

Star-delta switchSurface mounting

Part no.

T5B-4-8410/I4



Article no. 207234

Delivery programme

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.			ο Υ Δ FS 635
Main conducting paths			
No. of poles		M	3
Max. motor rating			
AC-23A			
400/415 V 50-60 Hz	Р	kW	22
Rated uninterrupted current	l _u	Α	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

delicial			
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		Operati h	ons(1000
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	690
nateu operational voltage	O _e	AC	030
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			111/3
Rated uninterrupted current	l _u	A	62
open	l _u	A	63
Enclosed	l _u	Α	63
Load rating with intermittent operation, class 12		1	
AB 25 % DF		x l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x l _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		0	90 60 45 30
Contact units			10
Double-break contacts			max. 20
Current heat loss per contact at l _e		W	4.5
Terminal capacities			
Solid or stranded Flexible with ferrule to DIN 46228		mm ²	1 x (2.5 - 35) 2 x (2.5 - 16) 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 $\cos \phi = 0.35$		A	800
Rated breaking capacity, motor load switch cos φ = 0.35		A	500
230 V		A	520
400 V 500 V		A A	600
500 V		A	480 340
Rated operational current 440 V load-break switch AC-21A	l _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	Р	kW	22
500 V Star-delta	Р	kW	37
660 V 690 V	Р	kW	37

Bibly V Standelland switches (main switches maintenance switches) P kW 37				
230 V	690 V Star-delta	Р	kW	37
### AUD V P KW 22 500 V P KW 22 600 V P KW 24 600	AC-23A Motor load switches (main switches maintenance switches)	Р	kW	
SOU P	230 V	Р	kW	15
Rated operational current control switch AC-15	400 V	Р	kW	22
Rated operational current control switch AC-15 220 V 230 V 240 V	500 V	Р	kW	22
I	690 V	Р	kW	22
Bated operational current Contacts Con	Rated operational current control switch AC-15			
Both	220 V 230 V 240 V	l _e	Α	16
DC	380 V 400 V 415 V	l _e	Α	6
DC-1, Load-break switches L/R = 1 ms	500 V	I _e	Α	4
Rated operational current Ie	DC		$x U_s$	
Voltage per contact pair in series V 60 DC-23A, motor load switch L/R = 15 ms V 60 24 V Rated operational current Ie A 50 Contacts Quantity 1 48 V Contacts Quantity 2 Contacts Quantity 2 60 V Contacts Quantity 3 Contacts Quantity 3 120 V Quantity 3 Rated operational current Ie A 25 Contacts Quantity 3 240 V Quantity 6 DC-13, Control switches L/R = 50 ms Quantity 6 Rated operational current Ie A 20 Contacts Quantity 6	DC-1, Load-break switches L/R = 1 ms			
DC-23A, motor load switch L/R = 15 ms 24 V	Rated operational current	I _e	Α	63
Rated operational current Le	Voltage per contact pair in series		V	60
Rated operational current Ie	DC-23A, motor load switch L/R = 15 ms			
Contacts	24 V			
Rated operational current	Rated operational current	l _e	Α	50
Rated operational current Contacts Quantity Rated operational current Ie A 50 Quantity Rated operational current Ie A 50 Quantity 3 120 V Rated operational current Ie A 25 Contacts Quantity 3 240 V Rated operational current Ie A 20 Quantity Contacts Quantity 6 DC-13, Control switches L/R = 50 ms Rated operational current Ie A 25 Voltage per contact pair in series V 24	Contacts		Quantity	1
Contacts Quantity Rated operational current Ie A 50 Contacts Quantity 3 120 V Rated operational current Ie A 25 Contacts Quantity 3 240 V Rated operational current Ie A 20 Contacts Quantity 6 DC-13, Control switches L/R = 50 ms Rated operational current Ie A 25 Voltage per contact pair in series	48 V			
Rated operational current Ie A 50 Contacts Quantity 3 120 V Rated operational current Ie A 25 Contacts Quantity 3 240 V Rated operational current Ie A 20 Contacts Quantity 6 DC-13, Control switches L/R = 50 ms Rated operational current Ie A 25 Voltage per contact pair in series	Rated operational current	le	Α	50
Rated operational current Contacts Quantity 120 V Rated operational current Ie A 25 Contacts Quantity 3 240 V Rated operational current Ie A 20 Contacts Quantity 6 DC-13, Control switches L/R = 50 ms Rated operational current Ie A 25 Voltage per contact pair in series	Contacts		Quantity	2
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	60 V			
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	Rated operational current	I _e	Α	50
Rated operational current Contacts	Contacts		Quantity	3
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	120 V			
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	Rated operational current	I _e	Α	25
Rated operational current Contacts Quantity BC-13, Control switches L/R = 50 ms Rated operational current I _e A 20 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	Contacts		Quantity	3
Contacts DC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series Quantity 6 Quantity 6 V 24	240 V			
DC-13, Control switches L/R = 50 ms Rated operational current I _e A 25 Voltage per contact pair in series V 24	Rated operational current	l _e	Α	20
Rated operational current I _e A 25 Voltage per contact pair in series V 24	Contacts		Quantity	6
Voltage per contact pair in series V 24	DC-13, Control switches L/R = 50 ms			
	Rated operational current	l _e	Α	25
0 - 1 - 2 - 1 - 12 - 10 - 10 - 10 - 10 -	Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA Fault HF	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:

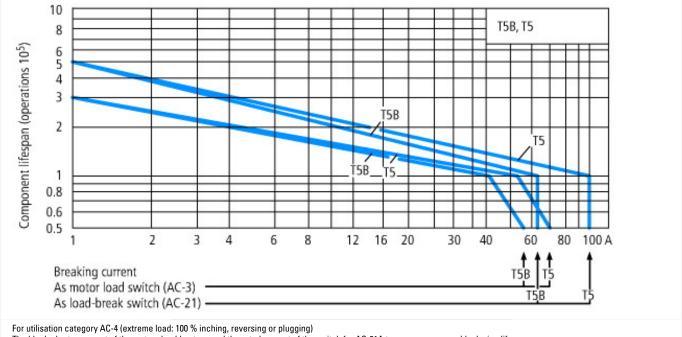
If 2 conductors are being used, a max. difference of one cross-section category is permissible

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

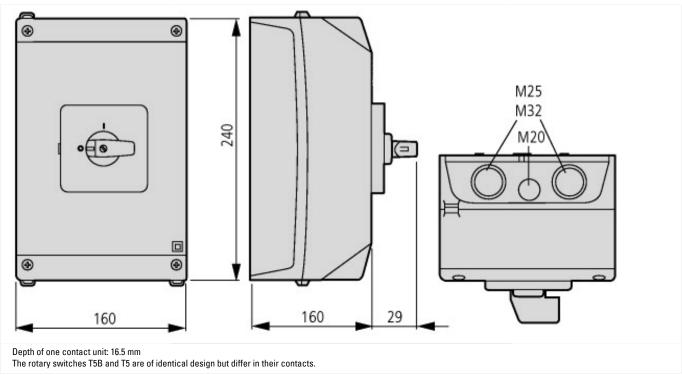
With 0 (off) position Type On/Off switch Motor rating at AC-3, 400 V Number of auxiliary contacts as N/Os Suitable for front mounting Protection type (IP), at front Rated uninterrupted current lu Suitable for base fixing Number of auxiliary contacts as changeover contacts Suitable for distribution board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

Characteristics



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



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