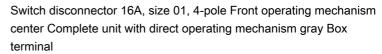
SIEMENS

Data sheet 3KD0142-2KG20-3





Model	
product brand name	SENTRON
product designation	3KD switch disconnector
design of the product	Switch
display version / for switch position indicator manual operation	O-I
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	
number of poles	4
type of device	fixed mounting
size of switch disconnector	01
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 500 V / maximum permissible	6 400 A ² ·s

 I2t value / of the gG fuse / at 690 V / maximum permissible 	5 800 A ² ·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	Ш
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	16 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 	0.3 W
 with conventional rated thermal current / per device 	0.3 W
 for rated value of the current / at AC / in hot operating state / per pole 	0.3 W
	0.3 W
operating state / per pole	0.3 W
operating state / per pole Current operating current / at AC-23 A / at 690 V / rated	
operating state / per pole Current operating current / at AC-23 A / at 690 V / rated value operating current / at AC-23 A / at 500 V / rated	16 A
operating state / per pole Current • operating current / at AC-23 A / at 690 V / rated value • operating current / at AC-23 A / at 500 V / rated value • operating current / at AC-23 A / at 400 V / rated	16 A 16 A
operating state / per pole Current • operating current / at AC-23 A / at 690 V / rated value • operating current / at AC-23 A / at 500 V / rated value • operating current / at AC-23 A / at 400 V / rated value • operating current / at AC-22 A / at 690 V / rated	16 A 16 A 16 A

operating current / at AC-21 A / at 690 V / rated value operating current / at AC-21 A / at 690 V / rated value operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / of the fuse / at 500 V and 690 V / rated value erated value let-through current / of the fuse / at 500 V / maximum permissible Main circuit operating power at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value	 operating current / at AC-21 A / at 400 V / rated value 	16 A
operating current / at AC-21 A / at 690 V / rated value operating current / at AC-23 A / at 500 V / at 5060 Hz / rated value / maximum operating current / at AC-22 A / at 500 V / at 5060 Hz / rated value / maximum operating current / at AC-22 A / at 400 V / at 5060 Hz / rated value / maximum operating current / at AC-22 A / at 400 V / at 5060 Hz / rated value / maximum operating current / at AC-22 A / at 690 V / at 5060 Hz / rated value / maximum operating current / at AC-23 A / at 400 V / at 5060 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 5060 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 5060 Hz / rated value / maximum continuous current or ated value iet-through current / of the fuse / at 500 V / maximum permissible let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / at 3700 A maximum permissible Main circuit operating power	• operating current / at AC-21 A / at 500 V / rated	16 A
operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum continuous current operating current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 500 V / rated value at AC-23 A / at 500 V / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rate	• operating current / at AC-21 A / at 690 V / rated	16 A
• operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum • operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum • operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum • operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum • operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum service of the fuse / at 500 V / maximum at 700 A permissible let-through current / of the gG fuse / at 690 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / rated value • at AC-23 A / at 690 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	• operating current / at AC-23 A / at 500 V / at	16 A
50/60 Hz / rated value / maximum operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum continuous current orated value orated value let-through current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power at AC-23 A / at 400 V / at 50/60 Hz / rated value at AC-23 A / at 4500 V / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value operating current / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value operating current / rated value Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts		16 A
So/60 Hz / rated value / maximum • operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum • operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum continuous current • rated value continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rat	· · · · · · · · · · · · · · · · · · ·	16 A
50/60 Hz / rated value / maximum • operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum continuous current • rated value 16 A continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-30 A /		16 A
continuous current • rated value continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-25 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	· · · · · · · · · · · · · · · · · · ·	16 A
rated value continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power at AC-23 A / at 400 V / at 50/60 Hz / rated value		16 A
continuous current / of upstream fuse / at 500 V and 690 V / rated value let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-34 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	continuous current	
let-through current / of the fuse / at 500 V / maximum permissible let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	• rated value	16 A
let-through current / of the gG fuse / at 690 V / maximum permissible Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts		32 A
Main circuit operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	-	3 700 A
operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts		3 700 A
operating power • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 11 kW operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	Main circuit	
at AC-23 A / at 500 V / rated value at AC-23 A / at 690 V / at 50/60 Hz / rated value operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts o		
at AC-23 A / at 690 V / at 50/60 Hz / rated value operating current / rated value 16 A Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts 0	• at AC-23 A / at 400 V / at 50/60 Hz / rated value	7.5 kW
operating current / rated value Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts 0	• at AC-23 A / at 500 V / rated value	7.5 kW
Auxiliary circuit number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts 0	• at AC-23 A / at 690 V / at 50/60 Hz / rated value	11 kW
number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	operating current / rated value	16 A
number of connected NC contacts / for auxiliary contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts	Auxiliany circuit	
contacts number of connected NO contacts / for auxiliary contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts 0		0
contacts number of connected CO contacts / for auxiliary contacts number of CO contacts / for auxiliary contacts 0	-	ů
number of CO contacts / for auxiliary contacts 0	-	0
	-	0
number of NC contacts / for auxiliary contacts 1	number of CO contacts / for auxiliary contacts	0
	number of NC contacts / for auxiliary contacts	1
number of NO contacts / for auxiliary contacts 1	number of NO contacts / for auxiliary contacts	1
Suitability	Suitability	
suitability for use		

main switch	Yes
• switch disconnector	Yes
 EMERGENCY OFF switch 	No
• safety switch	Yes
• maintenance/repair switch	Yes

Product details	
product feature / interlock	Yes
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 current making capacity (lcm)	
 for switch disconnector / without fuse link / rated value / minimum 	1.78 kA
conditional short-circuit current / with line-side fuse protection	
• at 500 V / by gG fuse / rated value	50 kA
• at 690 V / by gG fuse / rated value	50 kA

Connections	
type of connectable conductor cross-sections / for copper conductor	
• solid	1 x (2,5 35) mm ²
 finely stranded / with core end processing 	1 x (2,5 16) mm ²
• stranded	1 x (2,5 5) mm ²
type of electrical connection	
• for main current circuit	box terminal

Mechanical Design	
height	100 mm
width	83 mm
depth	92 mm
mounting type	Screw fixing and standard rail mounting 35 mm
mounting type	
 front mounting with 4-hole attachment 	No
 front mounting with central attachment 	No
• rail mounting	Yes

mounting position	any
net weight	355 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

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=3KD0142-2KG20-3

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

https://support.industry.siemens.com/cs/ww/en/ps/3KD0142-2KG20-3

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD0142-2KG20-3

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications

