DATASHEET - DDC-80/2-SK



DC switch disconnector, 80 A, 2 pole, 1 N/O, 1 N/C, Without rotary handle and drive shaft, rear mounting

DDC-80/2-SK

6098924



Part no. Catalog No.

Delivery program			
Product range			DC switch-disconnector Main switch maintenance switch
Part group reference			DDC
Stop Function			optional
			Without rotary handle and drive shaft
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			2 pole
Auxiliary contacts			
s.		N/0	1
7		N/C	1
Degree of Protection			IP20
Design			rear mounting
Rated uninterrupted current	lu	А	80
Note on rated uninterrupted current ${\boldsymbol{I}}_{\boldsymbol{u}}$			Rated uninterrupted current \mathbf{I}_{u} is specified for max. cross-section.

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs
Ambient temperature			
Operation	θ	°C	-25 - +55
Storage	θ	°C	-30 - +80
Overvoltage category/pollution degree			111/3
Rated impulse withstand voltage	U _{imp}	kV	8
Rated insulation voltage	Ui	V	1100
Mounting position			As required
Contacts			
Mechanical variables			
Number of poles			2 pole
Auxiliary contacts			
		N/0	1
		N/C	1
Electrical characteristics			
Rated uninterrupted current	Iu	А	80
Note on rated uninterrupted current $\boldsymbol{!}_{\boldsymbol{u}}$			Rated uninterrupted current \mathbf{I}_{u} is specified for max. cross-section.
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	3000
Note on rated short-time withstand current lcw			Current for a time of 1 second

Rated short-circuit making capacity	I _{cm}	kA _{eff}	4.3
Heat dissipation per pole, current-dependent	P _{vid}	W	4
Switching capacity			
Lifespan, mechanical	Operations		10000
DC			
Utilization category DC21B			
Rated operational current switch			
480 V	Ι _e	А	80
600 V	Ι _e	А	80
1000 V	le	А	80
Ferminal capacities			
Solid		mm ²	6 - 35
Flexible with ferrules to DIN 46228		mm ²	
flexible		mm ²	6 - 25
Stripping length		mm	15
Tightening torque for terminal screw		Nm	3

Design verification as per IEC/EN 61439

Design vernication as per ind/inv 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	80
Heat dissipation per pole, current-dependent	P _{vid}	W	4
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	55
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			Meets the product standard's requirements.
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 7.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

egree of protection (NEMA)		Other
egree of protection (IP), front side		IP20
ype of electrical connection of main circuit		Screw connection
terlockable		No
ype of control element		None
olour control element		Other
uitable for intermediate mounting		No
uitable for distribution board installation		No
uitable for front mounting centre		No
uitable for front mounting 4-hole		No
uitable for ground mounting		Yes
evice construction		Built-in device fixed built-in technique
oltage release optional		No
Notor drive integrated		No
Inter of additional sector and the sector additional sector additi		No
lumber of auxiliary contacts as change-over contact		0
lumber of auxiliary contacts as normally open contact		0
umber of auxiliary contacts as normally closed contact		0
lumber of poles		2
onditioned rated short-circuit current Iq	kA	0
witching power at 400 V	kW	0
ated operation power at AC-23, 400 V	kW	0
ated short-time withstand current lcw	kA	3
ated operation power at AC-3, 400 V	kW	0
ated permanent current at AC-21, 400 V	A	0
ated permanent current at AC-23, 400 V	A	0
ated permanent current lu	Å	80
ated operating voltage	v	1000 - 1000
lander of switches	v	0
umber of switches		1
ersion as energency stop instanation		No
ersion as emergency stop installation		No
ersion as safety switch		No
ersion as maintenance-/service switch		Yes
ersion as main switch		Yes

Additional product information (links)

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