



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, 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 disconnecter
design of the product	EMERGENCY-STOP 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	red
design of handle	knob-operated mechanism, red/yellow
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
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 	Yes
<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	3
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	
<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	113 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	1 650 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=3LD5820-0TK13>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5820-0TK13>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3LD5820-0TK13

CAX-Online-Generator

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

Tender specifications

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



