DATASHEET - DDC-125/2



DC switch disconnector, 125 A, 2 pole, 2 N/O, 2 N/C, with grey knob, service distribution board mounting



DDC-125/2 Part no. Catalog No. 6098930

Del	livery	prog	ram

Product range			DC switch-disconnector
Troductrunge			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	l _u	Α	125
Note on rated uninterrupted current !u			Rated uninterrupted current $\boldsymbol{I}_{\boldsymbol{u}}$ is specified for max. cross-section.

Technical data

General

delierai			
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			III/3
Rated impulse withstand voltage	U_{imp}	kV	8
Rated insulation voltage	Ui	V	1200
Mounting position			As required
Contacts			

Contacts			
Mechanical variables			
Number of poles			2 pole
Auxiliary contacts			
		N/0	2
		N/C	2
Electrical characteristics			
Rated uninterrupted current	I _u	Α	125
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{U}}$ is specified for max. cross-section.
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	4000
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated short-circuit making capacity	I _{cm}	kA _{eff}	6

Heat dissipation per pole, current-dependent	P _{vid}	W	8
Switching capacity			
Lifespan, mechanical	Operations		10000
DC			
Utilization category DC21B			
Rated operational current switch			
480 V	I _e	Α	125
600 V	I _e	Α	125
1000 V	I _e	Α	125
Terminal capacities			
Solid		mm^2	1 x 120
Flat conductor connection with busbars		mm ²	1 x (30 x 3) 2 x (20 x 3)
Terminal screw			M8
Tightening torque for terminal screw		Nm	14

Design verification as per IEC/EN 61439

Design verincation as per illo/liv 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	125
Heat dissipation per pole, current-dependent	P _{vid}	W	8
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 switch gear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must lobserved.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

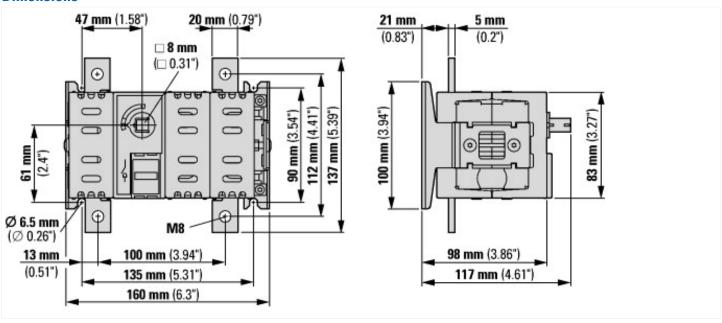
Technical data ETIM 7.0

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])

Varsion as anianternance-farvice switch 6 Yes Version as anianternance-farvice switch 6 7 Version as anianternance-farvice switch 6 7 Version as meregency stap installation 6 7 Version as reversing switch 6 7 Number of switches 6 7 Number of switches 6 7 Return day or strain yor buspe 6 7 Return day or strain yor buspe 6 7 Return day or strain yor buspe 7 8 Return day or strain or current at AC-23, 400 V A 0 Return day or strain or your at AC-23, 400 V A 4 Return day or strain or your at AC-23, 400 V A 4 Return day or strain or your at AC-23, 400 V A 4 Switching power at AC-23, 400 V A 9 Switching or strain or your at AC-23, 400 V A 9 Switching or strain or your at AC-23, 400 V A 9 Switching or strain or strain or your at AC-23, 400 V A 9 Switching or s	[AKF060013])		
Version as safety switch No Version as seregring switch No Version as seregring switch No Must read operating voltage No Max. read operating voltage No Rated permanent current at AC-23,400 V No Rated operation power at AC-3,400 V No Rated operation power at AC-3,400 V No Rated operation power at AC-3,400 V No Solution op ower at AC-23,400 V No Solution op ower at AC-23,400 V No Number of poles No Number of auxiliary contacts as normally clead contact No Number of auxiliary contacts as normally open contact No Motor drive optional No Motor drive optional No Motor drive integrated No Solitable for fost mounting entre No	Version as main switch		Yes
Version as emergency stop installation I No Version as rowering switch I No Number of switches I 1 Namex, rated operation voltage Use AC V 1000-1000 Rated operatiny voltage V 1000-1000 Rated permanent current Iu A 12 Rated permanent current at AC-23,400 V A 0 Rated operation power at AC-3,400 V W 0 Rated short-time withstand current Ig W 0 Rated short-time withstand current Ig W 0 Conditioned rated short-circuit current Ig W 0 Conditioned rated short-circuit current Ig W 0 Number of poles V 0 0 Number of sauxiliary contacts as normally closed contact V 0 0 Number of poles V 0 0 0 Number of sauxiliary contacts as normally closed contact V 0 0 0 Number of police interpreted V 0 0 0 0 0	Version as maintenance-/service switch		Yes
Version as reversing switch 1 Number of switches 1 Max. rated operation voltage UeAC V 100-1000 Rated operating voltage V 100-1000 Rated operating voltage V A 100-1000 Rated operating voltage A 100-1000 Rated permanent current but A 200-1000 Rated permanent current at AC-23,400 V A 0 Rated operation power at AC-3,400 V R A Voltage operation power at AC-23,400 V R A Number of power at AC-23,400 V R A A Number of power at AC-23,400 V R A A Notor of verpice interpreted R Y	Version as safety switch		No
Number of switches Image: Comparison voltage Ue AC V 0 Rated operation voltage Ue AC V 1000-1000 Rated operation voltage Ue AC V 1000-1000 Rated operation voltage Ue AC V 1000-1000 Rated operation voltage Ue AC A 10 Rated operation power at AC-23, 400 V A 0 Rated sports time withstand current tow W 0 0 Rated sports time withstand current tow W 0 0 Rated sports time withstand current tow W 0 0 Rated sports time withstand current tow W 0 0 Rated sports time withstand current tow W 0 0 Switching power at AC-23, 400 V W 0 0 Switching power at 400 V W 0 0 Number of poles W 0 0 Number of awiliary contacts as normally closed contact W 0 0 Motor drive eintegrated W 0 0 Woltze einstanding contacts as normally closed	Version as emergency stop installation		No
Max. rated operation voltage Us AC V 0	Version as reversing switch		No
Rated operating voltage V 1000-1000 Rated permanent current at AC-23,400 V A 125 Rated permanent current at AC-23,400 V A 0 Rated soperation power at AC-3,400 V A 4 Rated soperation power at AC-23,400 V A 4 Rated soperation power at AC-23,400 V A 4 Rated soperation power at AC-23,400 V A 6 Rated soperation power at AC-23,400 V A 4 Rated soperation power at AC-23,400 V A 4 Switching power at 400 V A 6 Number of poles A 6 Number of sudilary contacts as normally closed contact A 9 Number of sudilary contacts as normally open contact A 9 Motor drive optional A 9 9 Motor drive optional B 1 9 9 Motor drive optional B 9 9 9 Suitable for fort mounting 4-bole B 9 9 9 Suitable for fort mounting centre	Number of switches		1
Rated permanent current lu A 125 Rated permanent current at AC-23, 400 V A 0 Rated permanent current at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V A 0 Rated operation power at AC-3, 400 V A 4 Rated operation power at AC-23, 400 V W 0 Switching power at 400 V W 0 Conditioned rated short-circuit current Iq M A Number of auxiliary contacts as normally closed contact A 2 Number of auxiliary contacts as normally copen contact A 0 Number of auxiliary contacts as change-over contact A 0 Motor drive optional A No Motor drive integrated A No Voltage release optional B No Suitable for fort mounting 4-bol B No Suitable for front mounting 4-bol B No Suitable for front mounting centre B No Suitable for intermediate mounting B No Suitable for intermediate	Max. rated operation voltage Ue AC	V	0
Rated permanent current at AC-23, 400 V A 0 Rated permanent current at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V KW 0 Rated short-time withstand current low KW 0 Rated operation power at AC-23, 400 V KW 0 Switching power at 400 V KW 0 Conditioned rated short-circuit current Iq KW 0 Number of auxiliary contacts as normally closed contact KW 0 Number of auxiliary contacts as normally open contact W 0 Number of auxiliary contacts as change-over contact W 0 Motor drive optional W 0 Motor drive optional W 0 Motor drive integrated W 0 Voltage release optional W 0 Suitable for ground mounting W 0 Suitable for front mounting 4-hole W 0 Suitable for front mounting centre W 0 Suitable for intermediate mounting W 0 Suitable for intermediate mounting <td>Rated operating voltage</td> <td>V</td> <td>1000 - 1000</td>	Rated operating voltage	V	1000 - 1000
Rated permanent current at AC-21, 400 V A 0 Rated operation power at AC-3, 400 V kW 0 Rated short-time withstand current lcw kW 4 Rated short-time withstand current lcw kW 0 Switching power at AC-23, 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current lq kW 2 Number of ploses b 2 Number of auxiliary contacts as normally closed contact b 0 Number of auxiliary contacts as normally open contact b 0 Motor drive optional b 0 Motor drive integrated b 0 Voltage release optional b 0 Device construction b 0 Suitable for ground mounting b 0 Suitable for front mounting 4-hole b 0 Suitable for first mounting active b 0 Suitable for intermediate mounting b 0 Suitable for intermediate mounting b 0	Rated permanent current lu	Α	125
Rated operation power at AC-3,400 V kW 4 Rated short-time withstand current low kA 4 Rated operation power at AC-22,400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current lq kW 0 Number of poles A 2 Number of auxiliary contacts as normally closed contact C 0 Number of auxiliary contacts as change-over contact C 0 Motor drive optional C 0 Motor drive optional C No Motor drive integrated C No Voltage release optional C No Device construction C No Suitable for ground mounting C No Suitable for front mounting 4-hole No No Suitable for front mounting centre No No Suitable for intermediate mounting No No Suitable for intermediate mounting No No Colour control element No No	Rated permanent current at AC-23, 400 V	Α	0
Rated short-time withstand current low kA 4 Rated operation power at AC-23, 400 V kW 0 Switching power at 400 V kW 0 Conditioned rated short-circuit current lq kM 0 Number of poles KM 0 Number of auxiliary contacts as normally closed contact MM 0 Number of auxiliary contacts as normally open contact MM 0 Mottor drive integrated MM No Mottor drive integrated MM No Voltage release optional MM No Suitable for ground mounting MM Yes Suitable for front mounting A-hole NO No Suitable for front mounting centre MM NO Suitable for front mounting centre MM NO Suitable for intermediate mounting MM NO Colour control element MM<	Rated permanent current at AC-21, 400 V	Α	0
Rated operation power at AC-23,400 V Switching power at 400 V Conditioned rated short-circuit current lq Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as normally closed contact Number of auxiliary contacts	Rated operation power at AC-3, 400 V	kW	0
Switching power at 400 V kW 0 Conditioned rated short-circuit current Iq kA 0 Number of poles 4 2 Number of auxiliary contacts as normally closed contact 6 2 Number of auxiliary contacts as normally open contact 6 0 Number of auxiliary contacts as change-over contact 6 0 Motor drive optional 6 No Motor drive integrated 7 No Voltage release optional 8 No Suitable for ground mounting 8 Yes Suitable for front mounting 4-hole 9 No Suitable for front mounting 4-hole No No Suitable for distribution board installation No No Suitable for intermediate mounting No No Colour control element No No Type of control element No <td>Rated short-time withstand current lcw</td> <td>kA</td> <td>4</td>	Rated short-time withstand current lcw	kA	4
Conditioned rated short-circuit current IqKA0Number of poles44Number of auxiliary contacts as normally closed contact64Number of auxiliary contacts as normally open contact66Number of auxiliary contacts as change-over contact66Motor drive optional66Motor drive integrated7NoVoltage release optional688Device construction688Suitable for ground mounting788Suitable for front mounting 4-hole78NoSuitable for distribution board installation66NoSuitable for intermediate mounting7NoNoColour control element7NoNoType of control element7GreyNoType of electrical connection of main circuit6YesNoType of electrical	Rated operation power at AC-23, 400 V	kW	0
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as normally open contacts Number of auxiliary contacts as normally open contacts Number of auxiliary contacts as normally open contacts Number	Switching power at 400 V	kW	0
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact No No No No No No No Sultage release optional No Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side	Conditioned rated short-circuit current Iq	kA	0
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated No No Voltage release optional Device construction Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting entre Suitable for firnt mounting centre Suitable for firnt mounting centre Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Ves Surew connection Surew connection Surew connection P20	Number of poles		2
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for front mounting centre Suitable for fortn mounting centre Suitable for fortn mounting centre Suitable for font mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side	Number of auxiliary contacts as normally closed contact		0
Motor drive optionalNoMotor drive integratedNoVoltage release optionalNoDevice constructionBuilt-in device fixed built-in techniqueSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementGreyType of control elementLong turning handleInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideIP20	Number of auxiliary contacts as normally open contact		0
Motor drive integratedNoVoltage release optionalNoDevice constructionBuilt-in device fixed built-in techniqueSuitable for ground mountingYesSuitable for front mounting 4-holeNoSuitable for distribution board installationNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementGreyType of control elementLong turning handleInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideIP20	Number of auxiliary contacts as change-over contact		0
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	Motor drive optional		No
Device construction Built-in device fixed built-in technique Yes Suitable for ground mounting 4-hole Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side	Motor drive integrated		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Yes Yes Yes Yes Yes Interlockable Type of protection (IP), front side	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No Colour control element Grey Long turning handle Yes Screw connection IP20	Device construction		Built-in device fixed built-in technique
Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No Roe Roe No Serew connection No Colour control element Long turning handle Yes Screw connection IP20	Suitable for ground mounting		Yes
Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Res No Orey Grey Long turning handle Yes Screw connection IP20	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Grey Long turning handle Yes Screw connection IP20	Suitable for front mounting centre		No
Colour control element Grey Type of control element Long turning handle Interlockable Type of electrical connection of main circuit Cegree of protection (IP), front side Grey Long turning handle Yes Type of electrical connection of main circuit Figure 1 1 1 1 1 1 1 1 1 1 1 1 1	Suitable for distribution board installation		No
Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Long turning handle Yes Screw connection IP20	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP20	Colour control element		Grey
Type of electrical connection of main circuit Degree of protection (IP), front side Screw connection IP20	Type of control element		Long turning handle
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) Other	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	