



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 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, 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	Short rotary knob
color of the actuating element	red
design of handle	rotary operating mechanism, red/yellow
type of the driving mechanism motor drive	No

General technical data

number of poles	3
size of switch disconnecter	1
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	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

• at AC-21 A at 400 V rated value	32 A
• at AC-21 A at 440 V rated value	32 A
• at AC-23 A at 400 V rated value	32 A
operating power	
• at AC-23 A at 240 V rated value	7.5 kW
• at AC-23 A at 440 V rated value	15 kW
• at AC-23 A at 690 V rated value	19 kW
• at AC-3 at 240 V rated value	7.5 kW
• at AC-3 at 400 V rated value	15 kW
• at AC-3 at 690 V rated value	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	
• main switch	Yes
• switch disconnect	Yes
• EMERGENCY OFF switch	Yes
• safety switch	Yes
• maintenance/repair switch	Yes

Product details

product feature can be locked into OFF position	Yes
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accessories

product extension optional	
• motor drive	No
• 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	1
hasp thickness of the bracket locks	4 ... 6 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	50 kA
let-through current with closed switch	
• at 240 V for combination switch + gG fuse maximum	6 kA
• at 440 V for combination switch + gG fuse maximum	6 kA
• at 690 V for combination switch + gG fuse maximum permissible	6 kA
I _{2t} value with closed switch	
• at 240 V for combination switch + gG fuse maximum	12 kA ² .s
• at 440 V for combination switch + gG fuse maximum	12 kA ² .s
• at 690 V for combination switch + gG fuse maximum	12 kA ² .s
design of the fuse link	
• for short-circuit protection of the main circuit required	Fuse gG: 40 A
• for short-circuit protection of the auxiliary switch required	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 • minimum	6 14
AWG number as coded connectable conductor cross section solid according to UL 489	
• minimum • maximum	14 6
AWG number as coded connectable conductor cross section solid according to CSA C22.2 No. 5-16	
• minimum • maximum	12 8
type of connectable conductor cross-sections for copper conductor	
• solid • finely stranded with core end processing • stranded	1x (2,5...35mm ²) 1x (2,5...16 mm ²) 1x (2,5...35mm ²)
type of connectable conductor cross-sections for auxiliary contacts	
• 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	
• for main current circuit • for auxiliary contacts	box terminal 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 • front mounting with central attachment • rail mounting	Yes No No
net weight	270 g

Environmental conditions

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

General Product Approval

Declaration of Conformity



[Confirmation](#)



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