## **SIEMENS**

Data sheet 3LD5220-0TK13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 60A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 40hp, IEC: 63A, Operating power at AC-23A at 400V: 30kW, 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	1 ON - 0 OFF	
operation		
type of switch	front mounted	
design of the actuating element	Short rotary knob	
color of the actuating element	red	
design of handle	rotary operating mechanism, red/yellow	
type of the driving mechanism motor drive	No	
General technical data		
number of poles	3	
size of switch disconnector	2	
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	
operating voltage		
<ul> <li>at AC rated value</li> </ul>	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	7.5 W	
Current		
operational current rated value	63 A	
operational current		
• at 40 °C rated value	63 A	
<ul> <li>at 45 °C rated value</li> </ul>	63 A	
<ul> <li>at 50 °C rated value</li> </ul>	63 A	
<ul> <li>at 55 °C rated value</li> </ul>	63 A	

at AC rated value	63 A
Main circuit	
operational current	
• at AC-21 at 690 V rated value	63 A
• at AC-21 A at 240 V rated value	63 A
• at AC-21 A at 400 V rated value	63 A
<ul> <li>at AC-21 A at 440 V rated value</li> </ul>	63 A
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	63 A
operating power	
<ul> <li>at AC-23 A at 240 V rated value</li> </ul>	18.5 kW
<ul> <li>at AC-23 A at 400 V rated value</li> </ul>	30 kW
<ul><li>at AC-23 A at 440 V rated value</li></ul>	30 kW
<ul><li>at AC-23 A at 690 V rated value</li></ul>	37 kW
<ul><li>at AC-3 at 240 V rated value</li></ul>	18.5 kW
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	30 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	Voe
main switch     switch disconnector	Yes Yes
EMERGENCY OFF switch	Yes
safety switch	Yes
maintenance/repair switch	Yes
Product details	
	V
Droduct teature can be locked into CFF position	Yes
product feature can be locked into OFF position	Yes
accessories	Yes
accessories product extension optional	
accessories  product extension optional  motor drive	No
accessories  product extension optional  motor drive  voltage trigger	
accessories  product extension optional	No No
product extension optional	No No
product extension optional	No No 3
product extension optional	No No 3
product extension optional	No No 3 3
product extension optional	No No 3 3 0 3
product extension optional	No No 3 3
product extension optional	No No 3 3 0 3
product extension optional	No No 3 3 0 3
product extension optional	No No 3 3 0 3
product extension optional	No No 3 3 4 6 mm
product extension optional	No No 3 3 0 3 4 6 mm
product extension optional	No No 3 3 4 6 mm  50 kA 50 kA
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	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA
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 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	No No 3 3 4 6 mm  50 kA 50 kA
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 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 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             • 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             • at 690 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA
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 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 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             • 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             • 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             • 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             • at 690 V for combination switch + gG fuse maximum             • at 690 V for combination switch + gG fuse maximum	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA
product extension optional	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA
product extension optional	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA
product extension optional	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA
product extension optional	No No 3 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 7 kA 30 kA2.s 30 kA2.s 24 kA2.s
product extension optional	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA
product extension optional	No No 3 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 7 kA 30 kA2.s 30 kA2.s 24 kA2.s
product extension optional	No No 3 3 0 3 4 6 mm  50 kA 50 kA 8 kA 8 kA 7 kA 30 kA2.s 30 kA2.s 24 kA2.s fuse gL/gG: 63 A

according UL	
operational current at AC according to UL 489/UL 60947-	60 A
4-1 rated value operational current at AC according to UL 508/UL 60947-	60 A
4-1 rated value operating voltage at AC at 50/60 Hz according to UL 489	480 V
rated value 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	30
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	60 A
type of fuse according to UL	Class J
Connections	
AWG number as coded connectable conductor cross section solid	
maximum	1
• minimum	12
AWG number as coded connectable conductor cross section solid according to UL 489	
• minimum	12
maximum  AWG number as coded connectable conductor cross  action polid according to CSA C33 3 No. 5 16	1
section solid according to CSA C22.2 No. 5-16  • minimum	10
maximum	4
type of connectable conductor cross-sections for copper conductor	
• solid	1x (450mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	1x (435mm²)
stranded  type of connectable conductor cross-sections for auxiliary	1x (450mm²)
contacts  • solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary
finely stranded with core end processing	switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary
• stranded	switch 1x 2,5mm <sup>2</sup> lateral auxiliary switch 2x (0,75 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary
type of electrical connection	switch 1x (0,75 2,5mm²)
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	104 mm
width	90 mm
depth	108 mm
type of device	fixed mounting
fastening method fastening method	Built-in unit fixed-mounted version
4-hole front mounting	Yes
front mounting with central attachment	No
• rail mounting	No
net weight	380 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	25 °C
minimum     maximum	-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=3LD5220-0TK13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5220-0TK13

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD5220-0TK13

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://www.siemens.com/specifications







