SIEMENS

Data sheet

Madal

3LD2013-1TL53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 4pole, lu: 16 A, operating power / at AC-23 A 400 V: 7.5 kW, floor mounting with door coupling, rotary operating mechanism, Red / yellow, 4-hole mounting of the handle

Model	
product brand name	SENTRON
product designation	3LD Switch disconnector
design of the product	EMERGENCY-STOP switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Floor mounting with door coupling
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	4
size of switch disconnector	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
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	0.5 W
Current	
operational current rated value	16 A
operational current	
 at 40 °C rated value 	16 A
 at 45 °C rated value 	16 A
• at 50 °C rated value	16 A
 at 55 °C rated value 	16 A

 at AC rated value 	16 A
Main circuit	
operational current	
at AC-21 at 690 V rated value	16 A
• at AC-21 A at 240 V rated value	16 A
• at AC-21 A at 400 V rated value	16 A
• at AC-21 A at 440 V rated value	16 A
• at AC-23 A at 400 V rated value	16 A
operating power	
• at AC-23 A at 240 V rated value	4 kW
 at AC-23 A at 400 V rated value 	8 kW
 at AC-23 A at 440 V rated value 	7.5 kW
 at AC-23 A at 690 V rated value 	8 kW
 at AC-3 at 240 V rated value 	3 kW
 at AC-3 at 400 V rated value 	6 kW
 at AC-3 at 690 V rated value 	5.5 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 disconnector 	Yes
 EMERGENCY OFF switch 	Yes
 safety switch 	Yes
 maintenance/repair switch 	Yes
Product details	
product feature can be locked into OFF position	Yes
accessories	
product extension optional	
motor drive	No
 voltage trigger 	No
number of connectable NC contacts for auxiliary contacts attachable maximum	2
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 8 mm
Short circuit	
conditional short-circuit current with line-side fuse protection	
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	3 kA
• at 440 V for combination switch + gG fuse maximum	3 kA
• at 690 V for combination switch + gG fuse maximum	3 kA
permissible	
I2t value with closed switch	
 at 240 V for combination switch + gG fuse maximum 	2.5 kA2.s
 at 440 V for combination switch + gG fuse maximum 	2.5 kA2.s
 at 690 V for combination switch + gG fuse maximum 	3 kA2.s
design of the fuse link	
 for short-circuit protection of the main circuit required 	fuse gL/gG: 20 A
 for short-circuit protection of the auxiliary switch 	fuse gL/gG: 10 A
required	

according UL	
operational current at AC according to UL 508/UL 60947-	16 A
4-1 rated value operating voltage at AC at 50/60 Hz according to UL	600 V
508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL	7.5
60947-4-1 rated value	
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	10
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA
continuous current of upstream fuse according to UL rated value	50 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross	
section solid • maximum	10
• minimum	18
type of connectable conductor cross-sections for copper conductor	
• solid	1x (16mm²)
 finely stranded with core end processing 	1x (14mm ²)
• stranded	1x (16mm 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	
meenanical Design	
height	84 mm
	84 mm 67 mm
height width depth	67 mm 429.5 mm
height width depth type of device	67 mm 429.5 mm fixed mounting
height width depth type of device fastening method	67 mm 429.5 mm
height width depth type of device fastening method fastening method	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version
height width depth type of device fastening method fastening method • 4-hole front mounting	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes No Yes
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes No
height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes No Yes
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height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes No Yes 423 g
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height width depth type of device fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions ambient temperature during operation • minimum • maximum ambient temperature during storage • minimum • maximum General Product Approval	67 mm 429.5 mm fixed mounting Built-in unit fixed-mounted version Yes 423 g -25 °C 55 °C -25 °C 55 °C







Special Test Certificate





other

Miscellaneous

Environmental Confirmations

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=3LD2013-1TL53 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD2013-1TL53 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2013-1TL53 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications







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