SIEMENS

Data sheet 3LD2015-0TK51



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 16 A, Operating power / at AC-23 A at 400 V: 7.5 kW, floor mounting with door coupling, rotary operating mechanism, black, 4-hole mounting of the handle, without tolerance compensation

product brand name design of the product design of the product display version / for switch position indicator manual operation type of switch design of the actuating element design of the actuating element Short rotary knob black color / of the actuating element design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / 6 000 operating frequency / maximum degree of pollution Voltage insulation voltage / rated value	Model	
design of the product display version / for switch position indicator manual operation type of switch for swit	product brand name	SENTRON
display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of the actuating element black design of handle type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value • at AC / rated value • at AC / rated value • minimum • maximum Fooltz Protection class IP of the front IP65 degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value operatings late / per pole Current operational current / rated value	product designation	3LD Switch disconnector
operation type of switch design of the actuating element color / of the actuating element design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum 50 Hz • maximum 50 H	design of the product	Main switch
design of the actuating element black color / of the actuating element black design of handle type of the driving mechanism / motor drive No General technical data number of poles 3 size of switch disconnector 1 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / et at AC-23 A / at 690 V 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 600 Hz Protection class IP / on the front 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 operational current / rated value 16 A	. ,	1 ON - 0 OFF
color / of the actuating element design of handle type of the driving mechanism / motor drive Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switchin	type of switch	Floor mounting with door coupling
design of handle type of the driving mechanism / motor drive Senoral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Surge voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum • maximum Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operation greated value 16 A rotary operating mechanism, black No 3 rotary operating mechanism, black No 6 000 000 000 6 000 6 000 6 000 6 000 6 000 6 00V 6 0V 6 0V 6 0V 6 V 6	design of the actuating element	Short rotary knob
type of the driving mechanism / motor drive General technical data number of poles 3 size of switch disconnector 1 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 690 V surge voltage resistance / rated value 690 V operating frequency / material value 690 V surge voltage resistance / rated value 690 V operating voltage v at AC / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 600 Hz Protection class IP 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 operational current / rated value 16 A operational current / rated value 16 A	color / of the actuating element	black
general technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum for the degree of pollution Voltage insulation voltage / rated value operating voltage • at AC / rated value operating frequency / rated value • at AC / rated value • minimum • maximum for He6 degree of protection NEMA rating protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value • at 40 °C / rated value 16 A operational current • at 40 °C / rated value 16 A	design of handle	rotary operating mechanism, black
number of poles size of switch disconnector 1 mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value operating voltage • at AC / rated value operating frequency / rated value • at AC / rated value • minimum • maximum 50 Hz • maximum 50 Hz Protection class IP degree of protection NEMA rating protection class IP / on the front possible of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value • at 40 °C / rated value 16 A operational current • at 40 °C / rated value 16 A	type of the driving mechanism / motor drive	No
size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 70	General technical data	
mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum omaximum foo Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value	number of poles	3
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum omaximum foo Hz Protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	size of switch disconnector	1
at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage at AC / rated value operating frequency / rated value ominimum onum onum onum onum onum onum onum o	mechanical service life (switching cycles) / typical	100 000
operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum omaximum Frotection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value 16 A	electrical endurance (switching cycles)	
degree of pollution Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 680 V operating voltage • at AC / rated value 690 V operating frequency / rated value • minimum 50 Hz • maximum 60 Hz Protection class protection class IP 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 operational current / rated value 16 A operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	• at AC-23 A / at 690 V	6 000
insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage • at AC / rated value 690 V operating frequency / rated value • 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 Current operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	operating frequency / maximum	50 1/h
insulation voltage / rated value 690 V surge voltage resistance / rated value 6 kV operating voltage • at AC / rated value 690 V operating frequency / rated value • 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 Current operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	degree of pollution	3
surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz • maximum Frotection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value 6 kV 6 k	Voltage	
operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 60 Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value 16 A operational current • at 40 °C / rated value 16 A	insulation voltage / rated value	690 V
at AC / rated value operating frequency / rated value ininimum omaximum foo Hz Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value at 40 °C / rated value food	surge voltage resistance / rated value	6 kV
operating frequency / rated value	operating voltage	
	at AC / rated value	690 V
● maximum Protection class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current ● at 40 °C / rated value 16 A	operating frequency / rated value	
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protection class IP 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 operational current / rated value at 40 °C / rated value 16 A	maximum	60 Hz
degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value 1, 3R, 4X, 12 IP65 0.5 W 0.5 W 16 A	Protection class	
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 16 A operational current • at 40 °C / rated value 16 A	protection class IP	IP65
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 16 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 Current operational current / rated value operational current • at 40 °C / rated value 16 A	protection class IP / on the front	IP65
hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 16 A	Dissipation	
operational current / rated value 16 A operational current • at 40 °C / rated value 16 A		0.5 W
operational current • at 40 °C / rated value 16 A	Current	
• at 40 °C / rated value 16 A	operational current / rated value	16 A
	operational current	
• at 45 °C / rated value 16 A	 at 40 °C / rated value 	16 A
	• at 45 °C / rated value	16 A

 at 50 °C / rated value 	16 A
at 50 C / rated value at 55 °C / rated value	16 A
at AC / rated value at AC / rated value	16 A
	10 A
Main circuit	
operational current	40.4
• at AC-21 / at 690 V / rated value	16 A
at AC-21 A / at 240 V / rated value	16 A
at AC-21 A / at 400 V / rated value	16 A
• at AC-21 A / at 440 V / rated value	16 A
at AC-23 A / at 400 V / rated value	16 A
operating power	
at AC-23 A / at 240 V / rated value	4 kW
at AC-23 A / at 400 V / rated value	8 kW
at AC-23 A / at 440 V / rated value	7.5 kW
at AC-23 A / at 690 V / rated value	8 kW
at AC-3 / at 240 V / rated value	3 kW
at AC-3 / at 400 V / rated value	6 kW
at AC-3 / at 690 V / rated value	5.5 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	
special product feature	Without tolerance compensation
special product feature	Without tolerance compensation Yes
product feature / can be locked into OFF position	Without tolerance compensation Yes
product feature / can be locked into OFF position accessories	
product feature / can be locked into OFF position accessories product extension / optional	Yes
product feature / can be locked into OFF position accessories product extension / optional • motor drive	Yes No
product feature / can be locked into OFF position accessories product extension / optional motor drive voltage trigger	Yes No No
product feature / can be locked into OFF position accessories product extension / optional • motor drive	Yes No
product feature / can be locked into OFF position accessories product extension / optional	Yes No No
product feature / can be locked into OFF position accessories product extension / optional	No No No 3
product feature / can be locked into OFF position accessories product extension / optional	No No No 3
product feature / can be locked into OFF position accessories product extension / optional	No No Solve
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum	No No 3 5 0 3
product feature / can be locked into OFF position accessories product extension / optional	No No Solve
product feature / can be locked into OFF position accessories product extension / optional	No No 3 5 0 3
product feature / can be locked into OFF position accessories product extension / optional	No No 3 5 0 3
product feature / can be locked into OFF position accessories product extension / optional	No No 3 5 0 3
product feature / can be locked into OFF position accessories product extension / optional	No No No 3 5 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value	No No No 3 5 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional	No No No 3 5 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional	No No No 3 5 0 3 4 8 mm
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value let-through current / with closed switch • at 240 V / for combination switch + gG fuse / maximum • at 440 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse /	No No No 3 5 0 3 4 8 mm 50 kA 3 kA 3 kA
product feature / can be locked into OFF position accessories product extension / optional • motor drive • voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum number of bracket locks / maximum number of bracket locks / maximum hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 690 V / by gG fuse / rated value let-through current / with closed switch • at 240 V / for combination switch + gG fuse / maximum • at 440 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum permissible l2t value / with closed switch / at 240 V / for combination	Yes No No No 3 5 0 3 4 8 mm 50 kA 3 kA 3 kA 3 kA 3 kA

ewitch + aG fuse / maximum	
switch + gG fuse / maximum 12t value / with closed switch / at 690 V / for combination	3 kA2.s
switch + gG fuse / maximum	V IV L.J
design of the fuse link	
• for short-circuit protection of the main circuit /	fuse gL/gG: 20 A
requiredfor short-circuit protection of the auxiliary switch /	fuse gL/gG: 10 A
required	20. A
operational current / of upstream fuse / rated value	20 A
according UL	40.0
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	16 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	7.5
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	10
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	10
• minimum	18
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (16mm²)
 finely stranded / with core end processing 	1x (14mm²)
• stranded	1x (16mm²)
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	83 mm
width	67 mm
depth	393.5 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	Yes
net weight	384 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature / during storage	25 °C
• minimum	-25 °C 55 °C
maximum General Product Approval	33 C
GENERAL PRODUCT ADDROVAL	





Confirmation





Miscellaneous

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

other







Special Test Certificate



Environmental Confirmations

other

Miscellaneous

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=3LD2015-0TK51

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2015-0TK51

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2015-0TK51

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications











