SIEMENS

Data sheet 3LD2185-5VD21



SENTRON switch disconnector 3LD in molded-plastic enclosure , repair and maintenance switch with EMC plate, 6-pole lu: 25A, AC23A 400V at 50/60Hz: 9,5kW, used with frequency converter: AC20 400V at 0-550Hz: 5,5kW, 1NO + 1NC 20-150ms leading, molded-plastic encapsulation for metric cable gland, knob-operated mechanism, black, lockable in 0- and I-position, incl. cable shield clamps

Model		
product brand name	SENTRON	
product designation	3LD Switch disconnector	
design of the product	Switch	
display version / for switch position indicator manual operation	1 ON - 0 OFF	
type of switch	Molded-plastic enclosure for metric threaded joint	
design of the actuating element	selector switch	
color / of the actuating element	black	
design of handle	knob-operated mechanism, black	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	6	
number of poles / note	PE isolated from cable shield	
size of switch disconnector	2	
mechanical service life (switching cycles) / typical	100 000	
electrical endurance (switching cycles)		
• at AC-23 A / at 690 V	6 000	
 between converter and motor / when used as repair switch / at AC-20 A / at 690 V / at 0-550 Hz 	100 000	
operating frequency / maximum	50 1/h	
degree of pollution	3	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
operating voltage		
 between converter and motor / at AC / at 0-550 Hz / rated value 	690 V	
Protection class		
protection class IP	IP65	
degree of protection NEMA rating	1, 3R, 4X	
protection class IP / on the front	IP65	
Dissipation		
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.1 W	
Current		
operational current / rated value	25 A	
operational current		
at AC / rated value	25 A	
Main circuit		

operating frequency / between converter and motor / when	
used as repair switch	
• initial value	0 Hz
• full-scale value	550 Hz
operational current	
at AC-21 / at 690 V / rated value	25 A
at AC-21 A / at 240 V / rated value	25 A
at AC-21 A / at 400 V / rated value	25 A
at AC-21 A / at 440 V / rated value	25 A
at AC-23 A / at 400 V / rated value	20 A
operating power	
at AC-23 A / at 240 V / rated value	5 kW
at AC-23 A / at 440 V / rated value	9.5 kW
at AC-23 A / at 690 V / rated value	10 kW
at AC-3 / at 240 V / rated value	4 kW
at AC-3 / at 400 V / rated value	8 kW
 at AC-3 / at 690 V / rated value 	7.5 kW
operating active power [W] / between converter and motor / when used as repair switch / at AC-20 A	
• at 400 V / at 0-550 Hz / rated value	5.5 kW
 at 690 V / at 0-550 Hz / rated value 	11 kW
continuous current / between converter and motor / when used as repair switch / at AC-20	
• at 230 V / rated value	17.5 A
• at 400 V / rated value	13.2 A
at 400 V / rated value at 690 V / rated value	14 A
Auxiliary circuit	1771
	0
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
operating voltage / of auxiliary contacts / at AC / maximum	600 V
continuous current / of the auxiliary contact / rated value	10 A
insulation voltage / of the auxiliary switch / rated value	500 V
Suitability	
suitability for use	
main switch	Yes
 switch disconnector 	Yes
 EMERGENCY OFF switch 	No
 safety switch 	No
maintenance/repair switch	Yes
Product details	
product feature / can be locked in ON position	Yes
special product feature	inclusive EMC shield plate
product feature / can be locked into OFF position	Yes
accessories	
1000055U1165	
product extension / optional	No
product extension / optional • motor drive	No No
product extension / optional motor drive voltage trigger	No
product extension / optional	No 2
product extension / optional	No
product extension / optional	No 2
product extension / optional	No 2 4
product extension / optional	No 2 4 0
product extension / optional	No 2 4 0 3
product extension / optional	No 2 4 0 3
product extension / optional	No 2 4 0 3 4.5 8.5 mm
product extension / optional	No 2 4 0 3

 at 240 V / for combination switch + gG fuse / maximum 	3.5 kA		
at 440 V / for combination switch + gG fuse / maximum	3.5 kA		
at 690 V / for combination switch + gG fuse / maximum permissible	4 kA		
l2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	4 kA2.s		
I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA2.s		
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s		
design of the fuse link			
for short-circuit protection of the main circuit / required	fuse gL/gG: 25 A		
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A		
operational current / of upstream fuse / rated value	25 A		
according UL			
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	25 A		
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	600 V		
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	10		
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	15		
short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1	5 kA		
continuous current / of upstream fuse / according to UL / rated value	50 A		
type of fuse / according to UL	RK5		
Connections			
AWG number / as coded connectable conductor cross section / solid			
maximum	8		
• minimum	14		
type of connectable conductor cross-sections / for copper			
conductor			
solid	1x (1,516mm²)		
 finely stranded / with core end processing 	1x (1,510mm²)		
• stranded	1x (1,516mm²)		
type of connectable conductor cross-sections / for auxiliary contacts			
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)		
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²		
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)		
type of electrical connection			
for main current circuit	box terminal		
for auxiliary contacts	connection terminals		
Mechanical Design			
height	199 mm		
width	146 mm		
depth	149 mm		
type of device	fixed mounting		
fastening method	Complete unit in enclosure with EMC shield plate		
fastening method			
4-hole front mounting	No		
4-hole front mounting			
4-hole front mountingfront mounting with central attachment	No Yes		
4-hole front mounting	No		

Environmental conditions			
ambient temperature / during operation			
• minimum	-25 °C		
maximum	55 °C		
ambient temperature / during storage			
• minimum	-25 °C		
• maximum	55 °C		
General Product Approval		Declaration of Conformity	

Confirmation











Test Certificates other

<u>Miscellaneous</u> <u>Miscellaneous</u> <u>Environmental Confirmations</u>

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD2185-5VD21

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3LD2185-5VD21

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2185-5VD21

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







