

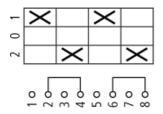
Type: **T0-2-8211/l1** Article No.: **207102** 



With black thumb-grip and grey front plate

Ordering information			
Design			Surface mounting
Description			With 0 (Off) position
No. of poles		M	2
Max. three-phase motor rating (per set of 3 contacts) 50-60 Hz AC-3 400/415 V 50-60 Hz	Р	kW	11
Rated uninterrupted current	<i>I</i> <sub>u</sub>	Α	20
Description			With 0 (Off) position

### **Contact sequence**



#### Front plate no.



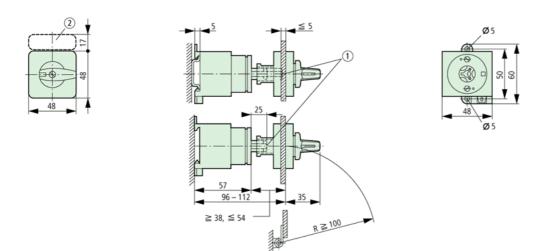
General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnectors to IEC/EN 60947-3 Load-break switches to IEC/EN 60947-3
Lifespan, mechanical	Operations	× 10 <sup>6</sup>	1
Maximum operating frequency	Operations/h		3000
Climatic proofing			Damp heat, constant, to IEC 60068–2–78; Damp heat, cyclical, to IEC 60068–2–30
Ambient temperature			
Open		°C	-25/50
Enclosed		°C	-25/40
Mounting position			As required
Documentation			Main catalogue HPL
Mechanical shock resistance (shock duration 20 ms)		g	> 15
Contacts			
Rated operational voltage	<i>U</i> e	V AC	690
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated uninterrupted current			
open	<i>I</i> <sub>u</sub>	Α	20
Enclosed	<i>I</i> <sub>u</sub>	Α	20
Load-carrying capacity in intermittent operation, Class 12			
AB 25 % DF		× Ie	2
AB 40 % DF		× Ie	1,6
AB 60 % DF		× Ie	1,3
Short-circuit rating			
Fuse		A gG/gL	20
Rated short–time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	320
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			11
Double-break contacts			max. 22
Current heat loss per contact at <i>l</i> <sub>e</sub>		W	0,6
Terminal capacities			
Solid or stranded		mm <sup>2</sup>	1 × (1 – 2.5) 2 × (1 – 2.5)
Flexible with ferrule to DIN 46228		mm <sup>2</sup>	$1 \times (0.75 - 1.5)$ $2 \times (0.75 - 1.5)$
Terminal screw			M3.5
Tightening torque		Nm	1
Switching capacity			
AC			
Rated making capacity $cos = 0.35$		Α	130
Rated breaking capacity, motor load switch cos = 0.35			
230 V		Α	100
400 V		Α	110
500 V		Α	80
690 V		Α	60
Rated operational current 440 V load-break switch AC-21A	<i>l</i> e	Α	20
AC-3 motor load switch motor rating			
230 V	Р	kW	2,2
230 V Star-delta	Р	kW	4
400 V	Р	kW	2,2
400 V Star-delta	Р	kW	5,5
500 V	Р	kW	5,5
500 V Star-delta	Р	kW	7,5
690 V	Р	kW	4
690 V Star-delta	Р	kW	5,5
AC-23A Motor load switches (main switches maintenance switches)			
230 V	Р	kW	3,5
400 V	Р	kW	11
500 V	Р	kW	7,5
Rated operational current control switch AC-15			

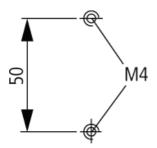
230 V				
500 V	230 V	<i>l</i> e	Α	6
DC DC-1, Load-break switches L/R = 1 ms Rated operational current Voltage per contact pair in series DC-21A Rated operational current 240 V 240 V Contacts Quantity DC-23A, Motor load switches L/R = 15 ms 24 V Rated operational current le A 10 Contacts Quantity Rated operational current le A 5 Contacts Quantity Rated operational current le A 5 Contacts Quantity Sate operational current le A 5 Contacts Quantity 3  Contacts Quantity 5  Contacts PC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series V 32 Control circuit reliability at 24 V PC, 10 mA  Notes  For mechanical shock resistance: T3l > 12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	400 V	<i>l</i> e	Α	4
DC-1, Load-break switches L/R = 1 ms  Rated operational current	500 V	<i>I</i> e	Α	2
1 ms         Rated operational current         I <sub>e</sub> A         10           Voltage per contact pair in series         V         60           DC-21A         A         1           Rated operational current 240 V         I <sub>e</sub> A         1           240 V Contacts         Quantity         1           DC-23A, Motor load switches L/R = 15 ms         —         A         10           24 V         Rated operational current         I <sub>e</sub> A         10           Contacts         Quantity         1         48 V         A         10           Rated operational current         I <sub>e</sub> A         10	DC			
Voltage per contact pair in series  DC-21A  Rated operational current 240 V  240 V Contacts  DC-23A, Motor load switches L/R = 15 ms  24 V  Rated operational current  le A 10  Contacts  Quantity  Rated operational current  le A 5  Contacts  Quantity  Falted operational current  Voltage per contact pair in series  Control circuit reliability at 24 V  DC, 10 mA  Notes  For mechanical shock resistance: T3/l >12g  Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Utor rated				
DC-21A	Rated operational current	<i>l</i> e	Α	10
Rated operational current 240 V 240 V Contacts  DC-23A, Motor load switches L/R = 15 ms  24 V  Rated operational current  Reated operational c	Voltage per contact pair in series		V	60
240 V Contacts  DC-23A, Motor load switches L/R = 15 ms  24 V  Rated operational current  le A 10  Contacts  48 V  Rated operational current  le A 10  Contacts  Quantity  Rated operational current  le A 5  Contacts  Quantity  Fault probability  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V probability  Notes  For mechanical shock resistance: T3/l >12g  Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	DC-21A			
DC-23A, Motor load switches L/R = 15 ms  24 V  Rated operational current	Rated operational current 240 V	<i>l</i> e	Α	1
= 15 ms  24 V  Rated operational current    e	240 V Contacts		Quantity	1
Rated operational current $I_{\rm e}$ A 10  Contacts  Quantity 1  Rated operational current $I_{\rm e}$ A 10  Contacts  Quantity 2  60 V  Rated operational current $I_{\rm e}$ A 10  Contacts  Quantity 3  120 V  Rated operational current $I_{\rm e}$ A 5  Contacts  Quantity 3  240 V  Rated operational current $I_{\rm e}$ A 5  Contacts  Quantity 3  Contacts  Quantity 5  DC-13, Control switches L/R = 50 ms  Rated operational current $I_{\rm e}$ A 10  Voltage per contact pair in series  Control circuit reliability at 24 V pault probability $I_{\rm e}$ A 10  Notes  For mechanical shock resistance: $I_{\rm e}$ A, $I_{\rm e}$ B, $I_{\rm e}$ A, $I_{\rm e}$ B, $I_{$				
Contacts  48 V  Rated operational current  60 P  Rated operational current  70 P  80	24 V			
Rated operational current  Contacts  Quantity  Rated operational current  Ie A 10  Contacts  Quantity  Rated operational current  Ie A 10  Contacts  Quantity  Rated operational current  Ie A 5  Contacts  Quantity  Fallt  For mechanical shock resistance: T3/I >12g  Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	Rated operational current	<i>l</i> e	Α	10
Rated operational current  Contacts  Quantity  Rated operational current  Ie A 10  Contacts  Quantity  Rated operational current  Ie A 5  Contacts  Contacts  Quantity  The contacts  Contacts  Control circuit reliability at 24 V DC, 10 mA  Notes  For mechanical shock resistance: T3/l >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	Contacts		Quantity	1
Contacts  60 V  Rated operational current  le A 10  Contacts 120 V  Rated operational current  le A 5  Contacts 240 V  Rated operational current  le A 5  Contacts 240 V  Rated operational current  le A 5  Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  le A 10  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Notes  For mechanical shock resistance: T3/l >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	48 V			
Rated operational current    Patter   P	Rated operational current	<i>l</i> e	Α	10
Rated operational current  Contacts  Quantity  Rated operational current  le A 5  Contacts  Quantity  3  240 V  Rated operational current  le A 5  Contacts  Quantity  Rated operational current  le A 5  Contacts  Quantity  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V probability  DC, 10 mA  Notes  For mechanical shock resistance: T3/l > 12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Utor rated	Contacts		Quantity	2
Contacts  120 V  Rated operational current  Ie A 5  Contacts  Quantity 3  240 V  Rated operational current  Ie A 5  Contacts  Quantity 5  DC-13, Control switches L/R = 50 ms  Rated operational current  Ie A 10  Voltage per contact pair in series  Control circuit reliability at 24 V pc, 10 mA  Notes  For mechanical shock resistance: T3/I > 12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	60 V			
Rated operational current    I_e	Rated operational current	<i>l</i> e	Α	10
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 $I_{e}$ V 32  Control circuit reliability at 24 V Fault probability $I_{e}$ $I$	Contacts		Quantity	3
Contacts  240 V  Rated operational current    Pack   A   5	120 V			
Rated operational current    Pack   Pack   Pack	Rated operational current	<i>l</i> e	Α	5
Rated operational current  Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Ie  A  10  Voltage per contact pair in series  Control circuit reliability at 24 V probability  Notes  For mechanical shock resistance: T3/l >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	Contacts		Quantity	3
Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V probability  Notes  Fault probability  For mechanical shock resistance: T3/I >12g  Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated	240 V			
DC-13, Control switches L/R = 50 ms  Rated operational current  I <sub>e</sub> A  10  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Notes  Fault probability  H <sub>F</sub> For mechanical shock resistance: T3/I >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	Rated operational current	<i>I</i> e	Α	5
Rated operational current    I_e	Contacts		Quantity	5
Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  H <sub>F</sub> Control circuit reliability at 24 V DC, 10 mA  H <sub>F</sub> For mechanical shock resistance: T3/I >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated				
Control circuit reliability at 24 V	Rated operational current	<i>l</i> e	Α	10
DC, 10 mA probability operations  Notes  For mechanical shock resistance: T3/l >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 Ufor rated	Voltage per contact pair in series		V	32
For mechanical shock resistance: T3/l >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated			H <sub>F</sub>	
resistance: T3/I >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated	Notes			
				resistance: T3/I >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated

	V AC Applies to rated uninterrupted current $I_u$ of the contact: with T5–4–8344/I5 max. 95 A For terminal capacity solid, stranded and flexible: T0(3), (6), (8): Maximum of 2 cross–section sizes difference admissible between 2 conductors T5(B)–: Maximum of 1 cross–section size difference admissible between 2 conductors For type T8–3–8342/ the following applies: switching angle = 90° and flat connection = 1 busbar 25 × 5 or 2 busbars 20 × 3
Dimensions	
	Extension possible with ZVV-T0, max. 4 × 25 = 100 mm
	Diameter of drilled hole Bottom
	Diameter of drilled hole Door
Explaination	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.

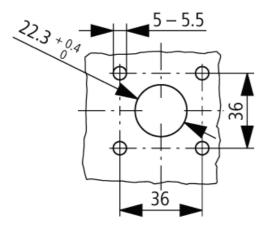
#### **Dimensions**



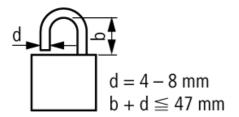
# **Dimensions**



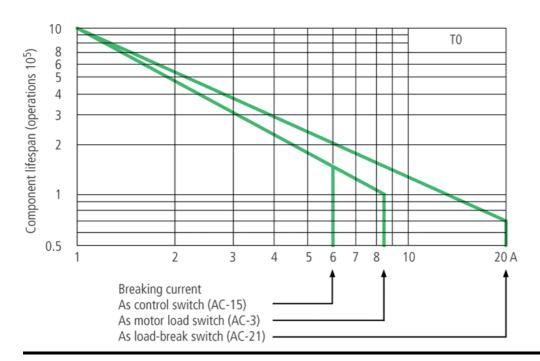
### **Dimensions**



# **Dimensions**



# **Characteristic curve**



Moeller GmbH, Hein-Moeller-Str. 7-11, D-53115 Bonn E-Mail: catalog@moeller.net, Internet: www.moeller.net, http://catalog.moeller.net Copyright 2006 by Moeller GmbH. Subject to modifications. HPL-C2006GB-INT V2.3