



Star-delta switch Surface mounting



Powering Business Worldwide™

Part no. T5B-4-8410/14

Article no. 207234

Delivery programme

Product range			Switch-disconnectors
Basic function			Star-delta switches
Part group reference			T5B
Design			Surface mounting
Protection type			IP65
			totally insulated
Emergency stop			without emergency switching off/emergency stop function
			with black thumb grip and front plate
Contact sequence			
Front plate no.			 FS 635
Main conducting paths			
No. of poles		M	3
Max. motor rating			
AC-23A			
400/415 V 50-60 Hz	P	kW	22
Rated uninterrupted current	I _u	A	63

Approvals

Product Standards
UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Suitable for
Degree of Protection

UL 508; CSA-C22.2 No. 14-05; IEC/EN 60947-3; CE marking
E36332
NLRV
12528
3211-05
UL listed, CSA certified
Branch circuits, suitable as motor disconnect
IEC: IP65; UL/CSA Type 3R, 12

General

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnectors to IEC/EN 60947-3 Load-break switches to IEC/EN 60947-3
Lifespan, mechanical	Operations	x 10 ⁶	0.5
Maximum operating frequency		Operations h	3000
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclical, to IEC 60068-2-30

Ambient temperature		°C	
Open		°C	- 25 - 50
Enclosed		°C	- 25 - 40
Mounting position			As required
Mechanical shock resistance to IEC 60068-2-27	Half-sinusoidal shock 20 ms	g	> 15

Contacts

Rated operational voltage	U_e	V AC	690
Rated impulse withstand voltage	U_{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated uninterrupted current	I_u	A	
open	I_u	A	63
Enclosed	I_u	A	63
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	80
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	1300
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between the contacts		V AC	440
Switching angles		°	90 60 45 30
Contact units			10
Double-break contacts			max. 20
Current heat loss per contact at I_e		W	4.5

Terminal capacities

Solid or stranded		mm ²	1 x (2.5 - 35) 2 x (2.5 - 16)
Flexible with ferrule to DIN 46228		mm ²	1 x (1.5 - 25) 2 x (1.5 - 10)
Terminal screw			M6
Tightening torque		Nm	4

Switching capacity

AC		$x U_s$	
Rated making capacity $\cos \varphi = 0.35$		A	800
Rated breaking capacity, motor load switch $\cos \varphi = 0.35$		A	
230 V		A	520
400 V		A	600
500 V		A	480
690 V		A	340
Rated operational current 440 V load-break switch AC-21A	I_e	A	63
Rating, AC-3 motor load switch	P	kW	
220 V 230 V	P	kW	22
230 V Star-delta	P	kW	22
380 V 400 V	P	kW	37
400 V Star-delta	P	kW	37
500 V	P	kW	22
500 V Star-delta	P	kW	37
660 V 690 V	P	kW	37

690 V Star-delta	P	kW	37
AC-23A Motor load switches (main switches maintenance switches)	P	kW	
230 V	P	kW	15
400 V	P	kW	22
500 V	P	kW	22
690 V	P	kW	22
Rated operational current control switch AC-15			
220 V 230 V 240 V	I _e	A	16
380 V 400 V 415 V	I _e	A	6
500 V	I _e	A	4
DC		x U _s	
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	63
Voltage per contact pair in series		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	A	50
Contacts		Quantity	1
48 V			
Rated operational current	I _e	A	50
Contacts		Quantity	2
60 V			
Rated operational current	I _e	A	50
Contacts		Quantity	3
120 V			
Rated operational current	I _e	A	25
Contacts		Quantity	3
240 V			
Rated operational current	I _e	A	20
Contacts		Quantity	6
DC-13, Control switches L/R = 50 ms			
Rated operational current	I _e	A	25
Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ , < 1 fault in 100000 operations

Notes

Notes The following applies for solid, multiwire, and flexible terminal capacities:

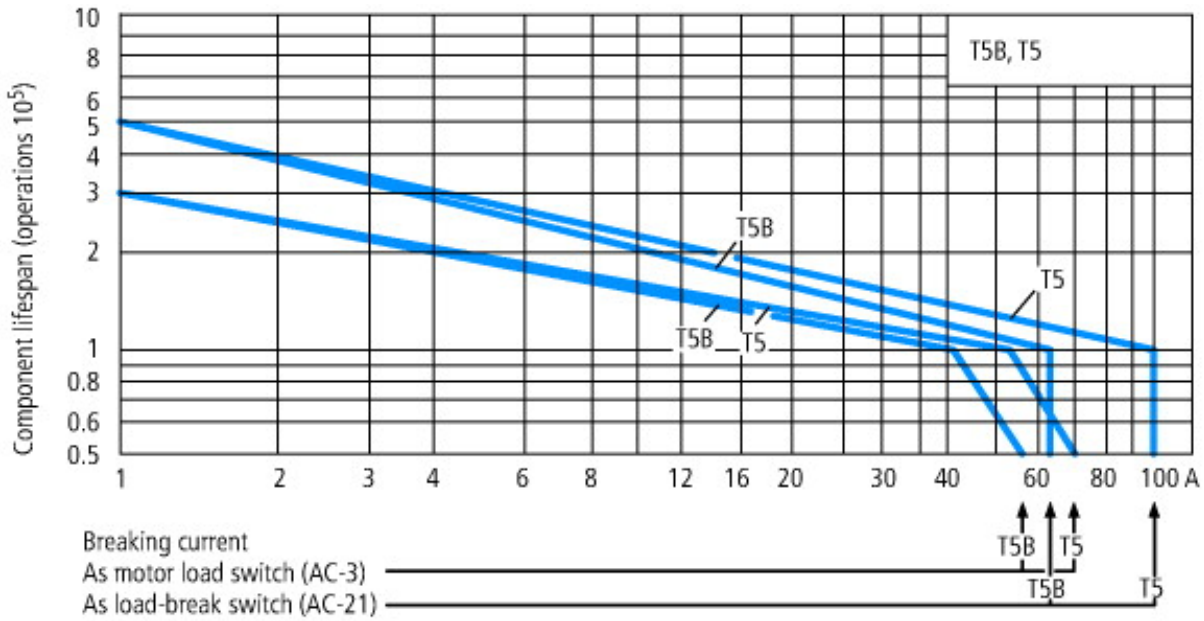
If 2 conductors are being used, a max. difference of one cross-section category is permissible

The following applies for part no. T8-3-8342/...: switching angle = 90° and flat terminal = 1 rail, 25 x 5, or 2 rails, 20 x 3

Technical data ETIM 4.0

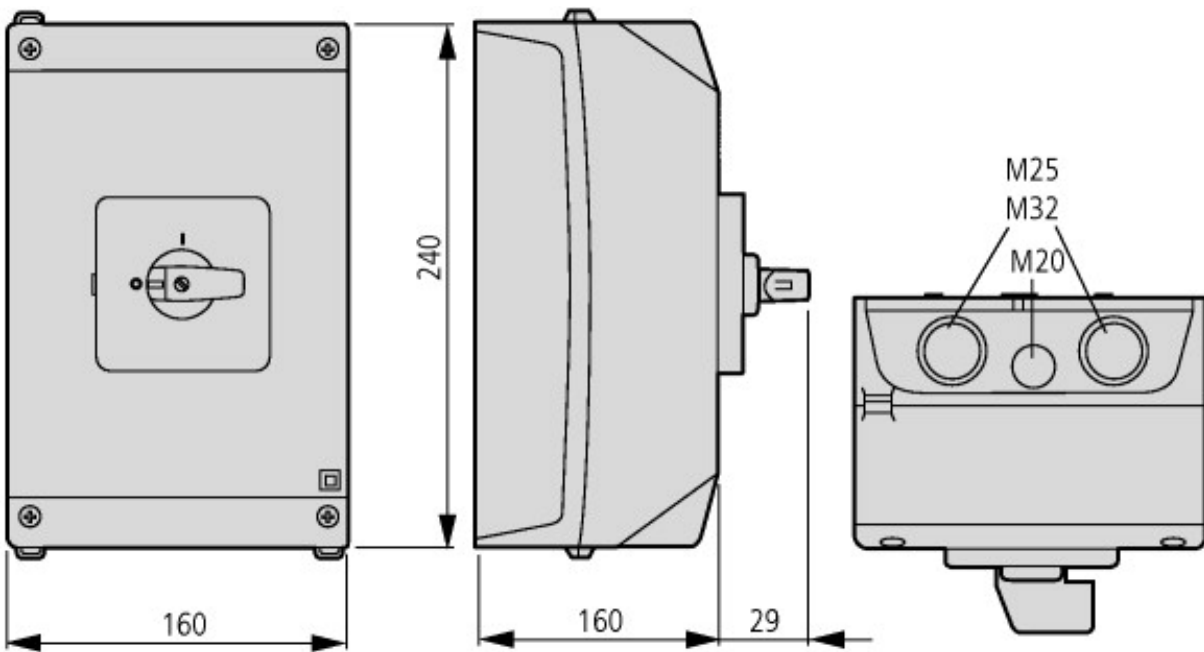
Number of auxiliary contacts as N/Cs			0
With 0 (off) position			YES
Type			On/Off switch
Motor rating at AC-3, 400 V		kWh	37
Number of auxiliary contacts as N/Os			0
Suitable for front mounting			No
Protection type (IP), at front			IP65
Rated uninterrupted current I _u		A	63
Suitable for base fixing			YES
Number of auxiliary contacts as changeover contacts			0
Suitable for distribution board installation			No
Suitable for rear mounting			No
Complete device in housing			YES
Type of control element			Toggle
Number of poles			3

Characteristics



For utilisation category AC-4 (extreme load: 100 % inching, reversing or plugging)
 The blocked rotor current of the motor should not exceed the rated current of the switch for AC-21A to ensure a reasonable device lifespan.

Dimensions



Depth of one contact unit: 16.5 mm
 The rotary switches T5B and T5 are of identical design but differ in their contacts.

Additional product information (links)

IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector

IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2011_06.pdf

<http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87>

<http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=141>