SIEMENS

Data sheet 3LD5810-0TK13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 150A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 100hp, IEC: 160A, Operating power at AC-23A at 400V: 75kW, floor mounting with door coupling rotary operating mechanism, defeatable, emergency switching-off, 4-hole mounting of the handle, without tolerance compensation, 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	Floor mounting with door coupling	
design of the actuating element	door-coupling rotary operating mechanism	
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	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	160 A	
operational current		
 at 40 °C / rated value 	160 A	
 at 45 °C / rated value 	160 A	
 at 50 °C / rated value 	160 A	
 at 55 °C / rated value 	160 A	
 at AC / rated value 	160 A	
Main circuit		

 at AC-21 / at 690 V / rated value 	160 A
at AC-21 A / at 240 V / rated value	160 A
at AC-21 A / at 400 V / rated value	160 A
at AC-21 A / at 440 V / rated value	160 A
at AC-23 A / at 400 V / rated value	160 A
operating power	
• at AC-23 A / at 240 V / rated value	45 kW
at AC-23 A / at 440 V / rated value	75 kW
at AC-23 A / at 690 V / rated value	55 kW
at AC-3 / at 240 V / rated value	45 kW
at AC-3 / at 400 V / rated value	75 kW
at AC-3 / at 690 V / rated value	45 kW
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
	0
number of NC contacts / for auxiliary contacts	
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
Product details	
special product feature	defeatable door-coupling handle
product feature / can be locked into OFF position	Yes
accessories	
accessories product extension / optional	
	No
product extension / optional • motor drive	No No
product extension / optional	
product extension / optional	No
product extension / optional	No 3
product extension / optional	No 3 5
product extension / optional	No 3 5 0
product extension / optional	No 3 5 0 3
product extension / optional	No 3 5 0 3
product extension / optional	No 3 5 0 3
product extension / optional	No 3 5 0 3 5 7.5 mm
product extension / optional	No 3 5 0 3 5 7.5 mm
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	No 3 5 0 3 5 7.5 mm
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 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 /	No 3 5 0 3 5 7.5 mm 50 kA 30 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 e 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 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA 16 kA 15 kA
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA 16 kA 15 kA
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA 16 kA 15 kA 223 kA2.s
product extension / optional	No 3 5 0 3 5 7.5 mm 50 kA 30 kA 16 kA 16 kA 15 kA 223 kA2.s

roquired	
required • for short-circuit protection of the auxiliary switch /	fuse gL/gG: 10 A
required	iuse gillyo. To A
operational current / of upstream fuse / rated value	160 A
according UL	
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	150 A
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	150 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	100
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	150 A
type of fuse / according to UL	Class J
Connections	
AWG number / as coded connectable conductor cross section / solid	
• minimum	1
• maximum	4/0
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
• minimum	1
MWG number / as coded connectable conductor cross	4/0
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16	2
minimum maximum	3 2/0
type of connectable conductor cross-sections / for copper conductor	210
• 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 2y (0.75 2.5mm²). 1y 4mm²; front auxiliany
	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	158 mm
type of device	fixed mounting Built-in unit fixed-mounted version
fastening method fastening method	Built-in unit incu-mounted version
4-hole front mounting	Yes
front mounting with central attachment	No
• rail mounting	No
net weight	1 900 g
Environmental conditions	
ambient temperature / during operation	
• minimum	-25 °C

maximum
 ambient temperature / during storage
 minimum
 maximum
 55 °C
 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=3LD5810-0TK13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5810-0TK13

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5810-0TK13

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







