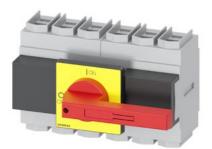
SIEMENS

Data sheet

3LD2405-3VK13

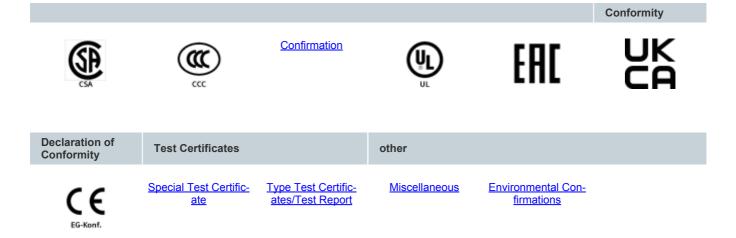


SENTRON, Switch disconnector 3LD, emergency switching-off switch, 6-pole, Iu=250 A, operating power / at AC-23 A 400 V: 132 kW, front-mounted, knob-operated mechanism, red/yellow, 4-hole mounting of the handle

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 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 switch disconnector 5 mumber of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 100 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value operating frequency / rated value 690 V operating requency / rated value 690 V operating requency / rated value 690 V operating frequency / rated value 600 Hz operating frequency / rated value <th>Model</th> <th></th>	Model		
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 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating infinuum 50 Hz operating infinuum 60 Hz Protection class IP IP65 degree of protection NEMA r	product brand name	SENTRON	
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	product designation	3LD Switch disconnector	
operation front mounted design of switch front mounted design of the actuating element red 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	design of the product	EMERGENCY-STOP switch	
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 number of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating voltage resistance / rated value 690 V operating requency / naximum 50 Hz operating voltage 600 V operating requency / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 610 Hz e at AC / rated value 690 V operating requency / rated value 690 V operating voltage 610 Hz e at C/ rated value 690 V operating requency / rated value 690 V operating voltage 610 Hz protection class IP IP65 degree of protection NEMA rating		1 ON - 0 OFF	
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 Immber of poles number of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V surge voltage resistance / rated value 690 V operating voltage 610 V operating requency / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 610 V operating requency / rated value 690 V operating voltage	type of switch	front mounted	
design of handle knob-operated mechanism, red/yellow type of the driving mechanism / motor drive No Genoral technical data No number of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / rated value 60 Hz Protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class I	design of the actuating element	selector switch	
type of the driving mechanism / motor drive No General technical data	color / of the actuating element	red	
Genoral technical data number of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 100 000 electrical endurance (switching cycles) / typical 00 00 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating frequency / rated value 690 V operating frequency / rated value 100 Hz Protection class IP 100 Hz protection class IP / on the fron	design of handle	knob-operated mechanism, red/yellow	
number of poles 6 size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating voltage 690 V operating trequency / rated value 690 V operating requency / rated value 690 V operating trequency / rated value 690 V operating frequency / rated value 690 V operating trequency / rated value 60 Hz protection class IP IP65 <t< td=""><td>type of the driving mechanism / motor drive</td><td>No</td></t<>	type of the driving mechanism / motor drive	No	
size of switch disconnector 5 mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating voltage 690 V operating trequency / rated value 690 V operating frequency / rated value 690 V operating class IP 1060 Hz protection class IP 1965 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front 1965 <t< td=""><td>General technical data</td><td></td></t<>	General technical data		
mechanical service life (switching cycles) / typical 100 000 electrical endurance (switching cycles) 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating frequency / maximum 690 V surge voltage resistance / rated value 690 V operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 60 Hz Protection class F protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	number of poles	6	
electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 0perating frequency / maximum 690 V surge voltage resistance / rated value 0perating voltage • at AC / rated value 0perating frequency / rated value 0perating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 690 V operating frequency / rated value 600 Hz Protection class protection class protection class degree of protection NEMA rating protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	size of switch disconnector	5	
• at AC-23 A / at 690 V 6 000 operating frequency / maximum 50 1/h degree of pollution 3 Voltage 690 V insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V operating voltage 690 V operating voltage 690 V operating requency / rated value 690 V operating frequency / rated value 60 Hz Protection class IP 10 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum 50 1/h degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 690 V operating voltage 690 V operating voltage 690 V operating voltage 690 V operating requency / rated value 690 V operating frequency / rated value 60 Hz Protection class Protection class protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W	electrical endurance (switching cycles)		
degree of pollution 3 Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 600 Hz Protection class Fortection class IP protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 36 W	• at AC-23 A / at 690 V	6 000	
Voltage insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class Protection class IP protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 90 V power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	operating frequency / maximum	50 1/h	
insulation voltage / rated value 690 V surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 900 V protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 1P65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	degree of pollution	3	
surge voltage resistance / rated value 8 kV operating voltage 690 V • at AC / rated value 690 V operating frequency / rated value 690 V • minimum 50 Hz • maximum 60 Hz Protection class 100 Hz protection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation 1965 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	Voltage		
operating voltage 690 V operating frequency / rated value 690 V operating frequency / rated value 50 Hz ominimum 50 Hz omaximum 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	insulation voltage / rated value	690 V	
• at AC / rated value 690 V operating frequency / rated value 690 V • 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	surge voltage resistance / rated value	8 kV	
operating frequency / rated value 50 Hz • minimum 50 Hz • maximum 60 Hz Protection class 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	operating voltage		
• minimum 50 Hz • maximum 60 Hz Protection class IP65 grotection class IP IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation IP65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	 at AC / rated value 	690 V	
• maximum 60 Hz Protection class IP65 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	operating frequency / rated value		
Protection class IP65 degree of protection NEMA rating 1, 3R, 4X, 12 protection class IP / on the front IP65 Dissipation IP65 power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	• minimum	50 Hz	
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	• maximum	60 Hz	
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	Protection class		
protection class IP / on the front IP65 Dissipation	protection class IP	IP65	
Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	degree of protection NEMA rating	1, 3R, 4X, 12	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole 36 W	protection class IP / on the front	IP65	
hot operating state / per pole	Dissipation		
Current		36 W	
	Current		
operational current / rated value 250 A	operational current / rated value	250 A	
operational current	operational current		
• at 40 °C / rated value 250 A	• at 40 °C / rated value	250 A	
• at 45 °C / rated value 250 A	• at 45 °C / rated value	250 A	

a at E0 °C / rated value	250 A
• at 50 °C / rated value	250 A
• at 55 °C / rated value	250 A
at AC / rated value	250 A
Main circuit	
operational current	
at AC-21 / at 690 V / rated value	250 A
• at AC-21 A / at 240 V / rated value	250 A
• at AC-21 A / at 400 V / rated value	250 A
• at AC-21 A / at 440 V / rated value	250 A
• at AC-23 A / at 400 V / rated value	224 A
operating power	76.1147
 at AC-23 A / at 240 V / rated value 	75 kW
 at AC-23 A / at 400 V / rated value 	132 kW
 at AC-23 A / at 440 V / rated value 	132 kW
 at AC-23 A / at 690 V / rated value 	55 kW
 at AC-3 / at 240 V / rated value 	55 kW
 at AC-3 / at 400 V / rated value 	110 kW
at AC-3 / at 690 V / rated value	45 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	N
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional • motor drive	Ne
	No
voltage trigger number of connectable NC contacts / for auxiliary contacts	No 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	4 6 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 	15 kA
 at 440 V / for combination switch + gG fuse / maximum 	15 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	15 kA
I2t value / with closed switch	
$\sim at 240 M/for combination quiteb + aC fuel /$	
 at 240 V / for combination switch + gG fuse / maximum 	557 kA2.s

maximum	
 at 690 V / for combination switch + gG fuse / 	557 kA2.s
maximum	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 250 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
operational current / of upstream fuse / rated value	250 A
according UL	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	250 A
operating voltage / at AC / at 50/60 Hz / according to UL 508/UL 60947-4-1 / rated value	600 V
active power [hp] / at AC / at 480 V / according to UL 508/UL 60947-4-1 / rated value	100
active power [hp] / at AC / at 600 V / according to UL 508/UL 60947-4-1 / rated value	75
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	
• minimum	1
• maximum	4/0
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (16185mm²)
 finely stranded / with core end processing 	1x (16150mm²)
stranded	1x (16185mm²)
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	169 mm
width	112 mm
depth	94 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	3 966 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



urther information

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