Specifications

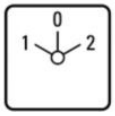

Photo is representative

Eaton 207220

Eaton Moeller® series T5B Changeover switch, 63 A, surface mounting, 2 contact units, Contacts: 4, 60 °, maintained, 0 (Off) position, 1-0-2, Design number 8211

General specifications	
PRODUCT NAME	Eaton Moeller® series T5B Changeover switch
CATALOG NUMBER	207220
EAN	4015082072209
PRODUCT LENGTH/DEPTH	240 mm
PRODUCT HEIGHT	162 mm
PRODUCT WIDTH	160 mm
PRODUCT WEIGHT	1.171 kg
CERTIFICATIONS	CSA Class No.: 3211-05 CSA-C22.2 No. 60947-4-1-14 IEC/EN 60204 CE UL File No.: E36332 IEC/EN 60947-3 CSA-C22.2 No. 94 UL UL Category Control No.: NLRV CSA File No.: 012528 VDE 0660 IEC/EN 60947 UL 60947-4-1 CSA
CATALOG NOTES	Rated Short-time Withstand Current (Icw) for a time of 1 second
MODEL CODE	T5B-2-8211/I4

Powering Business Worldwide

Actuator

ACTUATOR FUNCTION	Maintained With 0 (Off) position
ACTUATOR TYPE	Short thumb-grip

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	40 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

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)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF CONTACTS	4

Design verification

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.
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.
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	4.5 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	63 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W

Electrical rating

RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3)	520 A
RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)	600 A
RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	480 A
RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	340 A
RATED OPERATIONAL CURRENT (IE)	57.2 A at AC-3, 500 V star-delta 63 A at AC-3, 230 V star-delta 29.4 A at AC-3, 690 V star-delta 63 A at AC-3, 400 V star-delta
RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	63 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V	63 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V	63 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	33 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	23.8 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	51 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	41 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	33 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	17 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	63 A
RATED OPERATIONAL	25 A

Features & functions

ENCLOSURE MATERIAL	Plastic
FEATURES	Complete device in housing
FITTED WITH:	0 (off) position Black thumb grip and front plate
INSCRIPTION	1-0-2
NUMBER OF POLES	2

CURRENT (IE) AT DC-13, CONTROL SWITCHES L/R = 50 MS	
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	50 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 240 V	20 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 48 V	50 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 60 V	50 A
RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ	18.5 kW
RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	30 kW
RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ	22 kW
RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ	22 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	22 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	22 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	15 kW
RATED OPERATIONAL POWER STAR-DELTA AT 220/230 V, 50 HZ	18.5 kW
RATED OPERATIONAL POWER STAR-DELTA AT 380/400 V, 50 HZ	30 kW
RATED OPERATIONAL POWER STAR-DELTA AT 500 V, 50 HZ	37 kW
RATED OPERATIONAL POWER STAR-DELTA AT 690 V, 50 HZ	22 kW
RATED OPERATIONAL VOLTAGE (UE) AT AC -	690 V

MAX	
RATED UNINTERRUPTED CURRENT (IU)	63 A
UNINTERRUPTED CURRENT	Rated uninterrupted current Iu is specified for max. cross-section.

General information

DEGREE OF PROTECTION	IP65 NEMA 1 NEMA 12
DEGREE OF PROTECTION (FRONT SIDE)	IP65 NEMA 12
LIFESPAN, MECHANICAL	500,000 Operations
MODEL	Reverser
MOUNTING METHOD	Surface mounting
MOUNTING POSITION	As required
NUMBER OF CONTACT UNITS	2
OPERATING FREQUENCY	1200 Operations/h
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	Control switches
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) Ground mounting Front mounting
SWITCHING ANGLE	60 °
TYPE	Changeover switch

Motor rating

ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	3 HP
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 1-PHASE	7.5 HP
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	15 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	10 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	15 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	40 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	40 HP

Short-circuit rating

RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	2 kA
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	1,3 kA, Contacts, 1 second
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT)	10 kA, SCCR (UL/CSA) 100 A, Class J, max. Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT PROTECTION RATING	80 A gG/gL, Fuse, Contacts

Switching capacity

LOAD RATING	2 x I_e (with intermittent operation class 12, 25 % duty factor) 1.6 x I_e (with intermittent operation class 12, 40 % duty factor) 1.3 x I_e (with intermittent operation class 12, 60 % duty factor)
NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 24 V	1
NUMBER OF CONTACTS IN SERIES AT DC-23A, 240 V	6
NUMBER OF CONTACTS IN SERIES AT DC-23A, 48 V	2
NUMBER OF CONTACTS IN SERIES AT DC-23A, 60 V	3
RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)	800 A
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	63 A, Rated uninterrupted current max. (UL/CSA)
VOLTAGE PER CONTACT PAIR IN SERIES	60 V

Terminal capacities

SCREW SIZE	M6, Terminal screw
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (1 - 25) mm², ferrules to DIN 46228 2 x (1.5 - 10) mm², ferrule to DIN 46228
TERMINAL CAPACITY (SOLID/FLEXIBLE WITH FERRULE AWG)	12 - 4
TERMINAL CAPACITY (SOLID/STRANDED)	2 x (2.5 - 16) mm² 1 x (2.5 - 35) mm²
TIGHTENING TORQUE	35.4 lb-in, Screw terminals 4 Nm, Screw terminals

Resources

BROCHURES	Brochure - T Rotary Cam switch and P Switch-disconnector

CATALOGUES	P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN
DECLARATIONS OF CONFORMITY	eaton-changeover-switch-declaration-of-conformity-eu251494en.pdf
DRAWINGS	eaton-rotary-switches-t5b-changeover-switch-dimensions.eps eaton-rotary-switches-front-plate-t0-changeover-switch-symbol-009.eps eaton-rotary-switches-surface-mounting-t0-changeover-switch-3d-drawing.eps eaton-general-totally-insulated-t0-main-switch-symbol.eps eaton-general-rotary-switch-t0-step-switch-symbol.eps
ECAD MODEL	ETN.207220.edz
INSTALLATION INSTRUCTIONS	IL038010092
INSTALLATION VIDEOS	Eaton's P Switch-disconnectors used in a factory
MCAD MODEL	eaton-switch-mcad-drawings-bauform12.dwg DA-CS-bauform12
PRODUCT NOTIFICATIONS	MZ008005ZU_Orderform_Customized_Switch.pdf MZ008006ZU_Orderform_Customized_Switch.pdf
WIRING DIAGRAMS	eaton-rotary-switches-changeover-switch-t0-changeover-switch-wiring-diagram-002.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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