DATASHEET - T5-1-8200/EA/SVB



Main switch, T5, 100 A, flush mounting, 1 contact unit(s), 1 pole, Emergency switching off function, With red rotary handle and yellow locking ring



T5-1-8200/EA/SVB Part no.

Catalog No. 097224

EL-Nummer (Norway)

1417123

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T5
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			1 pole
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			0 0 0
			- 2
Switching angle		0	90
Design number			8200
Function			OFF OFF
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	55
Rated uninterrupted current	Iu	Α	100
Note on rated uninterrupted current !u			Rated uninterrupted current I_u is specified for max. cross-section.
Number of contact units		contact unit(s)	

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open	°(С	-25 - +50

Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	- mp	g	15
Mounting position		9	As required
Contacts			. to roquired
Mechanical variables			
Number of poles			1 pole
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	Iu	Α	100
Note on rated uninterrupted current !u			Rated uninterrupted current I_u is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I _e	2
AB 40 % DF		x I _e	1.6
AB 60 % DF			
		x I _e	1.3
Short-circuit rating			
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1700
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	2
Switching capacity		۸	050
cos φ rated making capacity as per IEC 60947-3		A	950
Rated breaking capacity cos φ to IEC 60947-3		A	700
230 V		A	760
400/415 V		A	740
500 V		A	590
690 V		Α	420
Safe isolation to EN 61140		V/ A C	440
between the contacts Current heat less per contact at I		V AC W	440
Current heat loss per contact at I _e			7.5
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	7.5
Lifespan, mechanical	Operations	x 10 ⁶	> 0.5
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	22
230 V Star-delta	P	kW	30
400 V 415 V	P	kW	30
400 V Star-delta	P	kW	45
500 V	P	kW	30
500 V Star-delta	P	kW	45
690 V	P	kW	15
690 V Star-delta	P	kW	22
Rated operational current motor load switch			
230 V	l _e	Α	71
230 V star-delta	I _e	Α	100
400V 415 V	I _e	Α	55
400 V star-delta	I _e	Α	95.3
500 V	I _e	Α	44
500 V star-delta	l _e	A	76.2
690 V		A	17
690 V star-delta	l _e		
090 A Stat-neita	l _e	А	29.4

AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	30
400 V 415 V	P	kW	55
500 V	P	kW	37
690 V	P	kW	30
Rated operational current motor load switch			
230 V	I _e	Α	100
400 V 415 V	I _e	Α	100
500 V	I _e	Α	55
690 V	I _e	Α	32
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	80
Voltage per contact pair in series		٧	60
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
Terminal capacities			
Solid or stranded		mm ²	1 x (2,5 - 35) 2 x (2,5 - 16)
Flexible with ferrules to DIN 46228		mm ²	1 x (1 - 25) 2 x (1.5 - 10)
Terminal screw			M6
Tightening torque for terminal screw		Nm	4
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts			
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		Α	65
Terminal capacity			
Terminal screw			M6

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	100
Heat dissipation per pole, current-dependent	P _{vid}	W	7.5
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties	
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 (II) is observed

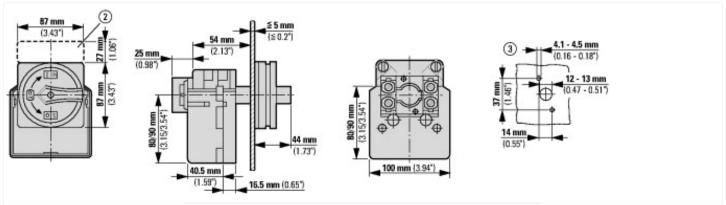
Technical data ETIM 7.0

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])

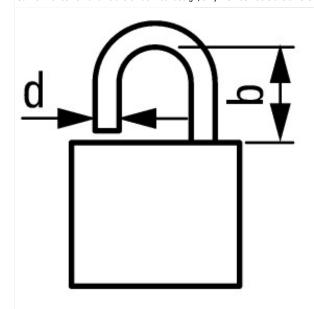
[AKFUDUU13])		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	٧	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	100
Rated permanent current at AC-23, 400 V	Α	100
Rated permanent current at AC-21, 400 V	Α	100
Rated operation power at AC-3, 400 V	kW	30
Rated short-time withstand current lcw	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		1
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 ground mounting		No
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		Yes
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)		Other

Dimensions



- ② ZFS-... Label mount not included as standard
- (3) Drilling dimensions door

Cam switches T5B and T5 are of identical design, only their contacts are different



d = 4 - 8 mm b + d ≤ 47 mmd = 0.16 - 0.31"
b + d ≤ 1.85"

≦3 padlocks

Additional product information (links)

Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html