

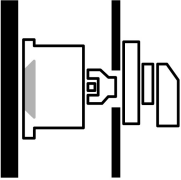


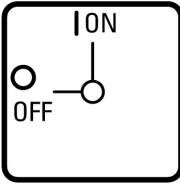
On-Off switch, 18-pole, 100 A, 90 °, rear mounting

Part no. T5-9-8354/Z
Article no. 094490



Delivery program

Product range		On-Off switch																																																																																																															
Part group reference		T5																																																																																																															
		with black thumb grip and front plate																																																																																																															
Number of poles		18-pole																																																																																																															
Degree of Protection		Front IP65																																																																																																															
Design		rear mounting																																																																																																															
																																																																																																																	
Contact sequence		<table border="1" style="border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>0</th> <th>1</th> </tr> </thead> <tbody> <tr><td>1</td><td>o</td><td>X</td></tr> <tr><td>2</td><td>o</td><td>X</td></tr> <tr><td>3</td><td>o</td><td>X</td></tr> <tr><td>4</td><td>o</td><td>X</td></tr> <tr><td>5</td><td>o</td><td>X</td></tr> <tr><td>6</td><td>o</td><td>X</td></tr> <tr><td>7</td><td>o</td><td>X</td></tr> <tr><td>8</td><td>o</td><td>X</td></tr> <tr><td>9</td><td>o</td><td>X</td></tr> <tr><td>10</td><td>o</td><td>X</td></tr> <tr><td>11</td><td>o</td><td>X</td></tr> <tr><td>12</td><td>o</td><td>X</td></tr> <tr><td>13</td><td>o</td><td>X</td></tr> <tr><td>14</td><td>o</td><td>X</td></tr> <tr><td>15</td><td>o</td><td>X</td></tr> <tr><td>16</td><td>o</td><td>X</td></tr> <tr><td>17</td><td>o</td><td>X</td></tr> <tr><td>18</td><td>o</td><td>X</td></tr> <tr><td>19</td><td>o</td><td>X</td></tr> <tr><td>20</td><td>o</td><td>X</td></tr> <tr><td>21</td><td>o</td><td>X</td></tr> <tr><td>22</td><td>o</td><td>X</td></tr> <tr><td>23</td><td>o</td><td>X</td></tr> <tr><td>24</td><td>o</td><td>X</td></tr> <tr><td>25</td><td>o</td><td>X</td></tr> <tr><td>26</td><td>o</td><td>X</td></tr> <tr><td>27</td><td>o</td><td>X</td></tr> <tr><td>28</td><td>o</td><td>X</td></tr> <tr><td>29</td><td>o</td><td>X</td></tr> <tr><td>30</td><td>o</td><td>X</td></tr> <tr><td>31</td><td>o</td><td>X</td></tr> <tr><td>32</td><td>o</td><td>X</td></tr> <tr><td>33</td><td>o</td><td>X</td></tr> <tr><td>34</td><td>o</td><td>X</td></tr> <tr><td>35</td><td>o</td><td>X</td></tr> <tr><td>36</td><td>o</td><td>X</td></tr> </tbody> </table>		0	1	1	o	X	2	o	X	3	o	X	4	o	X	5	o	X	6	o	X	7	o	X	8	o	X	9	o	X	10	o	X	11	o	X	12	o	X	13	o	X	14	o	X	15	o	X	16	o	X	17	o	X	18	o	X	19	o	X	20	o	X	21	o	X	22	o	X	23	o	X	24	o	X	25	o	X	26	o	X	27	o	X	28	o	X	29	o	X	30	o	X	31	o	X	32	o	X	33	o	X	34	o	X	35	o	X	36	o	X
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Switching angle	°	90																																																																																																															
Switching performance		maintained																																																																																																															

Front plate no.				
				FS 908
front plate				0-1
Motor rating AC-23A, 50 - 60 Hz				
400 V	P	kW		55
Rated uninterrupted current	I_u	A		100
Number of contact units		contact unit(s)		9

Technical data

General

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				
Open		°C		-25 - +50
Enclosed		°C		-25 - +40
Overvoltage category/pollution degree				III/3
Rated impulse withstand voltage	U_{imp}	V AC		6000
Mechanical shock resistance		g		15
Mounting position				As required
Protection against direct contact when actuated from front (EN 50274)				Finger and back-of-hand proof

Contacts

Mechanical variables				
Number of poles				18-pole
Electrical characteristics				
Rated operational voltage	U_e	V AC		690
Rated uninterrupted current	I_u	A		100
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		$\times I_e$		2
AB 40 % DF		$\times I_e$		1.6
AB 60 % DF		$\times I_e$		1.3
Short-circuit rating				
Fuse		A gG/gL		100
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}		1700
Note on rated short-time withstand current I_{cw}				Current for a time of 1 second
Rated conditional short-circuit current	I_q	kA		2

Switching capacity

$\cos \varphi$ rated making capacity as per IEC 60947-3		A		950
Rated breaking capacity $\cos \varphi$ to IEC 60947-3		A		
230 V		A		760
400/415 V		A		740
500 V		A		590
690 V		A		420
Safe isolation to EN 61140				
between the contacts		V AC		440
Current heat loss per contact at I_e		W		7.5
Current heat loss per auxiliary circuit at I_e (AC-15/230 V)		CO		7.5

Lifespan, mechanical	Operations	$\times 10^6$	> 0.5
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	22
230 V Star-delta	P	kW	30
400 V 415 V	P	kW	30
400 V Star-delta	P	kW	45
500 V	P	kW	30
500 V Star-delta	P	kW	45
690 V	P	kW	15
690 V Star-delta	P	kW	22
Rated operational current motor load switch			
230 V	I_e	A	71
230 V star-delta	I_e	A	100
400V 415 V	I_e	A	55
400 V star-delta	I_e	A	95.3
500 V	I_e	A	44
500 V star-delta	I_e	A	76.2
690 V	I_e	A	17
690 V star-delta	I_e	A	29.4
AC-21A			
Rated operational current switch			
440 V	I_e	A	100
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	30
400 V 415 V	P	kW	55
500 V	P	kW	37
690 V	P	kW	30
Rated operational current motor load switch			
230 V	I_e	A	100
400 V 415 V	I_e	A	100
500 V	I_e	A	55
690 V	I_e	A	32
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I_e	A	80
Voltage per contact pair in series		V	60
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H_F	$< 10^{-5}$, < 1 fault in 100000 operations

Terminal capacities

Solid or stranded	mm^2	1 x (2,5 - 35) 2 x (2,5 - 16)
Flexible with ferrules to DIN 46228	mm^2	1 x (1 - 25) 2 x (1,5 - 10)
Terminal screw		M6
Max. tightening torque	Nm	4

Technical safety parameters:

Notes		B10 _d values as per EN ISO 13849-1, table C1
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Rating data for approved types

Terminal capacity		
Terminal screw		M6

Design verification as per IEC/EN 61439

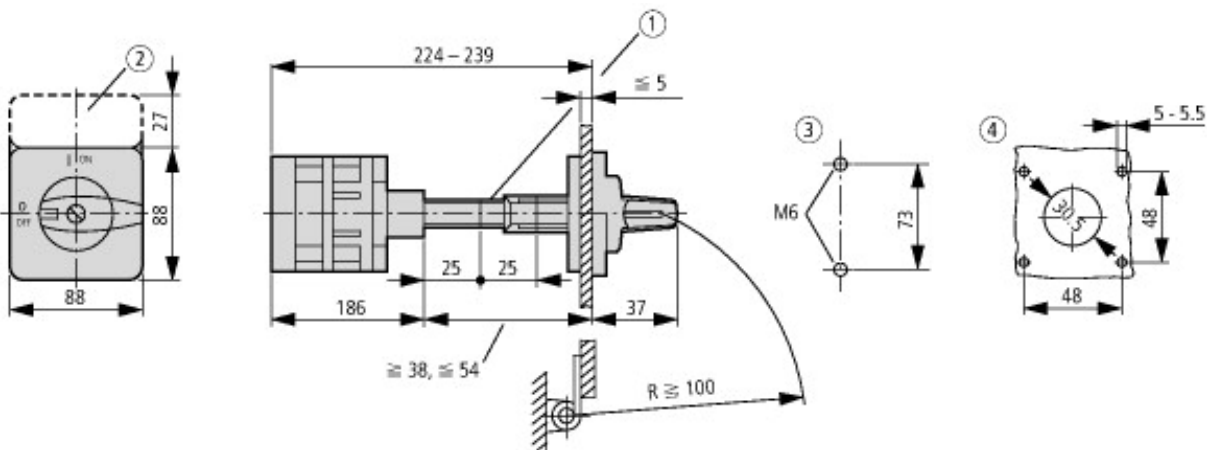
Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	100
Heat dissipation per pole, current-dependent	P_{vid}	W	7.5
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			
			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			
			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			
			Please enquire
10.2.5 Lifting			
			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			
			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			
			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			
			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			
			Meets the product standard's requirements.
10.5 Protection against electric shock			
			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			
			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			
			Is the panel builder's responsibility.
10.8 Connections for external conductors			
			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			
			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			
			Is the panel builder's responsibility.
10.10 Temperature rise			
			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			
			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			
			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			
			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

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@ss8.1-27-37-14-03 [AKF060010])			
Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Max. rated operation voltage U_e AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current I_u		A	100
Rated permanent current at AC-21, 400 V		A	100
Rated operation power at AC-3, 400 V		kW	30
Rated short-time withstand current I_{cw}		kA	1.7
Rated operation power at AC-23, 400 V		kW	55
Switching power at 400 V		kW	55
Conditioned rated short-circuit current I_q		kA	2

Number of poles	18
Number of auxiliary contacts as normally closed contact	0
Number of auxiliary contacts as normally open contact	0
Number of auxiliary contacts as change-over contact	0
Motor drive optional	No
Motor drive integrated	No
Voltage release optional	No
Device construction	Built-in device fixed built-in technique
Suitable for ground mounting	Yes
Suitable for front mounting 4-hole	No
Suitable for front mounting center	No
Suitable for distribution board installation	No
Suitable for intermediate mounting	Yes
Colour control element	Black
Type of control element	Door coupling rotary drive
Interlockable	No
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65

Dimensions



- ① Shaft extension with ZAV-P3 possible, max. $4 \times 25 = 100$ mm
- ② ZFS... Label mount not included as standard
- ③ Drilling dimensions base
- ④ Drilling dimensions door
- Cam switches T5B and T5 are of identical design, only their contacts are different

Additional product information (links)

IL03801009Z (AWA1150-1692) Cam switches: switch-disconnectors

IL03801009Z (AWA1150-1692) Cam switches: switch-disconnectors	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2016_07.pdf
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html