness, copper strip

		2 x 35 mm ² , solid or stranded 1 x 50 mm ² , flexible with ferrules to DIN 46228 2 x 25 mm ² , flexible with ferrules to DIN 46228 2 x 13 x 1.5 mm Number of segments x width x thickness, copper strip
Screw size		M5, Inbus, Terminal screw
Tightening torque		39.8 lb-in, Screw terminals 4.5 Nm, Screw terminals
Electrical rating		
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 I/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 uninterrupted current (Iu)		160 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating		
Rated conditional short-circuit current (Iq)		30 kA
Rated short-time withstand current (Icw)		3 kA 3 kA, Contacts, 1 second
Short-circuit protection rating		160 A gG/gL, Fuse, Contacts
Switching capacity		
Load rating		1.6 x I# (with intermittent operation class 12, 40 % duty factor) 2 x I# (with intermittent operation class 12, 25 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % 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
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)		1
Number of auxiliary contacts (normally open contacts)		1
Actuator		
Actuator color		Red
Actuator type		Door coupling rotary drive
Design verification		
Equipment heat dissipation, current-dependent P _{vid}		11 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent P _{vid}		11 W
Rated operational current for specified heat dissipation (I _n)		160 A
Static heat dissipation, non-current-dependent P _{vs}		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 disconnecter (EC000216)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (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 U _e AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current I _u	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 I _{cw}	kA	3
Rated operation power at AC-23, 400 V	kW	55
Switching power at 400 V	kW	55
Conditioned rated short-circuit current I _q	kA	30
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		Built-in device fixed built-in technique
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		Yes
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