SIEMENS

Data sheet 3LD5810-0TL11

SENTRON, Molded case switch 3LD5 UL, Main switch, 4-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, Standard, 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	Main 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	gray
design of handle	rotary operating mechanism, black
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	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	
operational current	

● 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
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	No
● 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	
product extension / optional	
● motor drive	No
● voltage trigger	No
number of connectable NC contacts / for auxiliary contacts / attachable / maximum	2
number of connectable NO contacts / for auxiliary contacts / attachable / maximum	3
number of connectable CO contacts / for auxiliary contacts / attachable / maximum	0
number of bracket locks / maximum	3
hasp thickness / of the bracket locks	5 ... 7.5 mm
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	30 kA
let-through current / with closed switch	
● at 240 V / for combination switch + gG fuse / maximum	16 kA
● at 440 V / for combination switch + gG fuse / maximum	16 kA
● at 690 V / for combination switch + gG fuse / maximum permissible	15 kA
I2t value / with closed switch	
● at 240 V / for combination switch + gG fuse / maximum	223 kA2.s
● at 440 V / for combination switch + gG fuse / maximum	223 kA2.s
● at 690 V / for combination switch + gG fuse / maximum	223 kA2.s
design of the fuse link	
● for short-circuit protection of the main circuit /	Fuse gG: 160 A

required	
● for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 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
● 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 (16 ...185mm²)
● finely stranded / with core end processing	1x (16...150mm²)
● stranded	1x (16...185mm²)
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	158 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	2 400 g
Environmental conditions	
ambient temperature / during operation	
● minimum	-25 °C

• maximum	55 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	55 °C

General Product Approval					Declaration of Conformity
CSA	Confirmation	UL	EAC	CE EG-Konf.	UKCA

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=3LD5810-0TL11
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD5810-0TL11
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5810-0TL11
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications