SIEMENS

Data sheet 3LD5420-0TL13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 4-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	4	
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		
operational current		

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	
suitability for use	
main switch	Yes
switch disconnector	Yes
Switch disconnector EMERGENCY OFF switch	Yes
safety switch	Yes
	Yes
maintenance/repair switch Product details	Tes
	V
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
• motor drive	No
motor drivevoltage trigger	No
motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts	
motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts / attachable / maximum	No 2
motor drive voltage trigger number of connectable NC contacts / for auxiliary contacts	No
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	No 2
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	No 2 2 0
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 2 2 0 3
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 hasp thickness / of the bracket locks	No 2 2 0
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 hasp thickness / of the bracket locks Short circuit	No 2 2 0 3
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 hasp thickness / of the bracket locks	No 2 2 0 3
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse	No 2 2 0 3
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 hasp thickness / of the bracket locks Short circuit conditional short-circuit current / with line-side fuse protection	No 2 2 0 3 5 7.5 mm
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 440 V / by gG fuse / rated value	No 2 2 0 3 5 7.5 mm
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 440 V / by gG fuse / rated value at 690 V / by gG fuse / rated value	No 2 2 0 3 5 7.5 mm
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 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 /	No 2 2 0 3 5 7.5 mm 50 kA 50 kA
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 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 /	No 2 2 0 3 5 7.5 mm 50 kA 50 kA
 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 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 pat 690 V / for combination switch + gG fuse / maximum 	No 2 2 0 3 5 7.5 mm 50 kA 50 kA 16 kA
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 440 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 l2t value / with closed switch	No 2 2 0 3 5 7.5 mm 50 kA 50 kA 16 kA 16 kA 15 kA
 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 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 pat 690 V / for combination switch + gG fuse / maximum 	No 2 2 0 3 5 7.5 mm 50 kA 50 kA 16 kA
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 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 440 V / by gG fuse / rated value at 690 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 240 V / for combination switch + gG fuse / maximum at 240 V / for combination switch + gG fuse / maximum at 240 V / for combination switch + gG fuse / maximum at 440 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 at 690 V / for combination switch + gG fuse / maximum 	No 2 2 0 3 5 7.5 mm 50 kA 50 kA 16 kA 16 kA 15 kA 223 kA2.s

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	151 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	2 150 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=3LD5420-0TL13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5420-0TL13

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5420-0TL13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







