# **SIEMENS**

Data sheet \_\_\_\_3KD3230-0NE20-0

Switch disconnector 125 A, Size 2, 3-pole Front operating mechanism center Basic unit without handle flat terminal incl. phase barriers



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	3
Type of device	fixed mounting
Size of switch disconnector	2
Electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 500
• at DC-23 A / at 440 V	1 000
<ul> <li>I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum</li> </ul>	548 000 A <sup>2</sup> ·s

• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	548 000 A²·s
<ul> <li>I2t value / with closed switch / at 415 V / for combination switch +molded case circuit breaker / maximum</li> </ul>	1 055 000 A <sup>2</sup> ·s
<ul> <li>I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum</li> </ul>	376 000 A²·s
<ul> <li>I2t value / with closed switch / at 690 V / for combination switch + aM fuse / maximum</li> </ul>	596 500 A²·s
<ul> <li>I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum</li> </ul>	19 815 A <sup>2</sup> ·s
<ul> <li>I2t value / of the fuse / at 500 V / maximum permissible</li> </ul>	223 005 A²-s
<ul> <li>I2t value / of the gG fuse / at 690 V / maximum permissible</li> </ul>	226 005 A <sup>2</sup> ·s
<ul> <li>I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible</li> </ul>	48 000 A²·s
<ul> <li>I2t value / of the molded case circuit breaker / at 415 V / maximum permissible</li> </ul>	1 750 000 A²·s
circuit-breaker / Design	3KD3
Mechanical service life (switching cycles) / typical	15 000
Position / of the switch operating mechanism	after the first pole
Overvoltage in percent / relative to the operating voltage / at AC / at 400, 500, 690 V / at 50/60 Hz	10 %
Overvoltage category	III
Degree of pollution	3
Voltage	
Operating voltage / with current paths in series	
• with degree of pollution 2 / at DC / rated value	440 V / 3
<ul> <li>with degree of pollution 3 / at DC / rated value</li> </ul>	440 V / 3
Insulation voltage	
• rated value	1 000 V
Surge voltage resistance / rated value	8 kV
Current / at AC / rated value	125 A
Operating voltage	
• at AC / at 50/60 Hz / rated value	1 000 V
Protection class	
Protection class IP	IP00
Protection class IP	
<ul> <li>with closed switch / with cover or cable lug cover</li> </ul>	IP20
• on the front	IP00

# Power loss [W] • with conventional rated thermal current / per pole • with conventional rated thermal current / per device • for rated value of the current / at AC / in hot operating state / per pole 3.2 W 3.2 W

Current	
Operating current	
• at AC-23 A / at 690 V / rated value	125 A
• at AC-23 A / at 500 V / rated value	125 A
• at AC-23 A / at 400 V / rated value	125 A
• at AC-22 A / at 690 V / rated value	125 A
• at AC-22 A / at 500 V / rated value	125 A
• at AC-22 A / at 400 V / rated value	125 A
• at AC-20 A / at 1000 V / maximum	125 A
• at AC-21 A / at 400 V / rated value	125 A
• at AC-21 A / at 500 V / rated value	125 A
• at AC-21 A / at 690 V / rated value	125 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• at DC-20 A / at 1000 V / maximum	125 A / 1
• at DC-23 A / at 440 V / rated value / Note	125 A / 3
• at DC-23 A / at 220 V / rated value / Note	125 A / 2
• at DC-22 A / at 440 V / rated value / Note	125 A / 3
• at DC-22 A / at 220 V / rated value / Note	125 A / 2
• at DC-21 A / at 440 V / rated value / Note	125 A / 3
• at DC-21 A / at 220 V / rated value	125 A / 2
• at 45 °C / rated value	125 A
Continuous current	
• rated value	125 A

• at 40 °C / rated value	125 A
• at 45 °C / rated value	125 A
• at 50 °C / rated value	125 A
• at 55 °C / rated value	125 A
• at 60 °C / rated value	125 A
• at 65 °C / rated value	125 A
• at 70 °C / rated value	125 A
Continuous current / of upstream fuse / at 500 V and 690 V / rated value	250 A
Continuous current / of upstream fuse / at 1000 V / rated value	250 A
Continuous current / of upstream molded case circuit breaker / at 415 V / rated value	200 A
Operating current / at DC / rated value	125 A
Let-through current / of the fuse / at 500 V / maximum permissible	25 700 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	29 500 A
Let-through current / of the aM fuse / at 690 V / maximum permissible	32 900 A
Let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	12 500 A
Let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	28 000 A
Let-through current / with closed switch	
<ul> <li>at 690 V / for combination switch + aM fuse / maximum permissible</li> </ul>	17 600 A
<ul> <li>at 690 V / for combination switch + gG fuse / maximum permissible</li> </ul>	23 700 A
<ul> <li>at 415 V / for combination switch +molded case circuit breaker / maximum permissible</li> </ul>	21 700 A
<ul> <li>at 1000 V / for combination switch +gG/aM</li> <li>SITOR fuse / maximum permissible</li> </ul>	10 795 A
<ul> <li>for combination switch + fuse / at 400 V / maximum permissible</li> </ul>	27 700 A
<ul> <li>for combination switch + fuse / at 500 V / maximum permissible</li> </ul>	27 700 A
Short-time withstand current (Icw)	
• at 400 V AC / limited to 0.15 s / rated value	15 kA
Main circuit	

Main circuit	
Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	55 kW
• at AC-23 A / at 500 V / rated value	75 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	110 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	4
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0
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
<ul> <li>undervoltage release with leading contact</li> </ul>	No
Short circuit	
Short-time withstand current (lcw) / at AC 1000 V/DC 440 V / limited to 1 s / rated value	4 kA
Short-circuit current making capacity (lcm)	
<ul> <li>for switch disconnector / at 400 V AC / without fuse link / rated value / minimum</li> </ul>	30 kA
<ul> <li>for switch disconnector / at 1000 V AC / without fuse link / rated value / minimum</li> </ul>	12 kA
for switch disconnector / at DC 440 V / without fuse link / rated value / minimum	12 kA
for switch disconnector / without fuse link / rated value / minimum	12 kA
Conditional short-circuit current / with line-side fuse protection	
<ul> <li>at 415 V / by molded case circuit breaker / rated value</li> </ul>	65 kA
• at 500 V / by gG fuse / rated value	100 kA

• at 690 V / by gG fuse / rated value

100 kA

### Connections

Type of electrical connection

• for main current circuit

flat connector

Mechanical Design			
Height	168 mm		
Width	121 mm		
Depth	68 mm		
Mounting type	Screw fixing and standard rail mounting 35 mm		
Mounting type			
<ul> <li>front mounting with 4-hole attachment</li> </ul>	No		
<ul> <li>front mounting with central attachment</li> </ul>	No		
• rail mounting	Yes		
Mounting position	any		

1015 g

Ambient temperature / during operation

-25 °C • minimum

70 °C • maximum

Ambient temperature / during storage

-50 °C • minimum

80 °C • maximum

## Certificates

Net weight

Reference code

• acc. to DIN EN 61346-2

Q • acc. to DIN EN 81346-2

General Product Approval	Declaration of	Shipping Ap-	other
	Conformity	proval	

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Miscellaneous





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=3KD3230-0NE20-0

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

https://support.industry.siemens.com/cs/ww/en/ps/3KD3230-0NE20-0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KD3230-0NE20-0">http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3KD3230-0NE20-0</a>

# **CAx-Online-Generator**

http://www.siemens.com/cax

### **Tender specifications**

http://www.siemens.com/specifications





