## **SIEMENS**

## Data sheet

## 3KD0543-2LG20-3

Switch disconnector 100A, size 02, 4-pole Front operating mechanism center Complete unit with direct operating mechanism red/yellow Box terminal



Model	
product brand name	SENTRON
product designation	3KD switch disconnector
design of the product	Switch
display version / for switch position indicator manual operation	O-1
design of the operating mechanism	Short rotary knob
type of the driving mechanism	Front operating mechanism
type of the driving mechanism / motor drive	No
General technical data	
General technical data number of poles	4
	4 fixed mounting
number of poles	
number of poles type of device	fixed mounting
number of poles type of device size of switch disconnector	fixed mounting 02
number of poles type of device size of switch disconnector mechanical service life (switching cycles) / typical	fixed mounting 02

<ul> <li>I2t value / of the fuse / at 500 V / maximum permissible</li> </ul>	80 000 A <sup>2</sup> ·s
<ul> <li>I2t value / of the gG fuse / at 690 V / maximum permissible</li> </ul>	75 000 A <sup>2</sup> ·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	100 A
operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
Protection class	
protection class IP	IP10
protection class IP	
<ul> <li>with closed switch / with cover or cable lug</li> </ul>	IP10
cover	
• on the front	IP40
Dissipation	
power loss [W]	
<ul> <li>with conventional rated thermal current / per pole</li> </ul>	7.7 W
<ul> <li>with conventional rated thermal current / per device</li> </ul>	7.7 W
<ul> <li>for rated value of the current / at AC / in hot operating state / per pole</li> </ul>	23 W
Current	
operating current / at AC-23 A / at 690 V / rated	35 A
value	
<ul> <li>operating current / at AC-23 A / at 500 V / rated value</li> </ul>	35 A
<ul> <li>operating current / at AC-23 A / at 400 V / rated value</li> </ul>	80 A
<ul> <li>operating current / at AC-22 A / at 690 V / rated value</li> </ul>	100 A
<ul> <li>operating current / at AC-22 A / at 500 V / rated value</li> </ul>	100 A

<ul> <li>operating current / at AC-22 A / at 400 V / rated value</li> </ul>	100 A
<ul> <li>operating current / at AC-21 A / at 400 V / rated value</li> </ul>	100 A
<ul> <li>operating current / at AC-21 A / at 500 V / rated value</li> </ul>	100 A
<ul> <li>operating current / at AC-21 A / at 690 V / rated value</li> </ul>	100 A
<ul> <li>operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum</li> </ul>	35 A
<ul> <li>operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum</li> </ul>	100 A
<ul> <li>operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum</li> </ul>	100 A
<ul> <li>operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum</li> </ul>	100 A
<ul> <li>operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum</li> </ul>	80 A
<ul> <li>operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum</li> </ul>	35 A
continuous current	
• rated value	100 A
continuous current / of upstream fuse / at 500 V and 690 V / rated value	100 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	30 kW
operating current / rated value	100 A
Auxiliary circuit	
number of connected NC contacts / for auxiliary	0
contacts	
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	Νο
• main switch	
switch disconnector	Yes
EMERGENCY OFF switch	Yes
<ul> <li>safety switch</li> </ul>	Yes
<ul> <li>maintenance/repair switch</li> </ul>	Yes
Product details	
product feature / interlock	Yes
product component	
• trip indicator	No
<ul> <li>voltage trigger</li> </ul>	No
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>undervoltage release with leading contact</li> </ul>	No
product extension / auxiliary switch	Yes
product extension / optional	
motor drive	No
voltage trigger	No
Short circuit	
Short circuit short-circuit current making capacity (Icm)	
	3.55 kA
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link /</li> </ul>	3.55 kA
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul>	3.55 kA
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse</li> </ul>	3.55 kA 50 kA
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> </ul>	
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> </ul>	50 kA
<ul> <li>short-circuit current making capacity (Icm)         <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection                 <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>Connections</li> <li>type of connectable conductor cross-sections / for</li> </ul> </li> </ul>	50 kA
<ul> <li>short-circuit current making capacity (Icm)         <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul> </li> <li>conditional short-circuit current / with line-side fuse protection         <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>Connections         <ul> <li>type of connectable conductor cross-sections / for copper conductor</li> </ul> </li> </ul>	50 kA 50 kA
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> <li>Connections</li> <li>type of connectable conductor cross-sections / for copper conductor</li> <li>solid</li> </ul>	50 kA 50 kA 1 x (4 50) mm²
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> <li>Connections</li> <li>type of connectable conductor cross-sections / for copper conductor</li> <li>solid</li> <li>finely stranded / with core end processing</li> </ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup>
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> <li>Connections</li> <li>type of connectable conductor cross-sections / for copper conductor</li> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul>	50 kA 50 kA 1 x (4 50) mm²
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> <li>Connections</li> <li>type of connectable conductor cross-sections / for copper conductor</li> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> <li>type of electrical connection</li> </ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup> 1 x (4 50) mm <sup>2</sup>
<ul> <li>short-circuit current making capacity (Icm)</li> <li>for switch disconnector / without fuse link / rated value / minimum</li> <li>conditional short-circuit current / with line-side fuse protection</li> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> <li>Connections</li> <li>type of connectable conductor cross-sections / for copper conductor</li> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup>
<ul> <li>short-circuit current making capacity (Icm) <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul> </li> <li>conditional short-circuit current / with line-side fuse protection <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>Connections <ul> <li>type of connectable conductor cross-sections / for copper conductor <ul> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> </li> <li>type of electrical connection <ul> <li>for main current circuit</li> </ul> </li> </ul></li></ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup> 1 x (4 50) mm <sup>2</sup> box terminal
<ul> <li>short-circuit current making capacity (Icm) <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul> </li> <li>conditional short-circuit current / with line-side fuse protection <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>Connections <ul> <li>type of connectable conductor cross-sections / for copper conductor <ul> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> </li> <li>type of electrical connection <ul> <li>for main current circuit</li> </ul> </li> </ul> </li> </ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup> 1 x (4 50) mm <sup>2</sup> box terminal
<ul> <li>short-circuit current making capacity (Icm) <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul> </li> <li>conditional short-circuit current / with line-side fuse protection <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>at 690 V / by gG fuse / rated value</li> </ul> <li>Connections <ul> <li>type of connectable conductor cross-sections / for copper conductor <ul> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> </li> <li>type of electrical connection <ul> <li>for main current circuit</li> </ul> </li> </ul> </li> <li>Mechanical Design <ul> <li>height</li> <li>width</li> </ul></li>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup> 1 x (4 50) mm <sup>2</sup> box terminal
<ul> <li>short-circuit current making capacity (Icm) <ul> <li>for switch disconnector / without fuse link / rated value / minimum</li> </ul> </li> <li>conditional short-circuit current / with line-side fuse protection <ul> <li>at 500 V / by gG fuse / rated value</li> <li>at 690 V / by gG fuse / rated value</li> </ul> </li> <li>Connections <ul> <li>type of connectable conductor cross-sections / for copper conductor <ul> <li>solid</li> <li>finely stranded / with core end processing</li> <li>stranded</li> </ul> </li> <li>type of electrical connection <ul> <li>for main current circuit</li> </ul> </li> </ul> </li> </ul>	50 kA 50 kA 1 x (4 50) mm <sup>2</sup> 1 x (4 35) mm <sup>2</sup> 1 x (4 50) mm <sup>2</sup> box terminal

mounting type	
	No
<ul> <li>front mounting with 4-hole attachment</li> </ul>	
<ul> <li>front mounting with central attachment</li> </ul>	No
● rail mounting	Yes
mounting position	any
net weight	475 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=3KD0543-2LG20-3

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KD0543-2LG20-3

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KD0543-2LG20-3

CAx-Online-Generator http://www.siemens.com/cax

Tender specifications http://www.siemens.com/specifications







