

Type: **T3-1-8220/I2** Article No.: **207171**



With black thumb-grip and grey front plate

Ordering information			
Design			Surface mounting
Description			Without 0 (Off) position
No. of poles		М	1
Max. three-phase motor rating (per set of 3 contacts) 50-60 Hz AC-3 400/415 V 50-60 Hz	Р	kW	22
Rated uninterrupted current	<i>I</i> _u	Α	32
Description			Without 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 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			
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> _u	Α	32
Enclosed	<i>I</i> _u	Α	32
Load-carrying capacity in intermittent operation, Class 12			
AB 25 % DF		× I _e	2
AB 40 % DF		× I _e	1,6
AB 60 % DF		× Ie	1,3
Short-circuit rating			
Fuse		A gG/gL	35
Rated short–time withstand current (1 s current)	I _{cw}	A _{rms}	650
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between the contacts		V AC	440
Switching angles		o	90 60 45 30

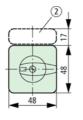
Contact units			11
Double-break contacts			max. 22
Current heat loss per contact at I_e		W	1,1
Terminal capacities			
Solid or stranded		mm ²	1 × (1 – 6) 2 × (1 – 6)
Flexible with ferrule to DIN 46228		mm ²	$1 \times (0.75 - 4)$ $2 \times (0.75 - 4)$
Terminal screw			M4
Tightening torque		Nm	1.6
Switching capacity			
AC			
Rated making capacity cos = 0.35		Α	320
Rated breaking capacity, motor load switch cos = 0.35			
230 V		Α	260
400 V		Α	260
500 V		Α	240
690 V		Α	170
Rated operational current 440 V load-break switch AC-21A	l _e	А	32
AC-3 motor load switch motor rating			
230 V	Р	kW	1,8
230 V Star-delta	Р	kW	11
400 V	Р	kW	3,6
400 V Star-delta	Р	kW	18,5
500 V	Р	kW	15
500 V Star-delta	Р	kW	22
690 V	Р	kW	15
690 V Star-delta	Р	kW	22
AC-23A Motor load switches (main switches maintenance switches)			
230 V	Р	kW	7,5
400 V	Р	kW	22
500 V	Р	kW	15
Rated operational current control switch AC-15			
230 V	<i>l</i> e	Α	10

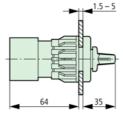
400 V	l _e	Α	6
500 V	<i>l</i> e	Α	4
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	<i>l</i> e	Α	25
Voltage per contact pair in series		V	60
DC-21A			
Rated operational current 240 V	l _e	Α	1
240 V Contacts		Quantity	1
DC-23A, Motor load switches L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	2
60 V			
Rated operational current	<i>l</i> e	Α	25
Contacts		Quantity	3
120 V			
Rated operational current	<i>l</i> e	Α	12
Contacts		Quantity	3
240 V			
Rated operational current	<i>l</i> e	Α	5
Contacts		Quantity	5
DC-13, Control switches $L/R = 50$ ms			
Rated operational current	l _e	Α	20
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			
			For mechanical shock resistance: T3/I >12g Applies to T0(3)/SVB: isolating characteristics to IEC/EN 60947 <i>U</i> for rated operational voltage up to 500 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
Pimensions		
		not included

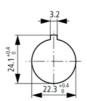
Dimensions	
	not included
	T3-1/EZ "Y T3-1/E + EZ-T0 + S-(SOND-)T0
Explaination	For utilisation category AC–4 (extreme load: 100 % inching, reversing or plugging) The blocked rotor current of the motor should not exceed the rated current of the switch for AC–21A to ensure a reasonable device lifespan.

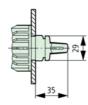
Dimensions



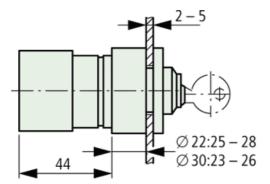


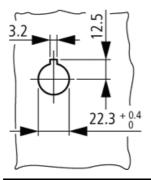


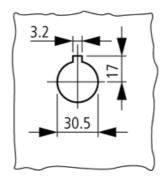




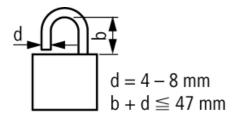
Dimensions



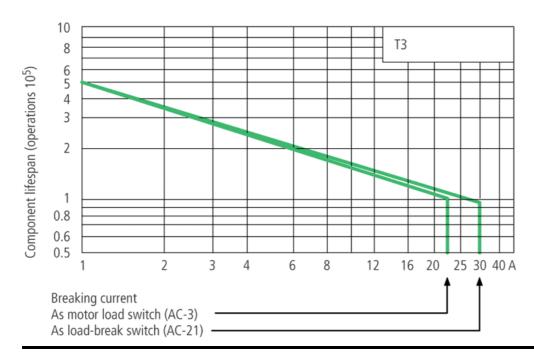




Dimensions



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