SIEMENS

Data sheet 3LD5820-0TK13



SENTRON 3LD5 switch disconnector UL, EMERGENCY-OFF switch, 3-pole, approved according to UL 489, UL 60947-4-1 and IEC 60947-3, UL: 150 A, SCCR 50 kA at 480 V AC, operational power @ 480 V AC 3-phase: 100 hp, IEC: 160 A, operational power at AC-23 A at 400 V: 75 kW, front-mounted: rotary operating mechanism, red/yellow, 4-hole mounting of the handle, including terminal covers for the infeed side

Model	
product brand name	SENTRON
product designation	Switch disconnector
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 disconnector	3
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
/oltage	
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	36 W
Main circuit	
operational current	
at AC-21 at 690 V rated value	160 A
• at AC-21 A at 240 V rated value	160 A
• at AC-21 A at 400 V rated value	160 A
at AC-21 A at 440 V rated value	160 A

a at AC 22 A at 400 V rated value	160 A
at AC-23 A at 400 V rated value operating power	160 A
at AC-23 A at 240 V rated value	45 kW
	75 kW
at AC-23 A at 440 V rated value at AC-23 A at 600 V rated value	75 kW
at AC-23 A at 690 V rated value at AC-23 at 340 V rated value	
at AC-3 at 240 V rated value	45 kW
at AC-3 at 400 V rated value	75 kW
at AC-3 at 690 V rated value	45 kW
Auxiliary circuit	0
number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts	0
	0
number of NO contacts for auxiliary contacts	500 V
operating voltage of auxiliary contacts at AC maximum	10 A
continuous current of the auxiliary contact rated value	500 V
insulation voltage of the auxiliary switch rated value Suitability	300 V
	Yes
suitability for use main switch	- 11
suitability for use SWEDGENCY OFF switch	Yes
suitability for use EMERGENCY OFF switch	Yes
suitability for use safety switch suitability for use maintenance/repair switch	Yes
Product details	165
	Van
product feature can be locked into OFF position Accessories	Yes
product extension optional	
motor drive	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts	3
attachable maximum	
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	
 at 440 V by gG fuse rated value 	50 kA
at 690 V by gG fuse rated value	30 kA
let-through current with closed switch	
 at 240 V for combination switch + gG fuse maximum 	16 kA
 at 440 V for combination switch + gG fuse maximum 	16 kA
 at 690 V for combination switch + gG fuse maximum permissible 	15 kA
I2t value with closed switch	
• at 240 V for combination switch + gG fuse maximum	223 kA2.s
• at 440 V for combination switch + gG fuse maximum	223 kA2.s
• at 690 V for combination switch + gG fuse maximum	223 kA2.s
design of the fuse link	
• for short-circuit protection of the main circuit required	Fuse gG: 160 A
• 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	100

short-lime withstand current (SCCR) at 480 V according to UL 1500 A Ut 1500 A (1500 A) Vippo of fusion according to UL Vippo of was a coced connectable conductor cross section solid according to UL 488 ***Indianal Conductor Comparison of Comparison o	60947-4-1 rated value	
value Class J Connections Class J AWG number as coded connectable conductor cross section soft maximum 1 4 % 4/0 AWG number as coded connectable conductor cross section solid according to UL 489 Imminimum • maximum 4 AWG number as coded connectable conductor cross section solid according to CSA C22 No. 5-16 2 • minimum 3 • maximum 3 • solid 1x (16185mm²) • finely standed with core end processing 1x (16185mm²) • finely standed with core end processing 1x (16185mm²) • finely standed with core end processing lateral auxiliary switch 2x (0.752,5mm²), 1x 4mm²; front auxiliary switch 1x (0.752,5mm²) auxiliary switch 1x (0.752,5mm²), 1x 4mm²; front auxiliary switch 1x (0.752,5mm²) auxiliary switch 1x (0.752	UL 508/UL 60947-4-1 and UL 489	50 kA
AWG number as coded connectable conductor cross section solid according to UL 489 • minimum • maximum • stranded type of connectable conductor cross-sections for copper conductor • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded w		150 A
AWG number as coded connectable conductor cross section solid maximum AWG number as coded connectable conductor cross section solid according to UL 489 Minimum Minimum Maximum AWG number as coded connectable conductor cross section solid according to UL 489 Minimum	type of fuse according to UL	Class J
section solid maximum AWG number as coded connectable conductor cross section solid according to UL 489 Iniminum Inimum	Connections	
AWG number as coded connectable conductor cross section solid according to UL 489		
esction solid according to UL 489 • minimum • maximum AWG number as coded connectable conductor cross section solid according to CSA C2.2 No. 5-16 • minimum • maximum 3 amaximum 20 type of connectable conductor cross-sections for copper conductor • solid • finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded * finely stranded with core end processing • stranded • finely stranded with core end processing • stranded * finely stranded with core end processing • stranded • finely stranded with core end processing • stranded •		
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AWG number as coded connectable conductor cross section solid according to CSA C22.2 No. 5-16 • minimum • maximum 200 type of connectable conductor cross-sections for copper conductor • solid • finely stranded with core end processing • stranded • solid • finely stranded with core end processing • for main current circuit • for main current circuit • for auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²) • for main current circuit • for auxiliary contacts • for auxiliary switch 2x (0,75 2,5mm²), 1x 4mm², front auxiliary switch 1x (0,75 2,5mm²), 1x 4mm², front	• minimum	1
section solid according to CSA C22.2 No. 5-16 • minimum	• maximum	4/0
type of connectable conductor cross-sections for copper conductor • solid • finely stranded with core end processing • stranded type of connectable conductor cross-sections for auxiliary contacts • solid • finely stranded with core end processing • for main current circus • for device • for device 113 mm depth 425 mm 128 mm depth 425 mm 128 mm depth 426 forth mounting • 4-hole front mounting • 4-hole front mounting • 4-hole front mounting • forth mounting • f		
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type of electrical connection		2,5mm²
• for main current circuit • for auxiliary contacts connection terminals Acchanical Design height 178 mm width 113 mm depth 193 mm type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting No Net Weight 2.115 kg invironmental conditions ambient temperature during operation • minimum • maximum - 25 °C ambient temperature during storage • minimum • minimum • minimum • cas °C • maximum - 25 °C ambient temperature during storage • minimum • minimum • minimum • cas °C • maximum - cas °C • cas °C • maximum - cas °C •		
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● rail mounting No Net Weight 2.115 kg Environmental conditions ambient temperature during operation -25 °C ● maximum 55 °C ambient temperature during storage -25 °C ● minimum -25 °C ● maximum 55 °C		
Net Weight Environmental conditions ambient temperature during operation • minimum • maximum 55°C ambient temperature during storage • minimum • maximum 55°C		
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C	· · · · · · · · · · · · · · · · · · ·	
ambient temperature during operation • minimum • maximum 55 °C ambient temperature during storage • minimum -25 °C • maximum 55 °C		2.110 kg
● minimum -25 °C ● maximum 55 °C ambient temperature during storage ● minimum -25 °C ● maximum 55 °C		
 maximum 55 °C ambient temperature during storage minimum -25 °C maximum 55 °C 		25 °C
ambient temperature during storage		
 minimum -25 °C maximum 55 °C 		33 6
• maximum 55 °C		-25 °C
	maximum	













other Environment

Information on the packaging

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

Information for data generation and storage

https://support.industry.siemens.com/cs/ww/en/view/109995012

Information- and Downloadcenter (Catalogs, Brochures,...)

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD5820-0TK13}$

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

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

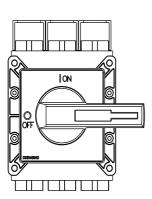
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5820-0TK13

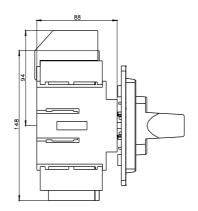
CAx-Online-Generator

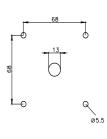
http://www.siemens.com/cax

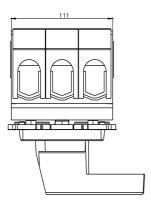
Tender specifications

https://www.siemens.com/specifications









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