SIEMENS

Data sheet

3LD2814-0TK53



SENTRON, Switch disconnector 3LD, emergency switching-off switch, 3pole, lu: 125 A, operating power / at AC-23 A 400 V: 45 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	1 ON - 0 OFF
operation	
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	3
size of switch disconnector	4
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
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	12 W
Current	
operational current rated value	125 A
operational current	
• at 40 °C rated value	125 A
 at 45 °C rated value 	125 A
 at 50 °C rated value 	125 A
• at 55 °C rated value	125 A

 at AC rated value 	125 A
Main circuit	
operational current	
at AC-21 at 690 V rated value	125 A
• at AC-21 A at 240 V rated value	125 A
• at AC-21 A at 400 V rated value	125 A
• at AC-21 A at 440 V rated value	125 A
• at AC-23 A at 400 V rated value	80 A
operating power	
at AC-23 A at 240 V rated value	22 kW
• at AC-23 A at 400 V rated value	45 kW
• at AC-23 A at 440 V rated value	45 kW
• at AC-23 A at 690 V rated value	37 kW
• at AC-3 at 240 V rated value	22 kW
• at AC-3 at 400 V rated value	37 kW
• 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	
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
	No
 voltage trigger number of connectable NC contacts for auxiliary contacts 	3
attachable maximum	5
number of connectable NO contacts for auxiliary contacts attachable maximum	5
number of connectable CO contacts for auxiliary contacts	0
attachable maximum number of bracket locks maximum	3
hasp thickness of the bracket locks	3 4 8 mm
Short circuit	
conditional abort aircuit aurrent with line aide fues	
conditional short-circuit current with line-side fuse protection	
protectionat 690 V by gG fuse rated value	20 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch 	
protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum	10 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch at 240 V for combination switch + gG fuse maximum at 440 V for combination switch + gG fuse maximum 	10 kA 10 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch 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 	10 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch 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 	10 kA 10 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch 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 l2t value with closed switch 	10 kA 10 kA 10 kA
 protection at 690 V by gG fuse rated value let-through current with closed switch 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 l2t value with closed switch at 240 V for combination switch + gG fuse maximum 	10 kA 10 kA 10 kA 104 kA2.s
 protection at 690 V by gG fuse rated value let-through current with closed switch 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 l2t value with closed switch at 240 V for combination switch + gG fuse maximum at 240 V for combination switch + gG fuse maximum 	10 kA 10 kA 10 kA 10 kA 104 kA2.s
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 protection at 690 V by gG fuse rated value let-through current with closed switch 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 l2t value with closed switch at 240 V for combination switch + gG fuse maximum at 240 V for combination switch + gG fuse maximum 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 at 690 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum at 690 V for combination switch + gG fuse maximum 	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s

according UL	
operational current at AC according to UL 508/UL 60947-	125 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	75
60947-4-1 rated value	
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	100
short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	10 kA
continuous current of upstream fuse according to UL rated value	200 A
type of fuse according to UL	RK5
Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	1
• minimum	12
type of connectable conductor cross-sections for copper conductor	
solid	1x (450mm ²)
 finely stranded with core end processing stranded 	1x (435mm²) 1x (450mm²)
• stranged type of connectable conductor cross-sections for auxiliary	1X (430mm ⁻)
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	106 mm
width depth	90 mm 470.5 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method fastening method	Built-in unit fixed-mounted version
fastening method fastening method • 4-hole front mounting	Built-in unit fixed-mounted version Yes
fastening method fastening method • 4-hole front mounting • front mounting with central attachment	Built-in unit fixed-mounted version Yes No
fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting	Built-in unit fixed-mounted version Yes No Yes
fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight	Built-in unit fixed-mounted version Yes No Yes
fastening method fastening method • 4-hole front mounting • front mounting with central attachment • rail mounting net weight Environmental conditions	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C
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	Built-in unit fixed-mounted version Yes No Yes 758 g
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	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C 55 °C
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	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C -25 °C -25 °C
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	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C 55 °C
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	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C -25 °C -25 °C
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	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C 55 °C -25 °C 55 °C 55 °C
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 • maximum	Built-in unit fixed-mounted version Yes No Yes 758 g -25 °C 55 °C -25 °C 55 °C 55 °C







Special Test Certificate





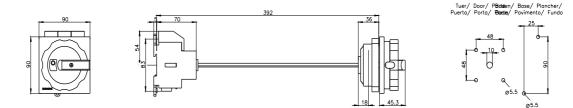
other

Miscellaneous

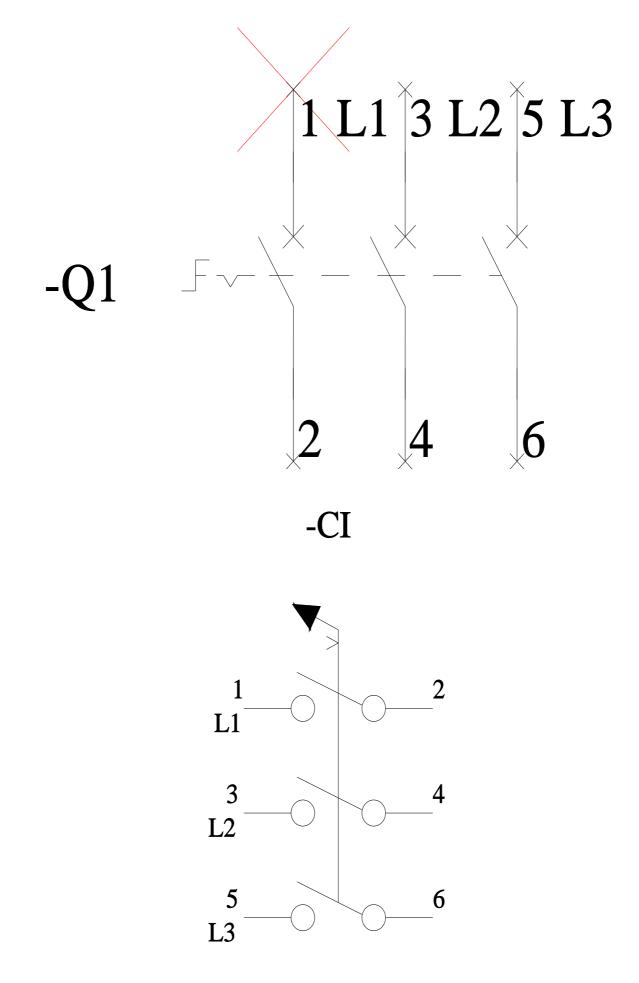
Environmental Confirmations

Further information

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