SIEMENS

Data sheet

3LD2318-7UL01



SENTRON, switch disconnector 3LD, change-over switch, 4-pole, lu: 160 A, operating performance / at AC-23 A at 400 V: 75 kW, floor mounting with door coupling, knob-operated mechanism, black, 4-hole mounting of the handle

product brand name SENTRON product designation 3LD Switch disconnector design of the product Selector switch disphay version / for switch position indicator manual operation 1 ON - 0 OFF - 2 ON type of switch Floor mounting with door coupling 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 Ceneral technical data	Model			
design of the product Selector switch display version / for switch position indicator manual operation 1 ON - 0 OFF - 2 ON type of switch Floor mounting with door coupling 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 Ceneral technical data number of poles at Ac 23 of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 6 000 operating voltage resistance / rated value 690 V summ 60 Hz Protection class IP fle55 portection class IP IP65 degree of protection class IP IP65 degree of protection class IP / on the front IP65 Dissipation 36 W protection class IP / on the front IP65 Dissipation 36 W operational current / rated value 60 A operational current / rated value 60 Hz <td>product brand name</td> <td>SENTRON</td>	product brand name	SENTRON		
display version / for switch position indicator manual operation 1 ON - 0 OFF - 2 ON type of switch Floor mounting with door coupling design of the actuating element black color / of the actuating element black design of handle knob-operated mechanism, black type of switch disconnector 5 mumber of poles 4 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurace (switching cycles) / typical 100 000 electrical endurace (switching cycles) / typical 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 8kV operating frequency / rated value 690 V summ 50 Hz operating frequency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operating requency / rated value 690 V operating requency / rated value 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 <tr< td=""><td>product designation</td><td>3LD Switch disconnector</td></tr<>	product designation	3LD Switch disconnector		
operation Floor mounting with door coupling 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	design of the product	Selector switch		
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 number of poles 4 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 0000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating frequency / rated value 690 V operating frequency / rated value 690 V operating voltage • at AC / rated value operating frequency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP fe65 degree of protection NEMA rating <		1 ON - 0 OFF - 2 ON		
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 isize of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 690 V operation class IP IPE65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IPE65	type of switch	Floor mounting with door coupling		
design of handle knob-operated mechanism, black type of the driving mechanism / motor drive No General technical data	design of the actuating element	selector switch		
type of the driving mechanism / motor drive No General technical data	color / of the actuating element	black		
General technical data number of poles 4 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating frequency / maximum 60 0V operating voltage 690 V surge voltage resistance / rated value 8 kV operating requency / rated value 690 V emaximum 50 Hz operating frequency / rated value 690 V e at AC / rated value 690 V operating requency / rated value 690 V e maximum 60 Hz Protection class IP 100 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W current 160 A operational current	design of handle	knob-operated mechanism, black		
number of poles 4 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 60 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating requency / maximum 600 V operating voltage 690 V • at AC / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 690 V operation class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W operational current / rated value <td>type of the driving mechanism / motor drive</td> <td>No</td>	type of the driving mechanism / motor drive	No		
size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 • at AC-23 A / at 690 V 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V surge voltage resistance / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / maximum 60 V operating frequency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation	General technical data			
mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating requency / maximum 601 operating voltage 690 V • at AC / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 600 Hz Protection class P protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation generating state / per pole operating state / per pole 160 A operational current / rated	number of poles	4		
electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 6400 • at AC / rated value 690 V operating voltage 6400 • at AC / rated value 690 V operating trequency / rated value 690 V • at AC / rated value 690 V operating frequency / rated value 600 V operating frequency / rated value 600 V operating frequency / rated value 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current 160 A operational current / rated value	size of switch disconnector	5		
• at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voitage insulation voltage / rated value insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 600 Hz Protection class P protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current 160 A operational current / rated value 160 A	mechanical service life (switching cycles) / typical	100 000		
operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 60 Hz Protection class IP protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W current 36 W operational current / rated value 160 A operational current / rated value 160 A operational current 160 A	electrical endurance (switching cycles)			
degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class Protection class IP protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 160 A operational current / rated value 160 A	• at AC-23 A / at 690 V	6 000		
Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class Protection class IP protection class IP / on the front IP65 Dissipation IP65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W current operational current / rated value 160 A operational current 160 A	operating frequency / maximum	50 1/h		
insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 1, 3R, 4X, 12 protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 1965 Dissipation 36 W operating state / per pole 160 A operational current 160 A operational current 160 A	degree of pollution	3		
surge voltage resistance / rated value 8 kV operating voltage 690 V operating frequency / rated value 690 V operating frequency / rated value 60 Hz • minimum 60 Hz Protection class IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 900 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W Operational current / rated value 160 A operational current 160 A	Voltage			
operating voltage 690 V operating frequency / rated value 690 V operating frequency / rated value 50 Hz • minimum 50 Hz • maximum 60 Hz Protection class 100 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W current 160 A operational current 160 A	insulation voltage / rated value	690 V		
• at AC / rated value 690 V operating frequency / rated value 50 Hz • minimum 60 Hz Protection class 60 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 1965 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W current 160 A operational current 160 A operational current 160 A	surge voltage resistance / rated value	8 kV		
operating frequency / rated value 50 Hz • maximum 60 Hz Protection class protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 degree of protection vector ve	operating voltage			
• minimum 50 Hz • maximum 60 Hz Protection class protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 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 36 W Current operational current / rated value 160 A operational current • at 40 °C / rated value 160 A	at AC / rated value	690 V		
maximum 60 Hz Protection class protection class IP IP65 degree of protection NEMA rating 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 Current operational current / rated value 160 A	operating frequency / rated value			
Protection class protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 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 Current 160 A operational current 160 A • at 40 °C / rated value 160 A	• minimum	50 Hz		
protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation IP65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W Current operational current / rated value operational current / rated value 160 A operational current 160 A	• maximum	60 Hz		
degree of protection NEMA rating 1, 3R, 4X, 12 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 36 W Current operational current / rated value operational current 160 A operational current 160 A	Protection class			
protection class IP / on the front IP65 Dissipation	protection class IP	IP65		
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W Current operational current / rated value 160 A operational current 160 A • at 40 °C / rated value 160 A	degree of protection NEMA rating	1, 3R, 4X, 12		
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W Current 0 operational current / rated value 160 A operational current 160 A	protection class IP / on the front	IP65		
hot operating state / per pole Current operational current / rated value 160 A operational current 160 A • at 40 °C / rated value 160 A	Dissipation			
operational current / rated value 160 A operational current 160 A • at 40 °C / rated value 160 A	power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	36 W		
operational current 160 A	Current			
at 40 °C / rated value 160 A	operational current / rated value	160 A		
	operational current			
• at 45 °C / rated value 160 A	• at 40 °C / rated value	160 A		
	• at 45 °C / rated value	160 A		

a at E0 °C / rated value	160 A
• at 50 °C / rated value	160 A
• at 55 °C / rated value	160 A
• at AC / rated value	160 A
Main circuit	
operational current	
at AC-21 / at 690 V / rated value	160 A
• at AC-21 A / at 240 V / rated value	160 A
• at AC-21 A / at 400 V / rated value	160 A
• at AC-21 A / at 440 V / rated value	160 A
at AC-23 A / at 400 V / rated value	132 A
operating power	400 1444
 at AC-23 A / at 240 V / rated value 	132 kW
 at AC-23 A / at 400 V / rated value 	132 kW
 at AC-23 A / at 440 V / rated value 	132 kW
• at AC-23 A / at 690 V / rated value	45 kW
 at AC-3 / at 240 V / rated value 	35 kW
 at AC-3 / at 400 V / rated value 	50 kW
• at AC-3 / at 690 V / rated value	37 kW
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	0
number of NO contacts / for auxiliary contacts	0
operating voltage / of auxiliary contacts / at AC / maximum	500 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	Yes
maintenance/repair switch	Yes
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	0
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	0
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
number of bracket locks / maximum	3
hasp thickness / of the bracket locks	4 6 mm
Short circuit	
conditional short-circuit current / with line-side fuse protection	
• at 690 V / by gG fuse / rated value	50 kA
let-through current / with closed switch	
 at 240 V / for combination switch + gG fuse / maximum 	15 kA
 at 440 V / for combination switch + gG fuse / maximum 	15 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	15 kA
I2t value / with closed switch	
 at 240 V / for combination switch + gG fuse / maximum 	185 kA2.s

maximum	
 at 690 V / for combination switch + gG fuse / 	185 kA2.s
maximum	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 160 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	160 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	180 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	75
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	50
short-time withstand current (SCCR) / at 600 V / according to UL 508/UL 60947-4-1	10 kA
continuous current / of upstream fuse / according to UL / rated value	200 A
type of fuse / according to UL	RK5
Connections	
AWG number / as coded connectable conductor cross section / solid	
• minimum	1
• maximum	4/0
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (16185mm²)
 finely stranded / with core end processing 	1x (16150mm²)
• stranded	1x (16185mm²)
type of connectable conductor cross-sections / for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
• finely stranded / with core end processing	lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²
• stranded	lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 2,5mm ²)
type of electrical connection	
for main current circuit	box terminal
 for auxiliary contacts 	connection terminals
Mechanical Design	
height	149 mm
width	299 mm
depth	94 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method • 4-hole front mounting	Yes
 front mounting with central attachment 	No
rail mounting	No
net weight	6 543 g
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
SF.	<u>Confirmation</u>	CCC		EHC	CE EG-Konf.
Declaration of Conformity	Test Certificates		other		
UK CA	Type Test Certific- ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>	<u>Miscellaneous</u>	Environmental Con- firmations	

urther information

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