SIEMENS

Data sheet 3KD0640-2LG20-3

Switch disconnector 125A, size 02, 4-pole Front operating mechanism center Basic unit without handle Box terminal



Model	
product brand name	SENTRON
product designation	3KD switch disconnector
design of the product	Switch
display version / for switch position indicator door-	ON-OFF
coupling rotary operating mechanism	
design of the operating mechanism	Without handle
type of the driving mechanism	Front operating mechanism
type of the driving mechanism / motor drive	No

General technical data	
number of poles	4
type of device	fixed mounting
size of switch disconnector	02
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
 I2t value / of the fuse / at 400 V / maximum permissible 	130 000 A²·s

 I2t value / of the fuse / at 500 V / maximum permissible 	130 000 A²·s
 I2t value / of the gG fuse / at 690 V / maximum permissible 	130 000 A²-s
position / of the switch operating mechanism	central
overvoltage in percent / relative to the operating voltage / at AC / at 400, 500, 690 V / at 50/60 Hz	5 %
overvoltage category	III
degree of pollution	3
Voltage	
insulation voltage	
• rated value	750 V
surge voltage resistance / rated value	8 kV
Supply voltage	
operating current / at AC / rated value	125 A
operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
Protection class	
protection class IP	IP10
protection class IP	
• with closed switch / with cover or cable lug	IP10
cover	
• on the front	IP40
Dissipation	
power loss [W]	
 with conventional rated thermal current / per pole 	12 W
 with conventional rated thermal current / per device 	12 W
 for rated value of the current / at AC / in hot operating state / per pole 	36 W
Current	
operating current / at AC-23 A / at 690 V / rated value	39 A
 operating current / at AC-23 A / at 500 V / rated value 	39 A
• operating current / at AC-23 A / at 400 V / rated value	100 A
• operating current / at AC-22 A / at 690 V / rated value	125 A
 operating current / at AC-22 A / at 500 V / rated value 	125 A

 operating current / at AC-22 A / at 400 V / rated value 	125 A
 operating current / at AC-21 A / at 400 V / rated value 	125 A
 operating current / at AC-21 A / at 500 V / rated value 	125 A
 operating current / at AC-21 A / at 690 V / rated value 	125 A
 operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum 	39 A
 operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum 	125 A
 operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum 	125 A
 operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum 	125 A
 operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum 	100 A
 operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum 	39 A
continuous current	
• rated value	125 A
continuous current / of upstream fuse / at 500 V and 690 V / rated value	125 A
let-through current / of the fuse / at 400 V / maximum permissible	10 500 A
let-through current / of the fuse / at 500 V / maximum permissible	7 000 A
let-through current / of the gG fuse / at 690 V / maximum permissible	7 000 A
Main circuit	
operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	45 kW
• at AC-23 A / at 500 V / rated value	22 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	37 kW
operating current / rated value	125 A
Auxiliary circuit	
number of connected NC contacts / for auxiliary contacts	0
number of connected NO contacts / for auxiliary contacts	0
number of connected CO contacts / for auxiliary contacts	0
number of CO contacts / for auxiliary contacts	0

number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts	1
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 / interlock	No
product component	
• trip indicator	No
 voltage trigger 	No
undervoltage release	No
 undervoltage release with leading contact 	No
product extension / auxiliary switch	Yes
product extension / optional	
• motor drive	No
voltage trigger	No
Short circuit	
Short circuit short-circuit current making capacity (lcm)	
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link /	3.55 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum	3.55 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse	3.55 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection	
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value	20 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection	
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections	20 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for	20 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor	20 kA 20 kA
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for	20 kA 20 kA 1 x (4 50) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded	20 kA 20 kA 1 x (4 50) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ² 1 x (4 50) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded type of electrical connection	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ² 1 x (4 50) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded type of electrical connection • for main current circuit	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ² 1 x (4 50) mm ²
short-circuit current making capacity (lcm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded type of electrical connection • for main current circuit Mechanical Design	20 kA 20 kA 1 x (4 50) mm ² 1 x (4 35) mm ² 1 x (4 50) mm ² box terminal
short-circuit current making capacity (Icm) • for switch disconnector / without fuse link / rated value / minimum conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value Connections type of connectable conductor cross-sections / for copper conductor • solid • finely stranded / with core end processing • stranded type of electrical connection • for main current circuit Mechanical Design height	20 kA 20 kA 1 x (4 50) mm² 1 x (4 35) mm² 1 x (4 50) mm² box terminal

mounting type	
 front mounting with 4-hole attachment 	No
 front mounting with central attachment 	No
• rail mounting	Yes
mounting position	any
net weight	465 g

Environmental conditions	
ambient temperature / during operation	
• minimum	-5 °C
• maximum	40 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	55 °C

Certificates	
reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

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=3KD0640-2LG20-3

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

https://support.industry.siemens.com/cs/ww/en/ps/3KD0640-2LG20-3

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD0640-2LG20-3

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications







