



**Main switch, T0, 20 A, surface mounting, 3 contact unit(s), 3 pole + N, 1 N/O, 1 N/C, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position**



**Part no. T0-3-15680/I1/SVB**  
**Catalog No. 207153**

**EL-Nummer 1417156**  
**(Norway)**

**Delivery program**

Product range			Main switch maintenance switch Repair switch
Part group reference			T0
Stop Function			Emergency switching off function
Number of poles			With red rotary handle and yellow locking ring 3 pole + N
<b>Auxiliary contacts</b>			
		N/O	1
		N/C	1
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			<b>totally insulated</b>
Design			surface mounting
Contact sequence			
Switching angle		°	90
Design number			15680
Function			
<b>Motor rating AC-23A, 50 - 60 Hz</b>			
400 V	P	kW	5.5
Rated uninterrupted current	I <sub>u</sub>	A	20
Note on rated uninterrupted current I <sub>u</sub>			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Number of contact units		contact unit(s)	3

**Technical data**

<b>General</b>			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3

Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Enclosed		°C	-25 - +40
Overtoltage category/pollution degree			III/3
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required

## Contacts

Mechanical variables			
Number of poles			3 pole + N
Auxiliary contacts			
		N/O	1
		N/C	1
Electrical characteristics			
Rated operational voltage	$U_e$	V AC	690
Rated uninterrupted current	$I_U$	A	20
Note on rated uninterrupted current $I_U$			Rated uninterrupted current $I_U$ is specified for max. cross-section.
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
Note on rated short-time withstand current $I_{cw}$			Current for a time of 1 second
Rated conditional short-circuit current	$I_q$	kA	6

## Switching capacity

$\cos \varphi$ rated making capacity as per IEC 60947-3		A	130
Rated breaking capacity $\cos \varphi$ to IEC 60947-3		A	
230 V		A	100
400/415 V		A	110
500 V		A	80
690 V		A	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at $I_e$		W	0.6
Current heat loss per auxiliary circuit at $I_e$ (AC-15/230 V)		CO	0.6
Lifespan, mechanical	Operations	$x 10^6$	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	3
230 V Star-delta	P	kW	5.5
400 V 415 V	P	kW	5.5
400 V Star-delta	P	kW	7.5
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
Rated operational current motor load switch			
230 V	$I_e$	A	11.5
230 V star-delta	$I_e$	A	20
400V 415 V	$I_e$	A	11.5

400 V star-delta	I <sub>e</sub>	A	20
500 V	I <sub>e</sub>	A	9
500 V star-delta	I <sub>e</sub>	A	15.6
690 V	I <sub>e</sub>	A	4.9
690 V star-delta	I <sub>e</sub>	A	8.5
<b>AC-23A</b>			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	3
400 V 415 V	P	kW	5.5
500 V	P	kW	7.5
690 V	P	kW	5.5
<b>Rated operational current motor load switch</b>			
230 V	I <sub>e</sub>	A	13.3
400 V 415 V	I <sub>e</sub>	A	13.3
500 V	I <sub>e</sub>	A	13.3
690 V	I <sub>e</sub>	A	7.6
<b>DC</b>			
<b>DC-1, Load-break switches L/R = 1 ms</b>			
Rated operational current	I <sub>e</sub>	A	10
Voltage per contact pair in series		V	60
<b>DC-21A</b>			
Rated operational current	I <sub>e</sub>	A	1
Contacts		Quantity	1
<b>DC-23A, motor load switch L/R = 15 ms</b>			
<b>24 V</b>			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	1
<b>48 V</b>			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	2
<b>60 V</b>			
Rated operational current	I <sub>e</sub>	A	10
Contacts		Quantity	3
<b>120 V</b>			
Rated operational current	I <sub>e</sub>	A	5
Contacts		Quantity	3
<b>240 V</b>			
Rated operational current	I <sub>e</sub>	A	5
Contacts		Quantity	5
<b>DC-13, Control switches L/R = 50 ms</b>			
Rated operational current	I <sub>e</sub>	A	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> , < 1 failure in 100,000 switching operations

### Terminal capacities

Solid or stranded		mm <sup>2</sup>	1 x (1 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Terminal screw			M3.5
Tightening torque for terminal screw		Nm	1

### Technical safety parameters:

<b>Notes</b>			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
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### Rating data for approved types

Terminal capacity			
Terminal screw			M3.5

Tightening torque		lb-in	8.83
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## Design verification as per IEC/EN 61439

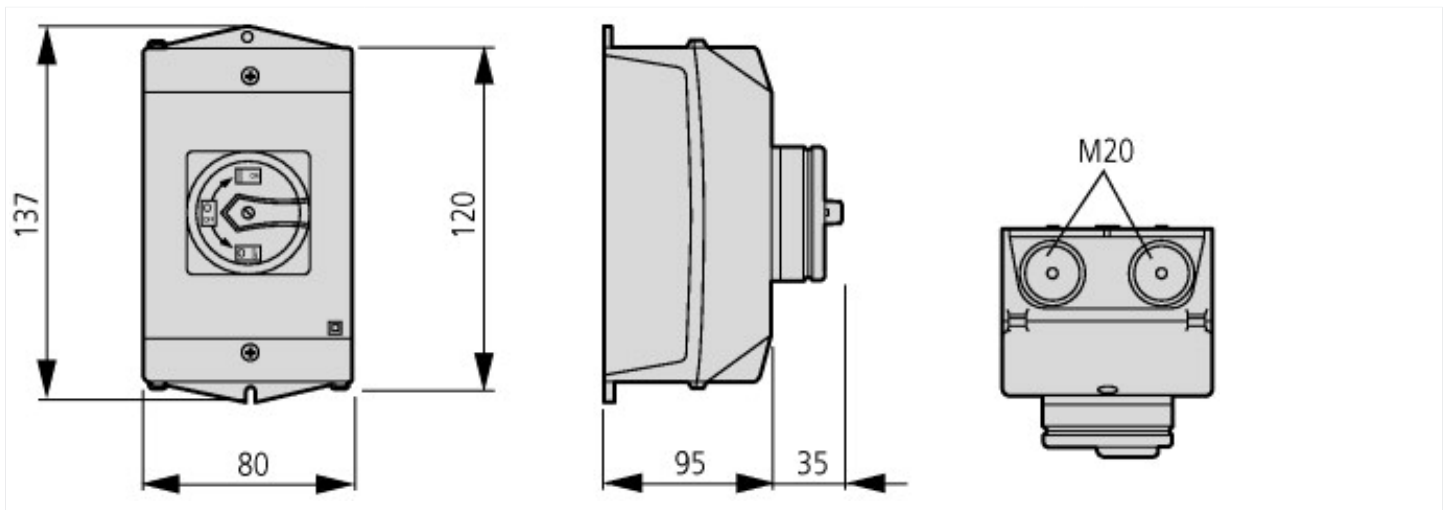
Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	20
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0.6
Equipment heat dissipation, current-dependent	$P_{vid}$	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
10.2.3.1 Verification of thermal stability of enclosures			
10.2.3.2 Verification of resistance of insulating materials to normal heat			
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
10.2.4 Resistance to ultra-violet (UV) radiation			
10.2.5 Lifting			
10.2.6 Mechanical impact			
10.2.7 Inscriptions			
10.3 Degree of protection of ASSEMBLIES			
10.4 Clearances and creepage distances			
10.5 Protection against electric shock			
10.6 Incorporation of switching devices and components			
10.7 Internal electrical circuits and connections			
10.8 Connections for external conductors			
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
10.9.3 Impulse withstand voltage			
10.9.4 Testing of enclosures made of insulating material			
10.10 Temperature rise			
10.11 Short-circuit rating			
10.12 Electromagnetic compatibility			
10.13 Mechanical function			

## Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ec@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			Yes
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage $U_e$ AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current $I_u$		A	20
Rated permanent current at AC-23, 400 V		A	13.3
Rated permanent current at AC-21, 400 V		A	20
Rated operation power at AC-3, 400 V		kW	5.5

Rated short-time withstand current I <sub>cw</sub>	kA	0.32
Rated operation power at AC-23, 400 V	kW	5.5
Switching power at 400 V	kW	5.5
Conditioned rated short-circuit current I <sub>q</sub>	kA	6
Number of poles		4
Number of auxiliary contacts as normally closed contact		1
Number of auxiliary contacts as normally open contact		1
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Red
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		Other

## Dimensions



M4



Drilling dimensions base



**$d = 4 - 8 \text{ mm}$**

**$b + d \leq 47 \text{ mm}$**

**$d = 0.16 - 0.31''$**

**$b + d \leq 1.85''$**

≤ 3 padlocks

### Additional product information (links)

Display flip catalog page.	<a href="http://ecat.moeller.net/flip-cat/?edition=K115A&amp;startpage=40">http://ecat.moeller.net/flip-cat/?edition=K115A&amp;startpage=40</a>
Technical overview cam switch, switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2</a>
System overview cam switch T	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4</a>
System overview switch-disconnector P	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6</a>
Key to part numbers Cam switch	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
Key to part numbers Switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
Switches for ATEX	<a href="http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html">http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html</a>