SIEMENS

Data sheet 3LD5020-0TL13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 4-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 30A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 20hp, IEC: 32A, Operating power at AC-23A at 400V: 15kW, 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	Short rotary knob	
design of handle	rotary operating mechanism, red/yellow	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	4	
type of device	fixed mounting	
type of switch	front mounted	
size of switch disconnector	1	
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	12 kA2.s	
let-through I2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	12 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 	4.5 W	
per conductor / typical	5 W	
Current		
operational current		
• at 40 °C / rated value	32 A	
 at 45 °C / rated value 	32 A	
 at 50 °C / rated value 	32 A	
• at 55 °C / rated value	32 A	

at AC / rated value	32 A
at AC-23 A / at 400 V / rated value	32 A
at AC-21 / at 690 V / rated value	32 A
at AC-21 A / at 240 V / rated value	32 A
at AC-21 A / at 440 V / rated value	32 A
operational current / of upstream fuse / rated value	40 A
let-through current / with closed switch	
 at 440 V / for combination switch + gG fuse / maximum 	6 kA
• at 690 V / for combination switch + gG fuse /	6 kA
maximum permissible	U IVA
Main circuit	
operating power	
at AC-23 A / at 240 V / rated value	7.5 kW
at AC-23 A / at 440 V / rated value	15 kW
at AC-23 A / at 690 V / rated value	19 kW
• at AC-3 / at 240 V / rated value	7.5 kW
• at AC-3 / at 400 V / rated value	15 kW
at AC-3 / at 690 V / rated value	15 kW
operational current / rated value	32 A
Auxiliary circuit	02.1
	0
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
	Yes Yes
EMERGENCY OFF switch	
EMERGENCY OFF switchsafety switch	Yes
EMERGENCY OFF switchsafety switchmaintenance/repair switch	Yes
 EMERGENCY OFF switch safety switch maintenance/repair switch Appearance	Yes Yes
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element	Yes Yes
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details	Yes Yes
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position	Yes Yes red Yes
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature can be locked into OFF position number of bracket locks / maximum	Yes Yes red Yes 1
EMERGENCY OFF switch safety switch maintenance/repair switch 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	Yes Yes red Yes 1 4 mm
EMERGENCY OFF switch safety switch maintenance/repair switch 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 / maximum hasp thickness / of the bracket locks / maximum	Yes Yes red Yes 1 4 mm
EMERGENCY OFF switch safety switch maintenance/repair switch 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 Yes red Yes 1 4 mm 6 mm
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm
EMERGENCY OFF switch safety switch maintenance/repair switch 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	Yes Yes red Yes 1 4 mm 6 mm
EMERGENCY OFF switch safety switch maintenance/repair switch 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 Yes red Yes 1 4 mm 6 mm No No
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm No No
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm No No
EMERGENCY OFF switch safety switch maintenance/repair switch 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 440 V / by gG fuse / rated value at 690 V / by gG fuse / rated value according UL	Yes Yes red Yes 1 4 mm 6 mm No No No
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm No No
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm No No No
EMERGENCY OFF switch safety switch maintenance/repair switch 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 440 V / by gG fuse / rated value at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 489/UL 60947-4-1 / rated value operational current / at AC / according to UL 508/UL	Yes Yes red Yes 1 4 mm 6 mm No No No No 30 A
EMERGENCY OFF switch safety switch maintenance/repair switch 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 440 V / by gG fuse / rated value at 690 V / by gG fuse / rated value according UL operational current / at AC / according to UL 489/UL 60947-4-1 / rated value 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	Yes Yes red Yes 1 4 mm 6 mm No No No 30 A 30 A
EMERGENCY OFF switch safety switch maintenance/repair switch Appearance color / of the actuating element Product details product feature	Yes Yes red Yes 1 4 mm 6 mm No No No 30 A 30 A 480 V

short-time withstand current (SCCR) / at 480 V / according to UL 508/UL 60947-4-1 and UL 489	50 kA
continuous current / of upstream fuse / according to UL / rated value	30 A
type of fuse / according to UL	Class CC, J
Number	
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	2
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
Connections	
AWG number / as coded connectable conductor cross	
section / solid	
• maximum	6
• minimum	14
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
• minimum	14
• maximum	6
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16	
• minimum	12
• maximum	8
type of connectable conductor cross-sections / for copper conductor	4 (0.7 0.7 0.7
• solid	1x (2,535mm²)
 finely stranded / with core end processing 	1x (2.516 mm²)
• stranded	1x (2,535mm²)
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
Requirements	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	Fuse gG: 40 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
Mechanical Design	
height	96 mm
width	80 mm
depth	59 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	350 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C
maximum	55 °C
ambient temperature / during storage / minimum	-25 °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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD5020-0TL13}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5020-0TL13

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5020-0TL13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications

