

Voltmeter selector switchesFlush mounting

EATON

Powering Business Worldwide™

Program

Range			Control switches
Basic function			Voltmeter selector switches
Part group reference (e.g. DIL)			T0
Design			Flush mounting
Protection type			Front IP65
Emergency stop			without emergency switching off/emergency stop function
			with black thumb grip and front plate
			With 0 (Off) position
Contacts			Neutral pole
Contact sequence			
Front plate no.			
Pole			3 x phase-phase 3 x phase-N
Main conducting paths			
No. of poles	M		3 + N
Max. motor rating			
AC-23A			
400/415 V 50-60 Hz	P	kW	6.5
Rated uninterrupted current	I _u	A	20

Approbationen

UL approval	Yes
CSA approval	Yes
Product Standards	UL 508; CSA-C22.2 No. 14-05; IEC/EN 60947-3; CE marking
UL File No.	E36332
UL CCN	NLRV
CSA File No.	12528
CSA Class No.	3211-05
NA Certification	UL listed, CSA certified
Specially designed for NA	Yes, in combination with "+NA" (105864)
Suitable for	Branch circuits
Degree of Protection	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	20
Enclosed	I _u	A	20
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	20
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	320
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			11
Double-break contacts			max. 22
Current heat loss per contact at I _e		W	0.6

Terminal capacities

Solid or stranded		mm ²	1 x (1 - 2.5) 2 x (1 - 2.5)
Flexible with ferrule to DIN 46228		mm ²	1 x (0.75 - 1.5) 2 x (0.75 - 1.5)
Terminal screw			M3.5
Tightening torque		Nm	1

Switching capacity

AC		x U _s	
Rated making capacity cos φ = 0.35		A	130
Rated breaking capacity, motor load switch cos φ = 0.35		A	
230 V		A	100
400 V		A	110
500 V		A	80
690 V		A	60
Rated operational current 440 V load-break switch AC-21A	I _e	A	20
Rating, AC-3 motor load switch	P	kW	
220/230 V	P	kW	3
230 V Star-delta	P	kW	4
400 V	P	kW	4
400 V Star-delta	P	kW	5.5
500 V	P	kW	5.5
500 V Star-delta	P	kW	7.5

690 V	P	kW	4
690 V Star-delta	P	kW	5.5
AC-23A Motor load switches (main switches maintenance switches)	P	kW	
230 V	P	kW	3.5
400 V	P	kW	6.5
500 V	P	kW	7.5
Rated operational current control switch AC-15			
230 V	I _e	A	6
400 V	I _e	A	4
500 V	I _e	A	2
DC		x U _s	
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	10
Voltage per contact pair in series		V	60
DC-21A	I _e	A	
Rated operational current 240 V	I _e	A	1
240 V Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	A	10
Contacts		Quantity	1
48 V			
Rated operational current	I _e	A	10
Contacts		Quantity	2
60 V			
Rated operational current	I _e	A	10
Contacts		Quantity	3
120 V			
Rated operational current	I _e	A	5
Contacts		Quantity	3
240 V			
Rated operational current	I _e	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I _e	A	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ , < 1 fault in 100000 operations

Notes

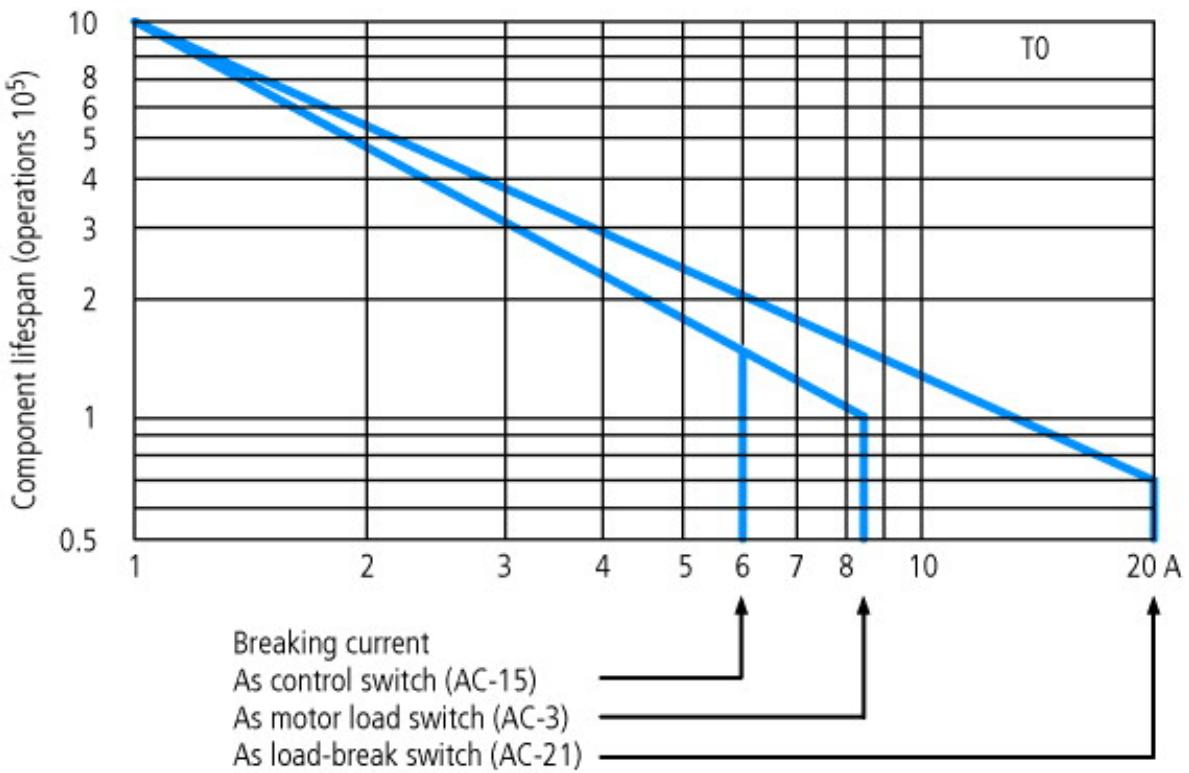
Notes The following applies for solid, multiwire, and flexible terminal capacities:
If 2 conductors are being used, a max. difference of 2 cross-section categories is permissible

Technical data according to ETIM 4.0

Measurement between phases possible		YES
Measuring between phase and neutral conductor possible		YES
Protection type (IP)		IP65
Device construction		Flush mounting plates
Suitable for rail-mounting		No
With 0 (off) position		YES
With operating element		YES

Characteristics

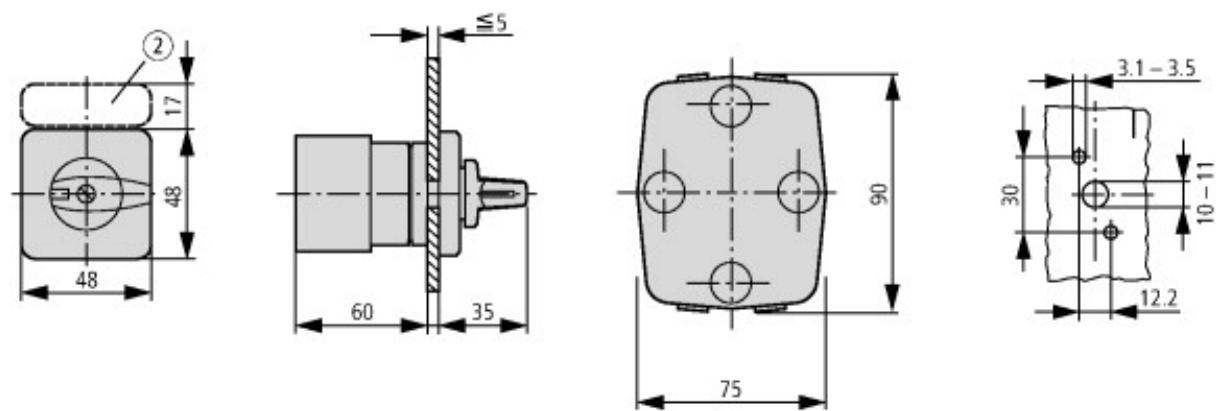
Form for ordering non-standard front plates



For utilisation category AC-4 (extreme load: 100 % inching, reversing or plugging)

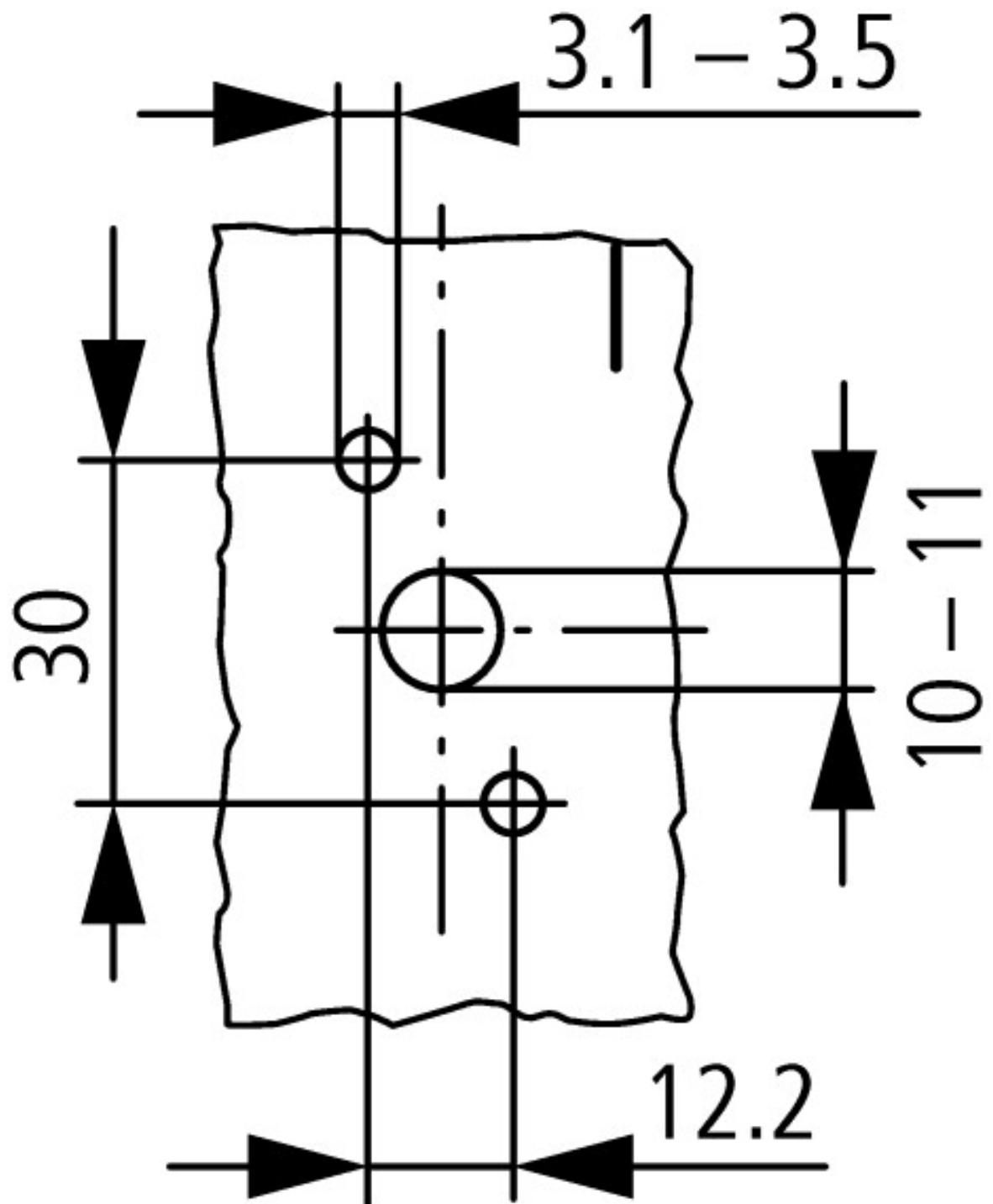
The blocked rotor current of the motor should not exceed the rated current of the switch for AC-21A to ensure a reasonable device lifespan.

Dimensions

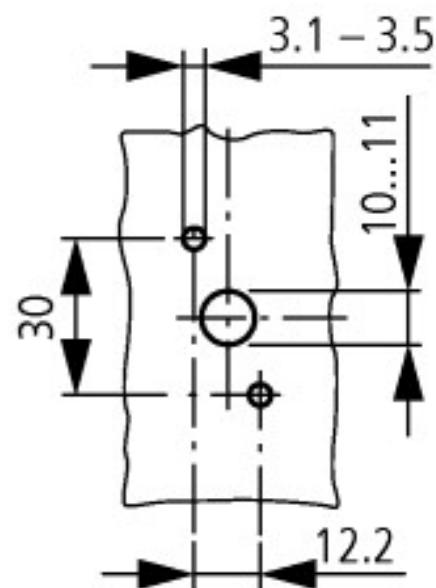
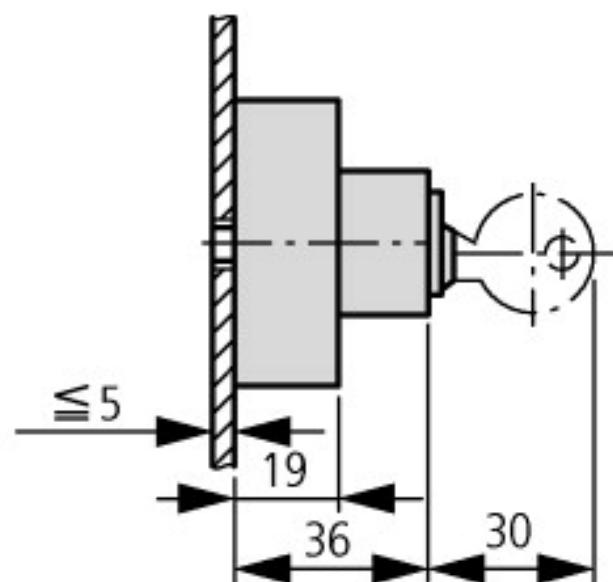
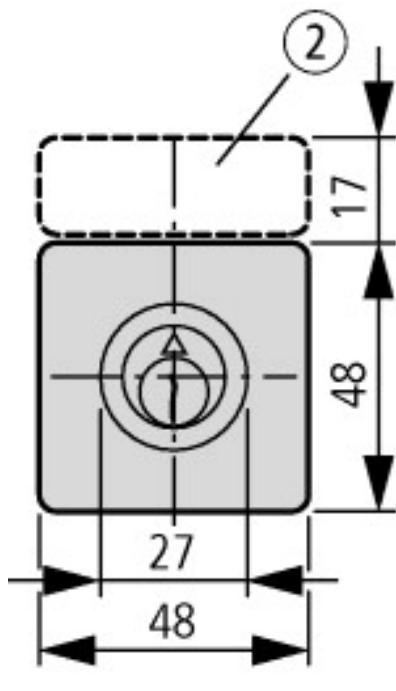


② Label mount not included as standard

One contact unit depth: 9.5 mm



Diameter of drilled hole Door



Key operation lock mechanism
T0.../E + S-(SOND-)TO

Additional product information (links)

AWA1150-0586 (IL03801020Z) Cam switch

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/05860709.pdf

Engineering

Technical overview

ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Leistung_G.pdf

Key to part numbers, modular system

ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Ovt_t_p_Typenschluesel_G.pdf

Ordering of non-standard switches

ftp://ftp.moeller.net/DOCUMENTATION/PDF/GB/Bestellformulare_de.pdf