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	
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operation type of switch design of the actuating element color / of the actuating element red red 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 emaximum 50 Hz emaximum 50 Hz protection class IP degree of protection NEMA rating protection class IP / on the front Dissipation Dower 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	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		
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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 • at 40 °C / rated value IP65 7.5 W 63 A	• minimum	50 Hz	
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	

a at 50 °C / rated value	63 A
 at 50 °C / rated value at 55 °C / rated value 	63 A 63 A
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	V
product feature / can be locked into OFF position	Yes
accessories	
product extension / optional	No.
• motor drive	No No
voltage trigger number of connectable NC contacts / for quvillion, contacts	No 2
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
I2t value / with closed switch • at 240 V / for combination switch + gG fuse /	30 kA2.s
maximum	00 to 12.0

• at 440 V / for combination switch + gG fuse /	30 kA2.s	
maximum	24 kA2 a	
 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		
• maximum	1	
• minimum	12	
AWG number / as coded connectable conductor cross 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 stranded	1x (435mm²)	
stranded type of connectable conductor cross-sections / for	1x (450mm²)	
auxiliary contacts • solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary	
• finely stranded / with core end processing	switch 1x (0,75 2,5mm²) lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary	
• stranded	switch 1x 2,5mm ² lateral auxiliary switch 2x (0,75 2,5mm ²), 1x 4mm ² ; front auxiliary	
type of electrical connection	switch 1x (0,75 2,5mm²)	
type of electrical connection • for main current circuit	box terminal	
for auxiliary contacts	connection terminals	
Mechanical Design		
height	104 mm	
width	90 mm	
depth	108 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	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









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

 ${\bf Service \& Support \ (Manuals, \ Certificates, \ Characteristics, \ FAQs, ...)}$

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

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

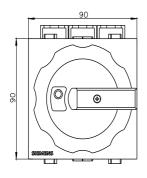
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5220-0TK13

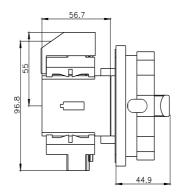
CAx-Online-Generator

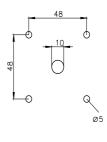
http://www.siemens.com/cax

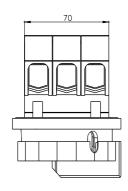
Tender specifications

http://www.siemens.com/specifications









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