SIEMENS

Data sheet

3LD5020-0TK11



SENTRON, Molded case switch 3LD5 UL, Main switch, 3-pole, certified according to UL489 UL60947-4-1 and IEC60947-3, UL: 30A, SCCR 50kA at 480VAC, Operating power at 480VAC 3-phase: 20hp, IEC: 32A, Operating power at AC-23A at 400V: 15kW, front-mounted, rotary operating mechanism, black, 4-hole mounting of the handle, incl. terminal covers for the infeed side

Model		
product brand name	SENTRON	
product designation	3LD UL switch disconnector	
design of the product	Main switch	
display version / for switch position indicator manual operation	1 ON - 0 OFF	
design of the actuating element	Short rotary knob	
design of handle	rotary operating mechanism, black	
type of the driving mechanism / motor drive	No	
General technical data		
number of poles	3	
type of device	fixed mounting	
type of switch	front mounted	
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	
I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	12 kA2.s	
let-through l2t value / with closed switch / at 440 V / for combination switch + gG fuse / maximum	12 kA2.s	
operating frequency / maximum	50 1/h	
Voltage		
insulation voltage / rated value	690 V	
surge voltage resistance / rated value	6 kV	
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 	4.5 W	
 per conductor / typical 	5 W	
Current		
operational current		
• at 40 °C / rated value	32 A	
• at 45 °C / rated value	32 A	
• at 50 °C / rated value	32 A	
• at 55 °C / rated value	32 A	

• at AC / rated value	32 A
 at AC-23 A / at 400 V / rated value 	32 A 32 A
 at AC-23 A / at 400 V / rated value at AC-21 / at 690 V / rated value 	32 A 32 A
• at AC-21 A / at 240 V / rated value	32 A
• at AC-21 A / at 240 V / rated value	32 A 32 A
operational current / of upstream fuse / rated value	40 A
let-through current / with closed switch	
• at 440 V / for combination switch + gG fuse /	6 kA
maximum	
 at 690 V / for combination switch + gG fuse / 	6 kA
maximum permissible	
Main circuit	
operating power	
• at AC-23 A / at 240 V / rated value	7.5 kW
• at AC-23 A / at 440 V / rated value	15 kW
at AC-23 A / at 690 V / rated value	19 kW
• at AC-3 / at 240 V / rated value	7.5 kW
• at AC-3 / at 400 V / rated value	15 kW
at AC-3 / at 690 V / rated value	15 kW
operational current / rated value	32 A
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	No
safety switch	Yes
maintenance/repair switch	Yes
Appearance	
color / of the actuating element	black
Product details	
product feature	
can be locked into OFF position	Yes
number of bracket locks / maximum	1
hasp thickness / of the bracket locks / minimum	4 mm
hasp thickness / of the bracket locks / maximum	6 mm
product extension / optional	
motor drive	No
voltage trigger	No
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
according UL	
operational current / at AC / according to UL 489/UL 60947-4-1 / rated value	30 A
operational current / at AC / according to UL 508/UL 60947-4-1 / rated value	30 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	20

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	30 A
type of fuse / according to UL	Class CC, J
Number	
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
Connections	
AWG number / as coded connectable conductor cross	
section / solid	
• maximum	6
• minimum	14
AWG number / as coded connectable conductor cross section / solid / according to UL 489	
• minimum	14
• maximum	6
AWG number / as coded connectable conductor cross section / solid / according to CSA C22.2 No. 5-16	
• minimum	12
• maximum	8
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (2,535mm²)
 finely stranded / with core end processing 	1x (2.516 mm ²)
stranded	1x (2,535mm²)
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
Requirements	
design of the fuse link	
 for short-circuit protection of the main circuit / required 	Fuse gG: 40 A
 for short-circuit protection of the auxiliary switch / required 	fuse gL/gG: 10 A
Mechanical Design	
height	96 mm
width	60 mm
depth	59 mm
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	270 g
Environmental conditions	
ambient temperature / during operation	25.10
• minimum	-25 °C
maximum ambient temperature / during storage / minimum	55 °C
ambient temperature / during storage / minimum	-25 °C
General Product Approval	Declaration of Conformity









UK CA

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=3LD5020-0TK11 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD5020-0TK11 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD5020-0TK11 CAx-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications

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