



SENTRON, Molded case switch 3LD5 UL, Main switch, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 30A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 20hp, IEC: 32A, Operating power at AC-23A at 400V: 15kW, 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	1
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating 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	4.5 W
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Current

operational current rated value	32 A
operational current	
• at 40 °C rated value	32 A
• at 45 °C rated value	32 A
• at 50 °C rated value	32 A
• at 55 °C rated value	32 A
• at AC rated value	32 A

Main circuit

operational current	
• at AC-21 at 690 V rated value	32 A
• at AC-21 A at 240 V rated value	32 A

<ul style="list-style-type: none"> ● at AC-21 A at 400 V rated value ● at AC-21 A at 440 V rated value ● at AC-23 A at 400 V rated value 	32 A
operating power	
<ul style="list-style-type: none"> ● at AC-23 A at 240 V rated value ● at AC-23 A at 440 V rated value ● at AC-23 A at 690 V rated value ● at AC-3 at 240 V rated value ● at AC-3 at 400 V rated value ● at AC-3 at 690 V rated value 	7.5 kW 15 kW 19 kW 7.5 kW 15 kW 15 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 ● switch disconnector ● EMERGENCY OFF switch ● safety switch ● maintenance/repair switch 	Yes Yes No Yes Yes

Product details

product feature can be locked into OFF position	Yes
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accessories

product extension optional	
<ul style="list-style-type: none"> ● motor drive ● voltage trigger 	No 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	1
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 ● at 690 V by gG fuse rated value 	50 kA 50 kA
let-through current with closed switch	
<ul style="list-style-type: none"> ● 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 maximum permissible 	6 kA 6 kA 6 kA
I _{2t} value with closed switch	
<ul style="list-style-type: none"> ● 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 maximum 	12 kA ² .s 12 kA ² .s 12 kA ² .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 gG: 40 A fuse gL/gG: 10 A
operational current of upstream fuse rated value	40 A

according UL

operational current at AC according to UL 489/UL 60947-4-1 rated value	30 A
operational current at AC according to UL 508/UL 60947-4-1 rated value	30 A
operating voltage at AC at 50/60 Hz according to UL 489	480 V

rated value	
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	20
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	30 A
type of fuse according to UL	Class CC, J

Connections

AWG number as coded connectable conductor cross section solid	
• maximum	6
• minimum	14
AWG number as coded connectable conductor cross section solid according to UL 489	
• minimum	14
• maximum	6
AWG number as coded connectable conductor cross section solid according to CSA C22.2 No. 5-16	
• minimum	12
• maximum	8
type of connectable conductor cross-sections for copper conductor	
• solid	1x (2,5...35mm ²)
• finely stranded with core end processing	1x (2.5...16 mm ²)
• stranded	1x (2,5..35mm ²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 ... 2,5mm ²), 1x 4mm ² ; front auxiliary switch 1x (0,75 ... 2,5mm ²)
• finely stranded with core end processing	lateral auxiliary switch 2x (0,75 ... 1,5mm ²), 1x 2,5mm ² ; front auxiliary switch 1x 2,5mm ²
• stranded	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	
• for main current circuit	box terminal
• for auxiliary contacts	connection terminals

Mechanical Design

height	96 mm
width	60 mm
depth	59 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	270 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](#)



[Confirmation](#)

[Miscellaneous](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3LD5020-0TK11>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD5020-0TK11>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5020-0TK11

CAX-Online-Generator

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

Tender specifications

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



