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	
design of the actuating element	selector switch	
design of handle	knob-operated mechanism, red/yellow	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	3	
type of device	fixed mounting	
type of switch	front mounted	
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	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	223 kA2.s	
let-through l2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	223 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, 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	
 per conductor / typical 	36 W	
Current		
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	

a at AC / rated value	100 A
 at AC / rated value at AC-23 A / at 400 V / rated value 	100 A
 at AC-23 A / at 400 V / rated value 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 240 V / rated value at AC-21 A / at 440 V / rated value 	100 A
operational current / of upstream fuse / rated value	100 A 125 A
let-through current / with closed switch	125 A
• at 440 V / for combination switch + gG fuse /	16 kA
maximum	
 at 690 V / for combination switch + gG fuse / 	15 kA
maximum permissible	
Main circuit	
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
operational current / rated value	100 A
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 	Yes
 safety switch 	Yes
maintenance/repair switch	Yes
Appearance	
color / of the actuating element	red
Product details	
product feature	
can be locked into OFF position	Yes
number of bracket locks / maximum	3
hasp thickness / of the bracket locks / minimum	5 mm
hasp thickness / of the bracket locks / maximum	7.5 mm
product extension / optional	
motor drive	No
voltage trigger	No
Short circuit	
conditional short-circuit current / with line-side fuse	
protection	
• at 440 V / by gG fuse / rated value	50 kA
 at 690 V / by gG fuse / rated value 	50 kA
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
Number	
number of connectable NC contacts / for auxiliary contacts	3
/ attachable / maximum	
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	
• minimum	3
• maximum	4/0
AWG number / as coded connectable conductor cross	
section / solid / according to UL 489	
• minimum	3
AWG number / as coded connectable conductor cross	
section / solid / according to CSA C22.2 No. 5-16	
• minimum	3
type of connectable conductor cross-sections / for copper conductor	
solid	$1x(16 - 185mm^2)$
	1x (16 185mm ²)
 finely stranded / with core end processing 	1x (16150mm ²)
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
	connection terminals
Requirements	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	Fuse gG: 125 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
Mechanical Design	
height	178 mm
width	113 mm
depth	93 mm
•	
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
	-25 °C
maximum	
ambient temperature / during storage / minimum	-25 °C
General Product Approval	Declaration of Conformity









UK CA

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