SIEMENS

Data sheet 3LD5220-0TK13



SENTRON, Molded case switch 3LD5 UL, Emergency switching-off, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 60A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 40hp, IEC: 63A, Operating power at AC-23A at 400V: 30kW, front-mounted, rotary operating mechanism, red/yellow, 4-hole mounting of the handle, incl. terminal covers for the infeed side

product brand name product designation design of the product display version / for switch position indicator manual operation type of switch design of the actuating element toclor / of the actuating element design of the actuating element design of he actuating element red red red rotary operating mechanism, red/yellow type of the driving mechanism / motor drive red rotary operating mechanism, red/yellow type of the driving mechanism / motor drive red rotary operating mechanism, red/yellow type of the driving mechanism / motor drive red rotary operating mechanism, red/yellow type of the driving mechanism / motor drive red rotary operating mechanism, red/yellow type of switch disconnector red redamines ervice life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltago insulation voltage / rated value operating voltage • at AC / trated value • minimum • naximum for type rotaction class protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 40 °C / rated value • operational current / rated value operational current / rated value operational current / rated value • at 40 °C / rated value	Model		
design of the product display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element design of handle type of the driving mechanism / motor drive General technical data number of poles size of switch disconnector electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value • at AC / rated value • minimum • maximum • maximum 60 Hz Protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current • at 4 °C / rated value • operational current / rated value • operational current / rated value operational current / rated value • operational current / rated value operational current / rated value • 63 A operational current / rated value • 63 A operational current / rated value • at 40 °C / rated value • 63 A	product brand name	SENTRON	
display version / for switch position indicator manual operation type of switch design of the actuating element color / of the actuating element ted design of handle type of shadle type of the driving mechanism / motor drive type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / operating frequency / maximum degree of pollution 3 **AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 **Voltage** insulation voltage / rated value operating frequency / rated value **operating frequency / rated value **operating frequency / rated value **operating frequency / rated value **ominimum **ob Hz **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 Current **operational current / rated value **operation	product designation	3LD UL switch disconnector	
operation type of switch design of the actuating element color / of the actuating element color / of the actuating element design of handle type of the driving mechanism / motor drive No General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A f a 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value operating voltage • at AC / rated value • minimum • maximum 50 Hz • maximum 50 Hz • maximum 50 Hz • maximum 50 Hz 690 V protection class IP 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 Current operational current / rated value	design of the product	EMERGENCY-STOP switch	
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color / of the actuating element design of handle type of the driving mechanism / motor drive Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Surge voltage resistance / rated value operating frequency / rated value • at AC / rated value • minimum • at AC / rated value • minimum 50 Hz • ob Hz • maximum 50 Hz 690 V coperating frequency / rated value • minimum 50 Hz • maximum 50 Hz fol Hz Fotection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current / rated value 63 A operational current • at 40 °C / rated value 63 A	type of switch	front mounted	
design of handle type of the driving mechanism / motor drive No Ceneral technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • at AC / rated value • poreating frequency / rated value • minimum 50 Hz • maximum 50 Hz degree of protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operating at AC / 2 / rated value • at 40 °C / rated value	design of the actuating element	Short rotary knob	
type of the driving mechanism / motor drive General technical data number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value operating voltage • at AC / rated value operating requency / rated value • surge voltage resistance / rated value operating frequency / rated value • minimum • maximum Frotection class protection class IP 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 Current operational current / rated value • at 40 °C / rated value 63 A operational current • at 40 °C / rated value • at 40 °C / rated value 63 A	color / of the actuating element	red	
Seneral technical data number of poles 3 size of switch disconnector 2 2 2 2 2 2 2 2 2	design of handle	rotary operating mechanism, red/yellow	
number of poles size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value • minimum • maximum 50 Hz e maximum 50 Hz Protection class IP 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 Current • at 40 °C / rated value • at 40 °C / rated value 63 A operational current / rated value 63 A operational current • at 40 °C / rated value • at 40 °C / rated value 63 A	type of the driving mechanism / motor drive	No	
size of switch disconnector mechanical service life (switching cycles) / typical electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 70tage insulation voltage / rated value surge voltage resistance / rated value • at AC / rated value • at AC / rated value • minimum operating frequency / rated value • maximum foo Hz Protection class IP 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 Current • at 40 °C / rated value 63 A operational current • at 40 °C / rated value 63 A	General technical data		
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electrical endurance (switching cycles) • at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz Protection class protection class IP 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 Current operational current / rated value 63 A operational current • at 40 °C / rated value 63 A	size of switch disconnector	2	
at AC-23 A / at 690 V operating frequency / maximum degree of pollution 3 Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage at AC / rated value operating frequency / rated value operating frequency / rated value ominimum o	mechanical service life (switching cycles) / typical	100 000	
operating frequency / maximum degree of pollution 7 voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value operating frequency / rated value operating frequency / rated value ominimum ominimu	electrical endurance (switching cycles)		
degree of pollution Voltage insulation voltage / rated value surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value ominimum ominimu	• at AC-23 A / at 690 V	6 000	
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 Current operational current / rated value 63 A operational current • at 40 °C / rated value 63 A	operating frequency / maximum	50 1/h	
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 Current operational current / rated value 63 A operational current • at 40 °C / rated value 63 A	degree of pollution	3	
surge voltage resistance / rated value operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum	Voltage		
operating voltage • at AC / rated value operating frequency / rated value • minimum • maximum 50 Hz 60 Hz Protection class protection class IP 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 Current operational current / rated value 63 A operational current • at 40 °C / rated value 63 A	insulation voltage / rated value	690 V	
■ at AC / rated value Operating frequency / rated value ■ minimum ■ maximum ■ maximum Bo Hz Protection class protection class IP 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 Current operational current / rated value ● at 40 °C / rated value ● 63 A	surge voltage resistance / rated value	6 kV	
operating frequency / rated value	operating voltage		
 minimum maximum 60 Hz Protection class protection class IP degree of protection NEMA rating 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 Current operational current / rated value 63 A operational current at 40 °C / rated value 63 A 	at AC / rated value	690 V	
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protection class IP 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 Current operational current / rated value operational current	• maximum	60 Hz	
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 Current operational current / rated value • at 40 °C / rated value 1, 3R, 4X, 12 IP65 7.5 W 7.5 W 63 A	Protection class		
protection class IP / on the front Dissipation power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value • at 40 °C / rated value 1P65 7.5 W 63 A 63 A	protection class IP	IP65	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole Current operational current / rated value operational current • at 40 °C / rated value 63 A	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 Current operational current / rated value operational current • at 40 °C / rated value 63 A	protection class IP / on the front	IP65	
hot operating state / per pole Current operational current / rated value operational current	Dissipation		
operational current / rated value 63 A operational current • at 40 °C / rated value 63 A		7.5 W	
operational current • at 40 °C / rated value 63 A	Current		
• at 40 °C / rated value 63 A	operational current / rated value	63 A	
	operational current		
• at 45 °C / rated value 63 A	 at 40 °C / rated value 	63 A	
	at 45 °C / rated value	63 A	

at 50 °C / rated value	63 A
at 50 °C / rated value at 55 °C / rated value	63 A 63 A
at SS *C / rated value at AC / rated value	63 A
Main circuit	03 A
operational current	
at AC-21 / at 690 V / rated value	63 A
• at AC-21 A / at 240 V / rated value	63 A
• at AC-21 A / at 400 V / rated value	63 A
at AC-21 A / at 440 V / rated value	63 A
at AC-23 A / at 400 V / rated value	63 A
operating power	
at AC-23 A / at 240 V / rated value	18.5 kW
at AC-23 A / at 400 V / rated value	30 kW
 at AC-23 A / at 440 V / rated value 	30 kW
 at AC-23 A / at 690 V / rated value 	37 kW
at AC-3 / at 240 V / rated value	18.5 kW
at AC-3 / at 400 V / rated value	30 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
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	3
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 	8 kA
 at 440 V / for combination switch + gG fuse / maximum 	8 kA
 at 690 V / for combination switch + gG fuse / maximum permissible 	7 kA
maximum permieerere	
let-through I2t value / with closed switch / at 240 V / for combination switch + gG fuse / maximum	30 kA2.s
let-through I2t value / with closed switch / at 240 V / for	30 kA2.s 30 kA2.s

combination switch + gG fuse / maximum	04140 -	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	24 kA2.s	
design of the fuse link		
 for short-circuit protection of the main circuit / required 	fuse gL/gG: 63 A	
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A	
operational current / of upstream fuse / rated value	63 A	
according UL		
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	60 A	
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	60 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 60947-4-1 / rated value	30	
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	60 A	
type of fuse / according to UL	Class J	
Connections		
AWG number / as coded connectable conductor cross		
section / solid	1	
maximum minimum	1	
Minimum AWG number / as coded connectable conductor cross	12	
section / solid / according to UL 489		
• minimum	12	
maximum	1	
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16		
• minimum	10	
• maximum	4	
type of connectable conductor cross-sections / for copper conductor		
• solid	1x (450mm²)	
finely stranded / with core end processing	1x (435mm²)	
• stranded	1x (450mm²)	
type of connectable conductor cross-sections / for auxiliary contacts		
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)	
 finely stranded / with core end processing 	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²	
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)	
type of electrical connection	hav tameled	
for main current circuit for auxiliany contracts	box terminal	
for auxiliary contacts	connection terminals	
Mechanical Design		
height	104 mm	
width	90 mm	
depth	108 mm	
type of device	fixed mounting Puilt in unit fixed mounted version	
fastening method	Built-in unit fixed-mounted version	
fastening method	Vos	
4-hole front mounting front mounting with central attachment	Yes	
front mounting with central attachment rail mounting	No No	
• rail mounting	IVU	

net weight	380 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 Conformity		



Confirmation



EHC





other

Miscellaneous

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=3LD5220-0TK13

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD5220-0TK13

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

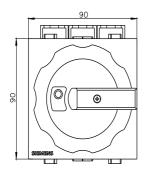
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5220-0TK13

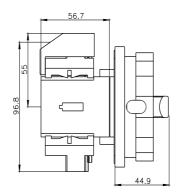
CAx-Online-Generator

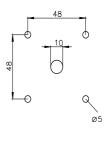
http://www.siemens.com/cax

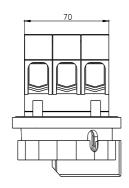
Tender specifications

http://www.siemens.com/specifications









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