



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, front-mounted, rotary operating mechanism, black, 4-hole mounting of the handle, incl. terminal covers for the infeed side

Model	
product brand name	SENTRON
product designation	3LD UL switch disconnecter
design of the product	Main switch
display version / for switch position indicator manual operation	1 ON - 0 OFF
type of switch	front mounted
design of the actuating element	selector switch
color / of the actuating element	black
design of handle	knob-operated mechanism, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	4
size of switch disconnecter	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	

<ul style="list-style-type: none"> • at AC-21 / at 690 V / rated value 	160 A
<ul style="list-style-type: none"> • at AC-21 A / at 240 V / rated value 	160 A
<ul style="list-style-type: none"> • at AC-21 A / at 400 V / rated value 	160 A
<ul style="list-style-type: none"> • at AC-21 A / at 440 V / rated value 	160 A
<ul style="list-style-type: none"> • at AC-23 A / at 400 V / rated value 	160 A
operating power	
<ul style="list-style-type: none"> • at AC-23 A / at 240 V / rated value 	45 kW
<ul style="list-style-type: none"> • at AC-23 A / at 440 V / rated value 	75 kW
<ul style="list-style-type: none"> • at AC-23 A / at 690 V / rated value 	55 kW
<ul style="list-style-type: none"> • at AC-3 / at 240 V / rated value 	45 kW
<ul style="list-style-type: none"> • at AC-3 / at 400 V / rated value 	75 kW
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • main switch 	Yes
<ul style="list-style-type: none"> • switch disconnector 	Yes
<ul style="list-style-type: none"> • EMERGENCY OFF switch 	No
<ul style="list-style-type: none"> • safety switch 	Yes
<ul style="list-style-type: none"> • maintenance/repair switch 	Yes
Product details	
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	
<ul style="list-style-type: none"> • motor drive 	No
<ul style="list-style-type: none"> • voltage trigger 	No
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
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	
<ul style="list-style-type: none"> • at 440 V / by gG fuse / rated value 	50 kA
<ul style="list-style-type: none"> • at 690 V / by gG fuse / rated value 	30 kA
let-through current / with closed switch	
<ul style="list-style-type: none"> • at 240 V / for combination switch + gG fuse / maximum 	16 kA
<ul style="list-style-type: none"> • at 440 V / for combination switch + gG fuse / maximum 	16 kA
<ul style="list-style-type: none"> • at 690 V / for combination switch + gG fuse / maximum permissible 	15 kA
I ² t value / with closed switch	
<ul style="list-style-type: none"> • at 240 V / for combination switch + gG fuse / maximum 	223 kA ² .s
<ul style="list-style-type: none"> • at 440 V / for combination switch + gG fuse / maximum 	223 kA ² .s
<ul style="list-style-type: none"> • at 690 V / for combination switch + gG fuse / maximum 	223 kA ² .s
design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit / required 	Fuse gG: 160 A

<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> minimum maximum 	1 4/0
AWG number / as coded connectable conductor cross section / solid / according to UL 489 <ul style="list-style-type: none"> minimum maximum 	1 4/0
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16 <ul style="list-style-type: none"> minimum maximum 	3 2/0
type of connectable conductor cross-sections / for copper conductor <ul style="list-style-type: none"> solid finely stranded / with core end processing stranded 	1x (16 ...185mm ²) 1x (16...150mm ²) 1x (16...185mm ²)
type of connectable conductor cross-sections / for auxiliary contacts <ul style="list-style-type: none"> solid finely stranded / with core end processing stranded 	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²) lateral auxiliary switch 2x (0,75 ... 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ² 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 <ul style="list-style-type: none"> for main current circuit for auxiliary contacts 	box terminal connection terminals
Mechanical Design	
height	178 mm
width	151 mm
depth	93 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method <ul style="list-style-type: none"> 4-hole front mounting front mounting with central attachment rail mounting 	Yes No No
net weight	2 150 g
Environmental conditions	
ambient temperature / during operation <ul style="list-style-type: none"> minimum maximum 	-25 °C 55 °C

ambient temperature / during storage

- 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?mfb=3LD5820-0TL11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5820-0TL11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD5820-0TL11

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



