DATASHEET - DDC-630/2



DC switch disconnector, 630 A, 2 pole, 2 N/O, 2 N/C, with grey knob, service distribution board mounting



Part no. Catalog No. DDC-630/2 6098946

Delivery program			
Product range			DC switch-disconnector Main switch maintenance switch
Part group reference			DDC
			with grey knob
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			2 pole
Auxiliary contacts			
		N/0	2
7		N/C	2
Degree of Protection			IP20
Design			service distribution board mounting
Rated uninterrupted current	lu	А	630
Note on rated uninterrupted current !u			Rated uninterrupted current ${\rm I}_{\rm u}$ is specified for max. cross-section.

Technical data

Standards FC/EN 60947, VDE 0660, IEC/EN 60947-3 Certifications CE, RoHs Ambient temperature CE, RoHs Operation 9 °C -25 + 55 Storage 8 °C -30 - +80 Overvoltage category/pollution degree III/3 III/3 Rated insulation voltage U _{imp} kV 12 Mounting position Vimp V 1200 Centacts Storage Server U Server U Mounting position Server U Server U Server U Mounting position Server U Server U Server U Mumber of poles Number of poles Server U Server U Auxiliary contacts NUMber Of poles Server U Server U	
Ambient temperature Image: Participant (Participant) Participant (Participant) Participant (Participant) Participant (Participant) Participant) Participant)<	
Operation 9 °C -25 + 55 Storage 9 °C -30 + 80 Overvoltage category/pollution degree III/3 III/3 Rated impulse withstand voltage Vimp KV 12 Rated insulation voltage Vimp Vimp Arequired Mounting position Vimp Vimp Arequired Mechanical variables Image: State of the section of the	
Storage θ °C -30 + 80 Overvoltage category/pollution degree III/3 III/3 Rated inpulse withstand voltage Uinp KV 200 Rated insulation voltage Uinp Varout As required Mounting position E E E Mechanical variables Image: Solar	
Overvoltage category/pollution degree III/3 Rated impulse withstand voltage Uimp KV 12 Rated insulation voltage Ui V 1200 Mounting position V As required Contacts V V V Number of poles V I Auxiliary contacts V P 2pole	
Rated impulse withstand voltage Uimp KV 12 Rated insulation voltage Uimp V 1200 Mounting position V As required Contacts V Sequired Number of poles Imp Imp Auxiliary contacts Imp Imp	
Rated insulation voltage Ui Vi 200 Mounting position As required Contacts Frequired Mechanical variables Frequired Number of poles Frequired Auxiliary contacts Frequired	
Mounting position As required Contacts Image: Section of poles Image: Section of poles Auxiliary contacts Image: Section of pole Image: Section of pole	
Contacts Mechanical variables Number of poles Auxiliary contacts	
Mechanical variables Image: Constant set of poles Number of poles Image: Constant set of pole Auxiliary contacts Image: Constant set of pole	
Number of poles 2 pole Auxiliary contacts 1	
Auxiliary contacts	
N/O 2	
N/C 2	
Electrical characteristics	
Rated uninterrupted current Iu A 630	
Note on rated uninterrupted current l _u is specified for max. cross-section.	
Rated short-time withstand current (1 s current) I _{cw} A _{rms} 15000	
Note on rated short-time withstand current lcw Current for a time of 1 second	
Rated short-circuit making capacity I _{cm} kA _{eff} 25	

Heat dissipation per pole, current-dependent	P _{vid}	W	97
Switching capacity			
Lifespan, mechanical	Operations		10000
DC			
Utilization category DC21B			
Rated operational current switch			
480 V	le	А	630
600 V	le	А	630
1000 V	le	А	630
Terminal capacities			
Solid		mm ²	2 x 185
Flat conductor connection with busbars		mm ²	2 x (40 x 5)
Terminal screw			M10
Tightening torque for terminal screw		Nm	20

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	630
Heat dissipation per pole, current-dependent	P _{vid}	W	97
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.

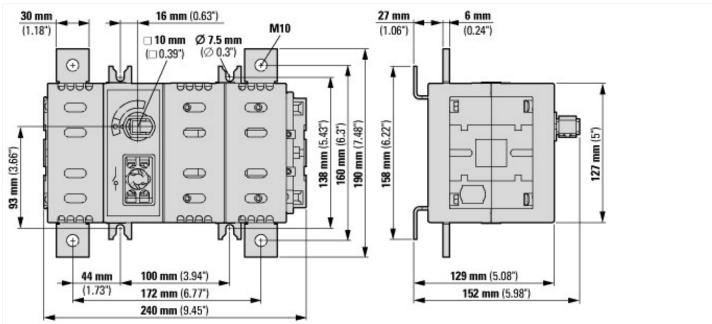
Technical data ETIM 7.0

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

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

[AKF000013])		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	0
Rated operating voltage	V	1000 - 1000
Rated permanent current lu	А	630
Rated permanent current at AC-23, 400 V	А	0
Rated permanent current at AC-21, 400 V	А	0
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	15
Rated operation power at AC-23, 400 V	kW	0
Switching power at 400 V	kW	0
Conditioned rated short-circuit current Iq	kA	0
Number of poles		2
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 centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Grey
Type of control element		Long turning handle
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP20
Degree of protection (NEMA)		Other

Dimensions



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