SIEMENS

Data sheet 3LD5420-0TK13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 100A, SCCR 65kA at 480VAC, Operating power at 480VAC 3-phase: 60hp, IEC: 100A, Operating power at AC-23A at 400V: 45kW, front-mounted, rotary operating mechanism, red/yellow, 4-hole mounting of the handle, incl. terminal covers for the infeed side

Model	
product brand name	SENTRON
product designation	3LD UL switch disconnector
design of the product	EMERGENCY-STOP switch
display version / for switch position indicator manual operation	1 ON - 0 OFF
type of switch	front mounted
design of the actuating element	selector switch
color / of the actuating element	red
design of handle	knob-operated mechanism, red/yellow
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
size of switch disconnector	3
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
operating frequency / maximum	50 1/h
degree of pollution	3
Voltage	
insulation voltage / rated value	690 V
surge voltage resistance / rated value	6 kV
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	100 A
operational current	
 at 40 °C / rated value 	100 A
 at 45 °C / rated value 	100 A
 at 50 °C / rated value 	100 A
 at 55 °C / rated value 	100 A
at AC / rated value	100 A
Main circuit	

at AC-21 / at 690 V / rated value	100 A
at AC-21 A / at 240 V / rated value	100 A
at AC-21 A / at 400 V / rated value	100 A
at AC-21 A / at 440 V / rated value	100 A
at AC-23 A / at 400 V / rated value	100 A
operating power	
at AC-23 A / at 240 V / rated value	30 kW
at AC-23 A / at 440 V / rated value	45 kW
at AC-23 A / at 690 V / rated value	37 kW
at AC-3 / at 240 V / rated value	30 kW
at AC-3 / at 400 V / rated value	45 kW
at AC-3 / at 690 V / rated value	30 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	000 V
suitability for use	Von
• main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	Yes
• 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	3
/ attachable / maximum	
/ attachable / maximum	
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
number of connectable NO contacts / for auxiliary contacts	0
number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts	
number of connectable NO contacts / for auxiliary contacts / attachable / maximum number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
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	0 3
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse	0 3
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection	0 3 5 7.5 mm
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value	0 3
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value	0 3 5 7.5 mm
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value let-through current / with closed switch • at 240 V / for combination switch + gG fuse /	0 3 5 7.5 mm
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 /	0 3 5 7.5 mm 50 kA 50 kA
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 /	0 3 5 7.5 mm 50 kA 50 kA
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 • at 690 V / for combination switch + gG fuse / maximum permissible	0 3 5 7.5 mm 50 kA 50 kA 16 kA
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 • at 690 V / for combination switch + gG fuse / maximum permissible I2t value / with closed switch	0 3 5 7.5 mm 50 kA 50 kA 16 kA 16 kA
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 12t value / with closed switch • at 240 V / for combination switch + gG fuse / maximum permissible	0 3 5 7.5 mm 50 kA 50 kA 16 kA 16 kA 15 kA
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection • at 440 V / by gG fuse / rated value • 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 I2t value / with closed switch • at 240 V / for combination switch + gG fuse /	0 3 5 7.5 mm 50 kA 50 kA 16 kA 16 kA
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for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	125 A
according UL	
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	100 A
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	100 A
operating voltage / at AC / at 50/60 Hz / according to UL 489 / rated value	480 V
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	480 V
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	60
short-time withstand current (SCCR) / at 480 V / according to UL 508/UL 60947-4-1 and UL 489	65 kA
continuous current / of upstream fuse / according to UL / rated value	100 A
type of fuse / according to UL	Class J
Connections	
AWG number / as coded connectable conductor cross section / solid	
• minimum	3
maximum	4/0
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
• minimum	3
maximum	4/0
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16	
• minimum	3
• maximum	2/0
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 2,5mm²), 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	178 mm
width	113 mm
depth	93 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	1 650 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
• maximum	55 °C

ambient temperature / during storage

minimummaximum

-25 °C 55 °C

General Product Approval

Declaration of Conformity



Confirmation









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=3LD5420-0TK13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5420-0TK13

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5420-0TK13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







