SIEMENS

Data sheet 3KD3830-0PE10-0

Switch disconnector 250 A, Size 3, 3-pole Front operating mechanism left Basic unit without handle flat terminal



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

General technical data		
Number of poles	3	
Type of device	fixed mounting	
Size of switch disconnector	3	
Electrical endurance (switching cycles)		
● at AC-23 A / at 690 V / at 50/60 Hz	1 000	
• at DC-23 A / at 440 V	1 000	
 I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum 	426 500 A²·s	
• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	426 500 A ² ·s	

 I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum 	348 000 A²·s
 I2t value / of the fuse / at 500 V / maximum permissible 	780 005 A²·s
 I2t value / of the gG fuse / at 690 V / maximum permissible 	525 005 A ² ·s
circuit-breaker / Design	3KD3
Mechanical service life (switching cycles) / typical	10 000
Position / of the switch operating mechanism	at the left end
Overvoltage category	IV
Voltage	
Operating voltage / with current paths in series	
with degree of pollution 2 / at DC / rated value /	440 V / 3
Note	
with degree of pollution 3 / at DC / rated value / Note	440 / 3
Insulation voltage	
• rated value	1 000 V
Surge voltage resistance / rated value	12 kV
Overvoltage in percent / relative to the operating	10 %
voltage / at AC / at 50/60 Hz	
Protection class	
Protection class IP	IP00
Protection class IP	
 with closed switch / with cover or cable lug 	IP20

Protection class	
Protection class IP	IP00
Protection class IP	
with closed switch / with cover or cable lug	IP20
cover	
• on the front	IP00

Dissipation	
Power loss [W]	
 with conventional rated thermal current / per pole 	6 W
 with conventional rated thermal current / per device 	18 W
 for rated value of the current / at AC / in hot operating state / per pole 	6 W

Electricity	
Operating current	
• at AC-21 A / at 400 V / maximum	250 A
• at AC-21 A / at 500 V / maximum	250 A
• at AC-21 A / at 690 V / maximum	250 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	250 A

• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	250 A
at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	250 A
at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	250 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	250 A
• at DC-23 A / at 440 V / rated value / maximum	250 / 3
• at DC-23 A / at 220 V / rated value / maximum	250 / 2
• at DC-22 A / at 440 V / rated value / maximum	250 / 3
• at DC-22 A / at 220 V / rated value / maximum	250 / 2
• at DC-21 A / at 440 V / rated value / maximum	250 / 3
• at DC-21 A / at 220 V / maximum	250 / 2
Current / at AC / rated value	250 A
Continuous current	
• rated value	250 A
• at 40 °C / rated value	250 A
• at 45 °C / rated value	250 A
• at 50 °C / rated value	250 A
• at 55 °C / rated value	250 A
• at 60 °C / rated value	250 A
• at 65 °C / rated value	250 A
• at 70 °C / rated value	250 A
Continuous current / at DC / rated value	250 A
Let-through current / of the fuse / at 500 V / maximum permissible	24 872 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	25 005 A
Let-through current / with closed switch	
 at 690 V / for combination switch + gG fuse / maximum permissible 	22 700 A
 for combination switch + fuse / at 400 V / maximum permissible 	25 100 A
 for combination switch + fuse / at 500 V / maximum permissible 	25 100 A
Short-time current resistance (Icw)	
• at 690 V AC/440 V DC / limited to 1 s / rated value	13 kA
Main circuit	

Operating power

• at AC-23 A / at 400 V / at 50/60 Hz / rated value	132 kW
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	160 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	220 kW
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
Auxiliary circuit	
Number of connected NC contacts / for auxiliary	0
contacts	
Number of connected NO contacts / for auxiliary	0
contacts	
Number of connected CO contacts / for auxiliary	0
contacts	
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	6
Number of NO contacts / for auxiliary contacts	6
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
• optional	
— motor drive	No
— Voltage trigger	No
Short circuit	
Short-circuit current making capacity (lcm)	
• for switch disconnector / at 690 V AC/440 V DC	26 kA
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/ without fuse link / rated value / minimum	20 KA
	26 kA

Conditional short-circuit current / with line-side fuse protection

• at 500 V / by gG fuse / rated value

100 kA

Connections	
 Type of connectable conductor cross-sections / for aluminum conductor / stranded / with lug 	1x (25 240 mm²), 2x (25 120 mm²)
 Type of connectable conductor cross-sections / for copper conductor / stranded / with lug / acc. to DIN 46235 	1x (16 185 mm²), 2x (16150 mm²)
Type of electrical connection	
for main current circuit	flat connector

Mechanical Design	
Height	164 mm
Width	190 mm
Depth	93.5 mm
Mounting position	any
Mounting type	screw fixing
Mounting type	
 front mounting with 4-hole attachment 	No
 front mounting with central attachment 	No
• rail mounting	No
Net weight	2 800 g

Environmental conditions		
Degree of pollution	3	
Ambient temperature		
during operation / minimum	-25 °C	
during operation / maximum	70 °C	
during storage / minimum	-50 °C	
during storage / maximum	80 °C	

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

General Product Approval	Declaration of	Shipping Approval
	Conformity	





Miscellaneous





Further informatior

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=3KD3830-0PE10-0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3KD3830-0PE10-0

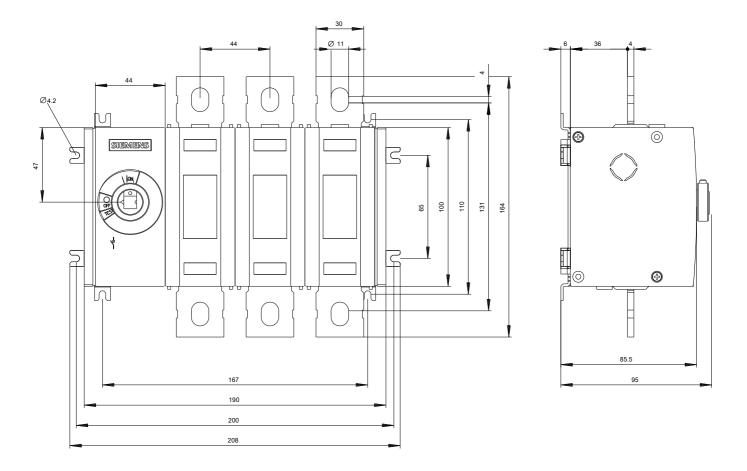
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3830-0PE10-0

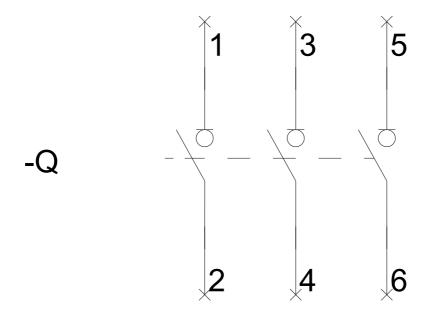
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications





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