SIEMENS

Data sheet

3LD2164-1GP51-0US2



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 25 A, Operating power / at AC-23 A at 400 V: 9.5 kW, molded-plastic encapsulation for inch cable gland, 1 NC, 1 NO, rotary operating mechanism, black

Model		
product brand name	SENTRON	
product designation	3LD Switch disconnector	
design of the product	Main switch	
display version / for switch position indicator manual operation	1 ON - 0 OFF	
design of the actuating element	Short rotary knob	
design of handle	rotary operating mechanism, black	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	3	
number of poles / note	PE	
type of device	fixed mounting	
type of switch	Molded-plastic enclosure for inch threaded joint	
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	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	4 kA2.s	
let-through l2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	4 kA2.s	
operating frequency / maximum	50 1/h	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
Protection class		
protection class IP	IP65	
degree of protection NEMA rating	1, 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 	1.1 W	
 per conductor / typical 	1 W	
Current		
operational current		
 at 40 °C / rated value 	25 A	
• at 45 °C / rated value	25 A	
• at 50 °C / rated value	25 A	

 at 55 °C / rated value 	05.4
	25 A
at AC / rated value	25 A
 at AC-23 A / at 400 V / rated value at AC-24 / at 600 V / rated value 	20 A
• 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 440 V / rated value	25 A 25 A
operational current / of upstream fuse / rated value let-through current / with closed switch	25 A
• at 440 V / for combination switch + gG fuse /	3.5 kA
maximum	0.0 MA
 at 690 V / for combination switch + gG fuse / 	4 kA
maximum permissible	
Main circuit	
operating power	
 at AC-23 A / at 240 V / rated value 	5 kW
 at AC-23 A / at 400 V / rated value 	10 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
operational current / rated value	25 A
Auxiliary circuit	
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	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 maintenance/repair switch 	Yes
	Vee
· · ·	Yes
Appearance	
Appearance color / of the actuating element	Yes black
Appearance color / of the actuating element Product details	
Appearance color / of the actuating element Product details product feature	black
Appearance color / of the actuating element Product details product feature • can be locked into OFF position	black Yes
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum	black Yes 3
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum	black Yes 3 4 mm
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum	black Yes 3
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional	Yes 3 4 mm 8 mm
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive	black Yes 3 4 mm
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger	Ves 3 4 mm 8 mm No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • woltage trigger Short circuit	Ves 3 4 mm 8 mm No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger	Ves 3 4 mm 8 mm No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • woltage trigger Short circuit conditional short-circuit current / with line-side fuse	Ves 3 4 mm 8 mm No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection	Yes 3 4 mm 8 mm No No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse • at 690 V / by gG fuse / rated value	Yes 3 4 mm 8 mm No No
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL	black Yes 3 4 mm 8 mm No No No S0 kA
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL	black Yes 3 4 mm 8 mm No No 50 kA 25 A
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 480 V / according to UL	black Yes 3 4 mm 8 mm No No No 50 kA 25 A 600 V
Appearance color / of the actuating element Product details product feature • can be locked into OFF position number of bracket locks / maximum hasp thickness / of the bracket locks / minimum hasp thickness / of the bracket locks / maximum product extension / optional • motor drive • voltage trigger Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 508/UL 60947-4-1 / rated value operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 480 V / according to UL 508/UL 508/UL 60947-4-1 / rated value active power [hp] / at AC / at 600 V / according to UL 508/UL 508/UL 60947-4-1 / rated value	black Yes 3 4 mm 8 mm 8 mm No No No 25 A 600 V 10

to UL 508/UL 60947-4-1	
continuous current / of upstream fuse / according to UL /	50 A
rated value	
type of fuse / according to UL	RK5
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
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 2,5mm ²), 1x 4mm ² ; front auxiliary
 finely stranded / with core end processing 	switch 1x (0,75 2,5mm ²) lateral auxiliary switch 2x (0,75 1,5mm ²), 1x 2,5mm ² ; front auxiliary
stranded	switch 1x 2,5mm ²
	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
Requirements	
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
Mechanical Design	
height	164 mm
width	100 mm
depth	118 mm
fastening method	Complete unit in enclosure
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	Yes
 rail mounting 	No
net weight	489 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	
	Miscellaneous UL VDE
General Product Declaration of Conformity	Test Certificates Marine / Shipping

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UK CA

CE EG-Konf. Miscellaneous

Miscellaneous



other

Miscellaneous

Environmental Confirmations

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=3LD2164-1GP51-0US2 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2164-1GP51-0US2 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2164-1GP51-0US2 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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