



SENTRON, Molded case switch 3LD5 UL, Main switch, 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, 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	Short rotary knob
color / of the actuating element	black
design of handle	rotary operating mechanism, black
type of the driving mechanism / motor drive	No
General technical data	
number of poles	3
size of switch disconnecter	2
mechanical service life (switching cycles) / typical electrical endurance (switching cycles)	100 000
• 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	
• at AC / rated value	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
• at 45 °C / rated value	63 A

<ul style="list-style-type: none"> • at 50 °C / rated value 	63 A
<ul style="list-style-type: none"> • at 55 °C / rated value 	63 A
<ul style="list-style-type: none"> • at AC / rated value 	63 A
Main circuit	
operational current	
<ul style="list-style-type: none"> • at AC-21 / at 690 V / rated value 	63 A
<ul style="list-style-type: none"> • at AC-21 A / at 240 V / rated value 	63 A
<ul style="list-style-type: none"> • at AC-21 A / at 400 V / rated value 	63 A
<ul style="list-style-type: none"> • at AC-21 A / at 440 V / rated value 	63 A
<ul style="list-style-type: none"> • at AC-23 A / at 400 V / rated value 	63 A
operating power	
<ul style="list-style-type: none"> • at AC-23 A / at 240 V / rated value 	18.5 kW
<ul style="list-style-type: none"> • at AC-23 A / at 400 V / rated value 	30 kW
<ul style="list-style-type: none"> • at AC-23 A / at 440 V / rated value 	30 kW
<ul style="list-style-type: none"> • at AC-23 A / at 690 V / rated value 	37 kW
<ul style="list-style-type: none"> • at AC-3 / at 240 V / rated value 	18.5 kW
<ul style="list-style-type: none"> • at AC-3 / at 400 V / rated value 	30 kW
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • main switch 	Yes
<ul style="list-style-type: none"> • switch disconnecter 	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	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	4 ... 6 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 	50 kA
let-through current / with closed switch	
<ul style="list-style-type: none"> • at 240 V / for combination switch + gG fuse / maximum 	8 kA
<ul style="list-style-type: none"> • at 440 V / for combination switch + gG fuse / maximum 	8 kA
<ul style="list-style-type: none"> • at 690 V / for combination switch + gG fuse / maximum permissible 	7 kA
I ² t value / with closed switch	
<ul style="list-style-type: none"> • at 240 V / for combination switch + gG fuse / maximum 	30 kA ² .s

<ul style="list-style-type: none"> • at 440 V / for combination switch + gG fuse / maximum • at 690 V / for combination switch + gG fuse / maximum 	30 kA2.s 24 kA2.s
design of the fuse link	
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit / required • for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 63 A fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	63 A
according UL	
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	60 A
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	60 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	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	
<ul style="list-style-type: none"> • maximum • minimum 	1 12
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
<ul style="list-style-type: none"> • minimum • maximum 	12 1
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 	10 4
type of connectable conductor cross-sections / for copper conductor	
<ul style="list-style-type: none"> • solid • finely stranded / with core end processing • stranded 	1x (4...50mm ²) 1x (4...35mm ²) 1x (4...50mm 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	104 mm
width	90 mm
depth	108 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 	Yes No

• rail mounting	No
net weight	380 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



[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=3LD5220-0TK11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5220-0TK11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5220-0TK11

CAX-Online-Generator

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

Tender specifications

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



