



SWITCH-DISCONNECTOR 80A, FRAME SIZE 1, 3-POLE FRONT
OPERATING LEFT 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-coupling rotary operating mechanism	ON-OFF
design of the actuating element	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	1
mechanical service life (switching cycles) / typical	15 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
• at DC-23 A / at 440 V	1 500
I ² t value	
• with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	2 331 A ² ·s
• of the fuse / at 500 V / maximum permissible	34 000 A ² ·s
• of the gG fuse / at 690 V / maximum permissible	55 000 A ² ·s
• of the gG/aM SITOR fuse / at 1000 V / maximum permissible	6 000 A ² ·s
• of the molded case circuit breaker / at 415 V / maximum permissible	480 000 A ² ·s
position / of the switch operating mechanism	at the left end
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
• with degree of pollution 3 / at DC / rated value	440 V / 3
insulation voltage	
• rated value	1 000 V
surge voltage resistance / rated value	8 kV
Protection class	
protection class IP	IP20
protection class IP	
• with closed switch / with cover or cable lug cover	IP20

- on the front

IP20

Dissipation

power loss [W]

• with conventional rated thermal current / per pole	2.1 W
• with conventional rated thermal current / per device	6.3 W
• for rated value of the current / at AC / in hot operating state / per pole	2.1 W

Current

operational current

• at 35 °C / rated value	80 A
• at 40 °C / rated value	80 A
• at 45 °C / rated value	80 A
• at 50 °C / rated value	80 A
• at 55 °C / rated value	80 A
• at 60 °C / rated value	80 A
• at 65 °C / rated value	80 A
• at 70 °C / rated value	80 A
• at AC / rated value	80 A
• at AC-23 A / at 690 V / rated value	80 A
• at AC-23 A / at 500 V / rated value	80 A
• at AC-23 A / at 400 V / rated value	80 A
• at AC-22 A / at 1000 V / maximum	80 A
• at AC-22 A / at 690 V / rated value	80 A
• at AC-22 A / at 500 V / rated value	80 A
• at AC-22 A / at 400 V / rated value	80 A
• at AC-20 A / at 1000 V / maximum	80 A
• at AC-21 A / at 500 V / rated value	80 A
• at AC-21 A / at 690 V / rated value	80 A
• at DC-20 A / at 1000 V / maximum	80 A / 1
• at DC-23 A / at 440 V / rated value / note	80 A / 3
• at DC-23 A / at 220 V / rated value / note	80 A / 2
• at DC-22 A / at 440 V / rated value / note	80 A / 3
• at DC-22 A / at 220 V / rated value / note	80 A / 2
• at DC-21 A / at 440 V / rated value / note	80 A / 3
• at DC-21 A / at 220 V / rated value	80 A / 2

continuous current / of upstream fuse / at 500 V and 690 V / rated value 100 A

continuous current / of upstream fuse / at 1000 V / rated value 100 A

continuous current / of upstream molded case circuit breaker / at 415 V / rated value 100 A

operational current / at DC / rated value 80 A

let-through current / of the fuse / at 500 V / maximum permissible 12 500 A

let-through current / of the gG fuse / at 690 V / maximum permissible 14 700 A

let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible 4 700 A

let-through current / of the molded case circuit breaker / at 415 V / maximum permissible 20 000 A

Main circuit

operating power

• at AC-23 A / at 500 V / rated value	55 kW
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operational current / rated value 80 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
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• switch disconnecter • EMERGENCY OFF switch • safety switch • maintenance/repair switch	Yes Yes Yes Yes
Product details	
product component	
• trip indicator • voltage trigger • undervoltage release • undervoltage release with leading contact	No No No No
product extension / auxiliary switch	Yes
product extension / optional	
• motor drive • voltage trigger	No No
Short circuit	
short-time withstand current (I _{cw}) / at 1000 V AC/440 V DC / limited to 1 s / rated value	3 kA
short-circuit current making capacity (I _{cm}) / for switch disconnecter	
• at 1000 V AC / without fuse link / rated value / minimum • at DC 440 V / without fuse link / rated value / minimum	7 kA 7 kA
conditional short-circuit current / with line-side fuse protection	
• at 415 V / by molded case circuit breaker / rated value • at 500 V / by gG fuse / rated value • at 690 V / by gG fuse / rated value	36 kA 100 kA 100 kA
Connections	
type of connectable conductor cross-sections / with flexible busbar	2x (0,8x9 mm ²)
type of connectable conductor cross-sections	
• for copper busbar	'1 x (2 x 9 mm ²)
type of connectable conductor cross-sections / for copper conductor	
• solid • finely stranded / with core end processing • stranded	1x (1 ... 16 mm ²) 1x (1 ... 35 mm ²) 1x (6 ... 35 mm ²)
type of electrical connection / for main current circuit	box terminal
Mechanical Design	
height	119 mm
width	94 mm
depth	68 mm
fastening method	Screw fixing and standard rail mounting 35 mm
fastening method	
• 4-hole front mounting • front mounting with central attachment • rail mounting	No No Yes
mounting position	any
net weight	788 g
Environmental conditions	
ambient temperature / during operation	
• minimum • maximum	-25 °C 70 °C
ambient temperature / during storage	
• minimum • maximum	-50 °C 80 °C
Certificates	
reference code / according to IEC 81346-2	Q
General Product Approval	
Declaration of Conformity	

[Confirmation](#)



[Miscellaneous](#)



Declaration of
Conformity

Marine / Shipping

other



[Environmental Con-
firmations](#)

[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=3KD2830-2ME10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD2830-2ME10-0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

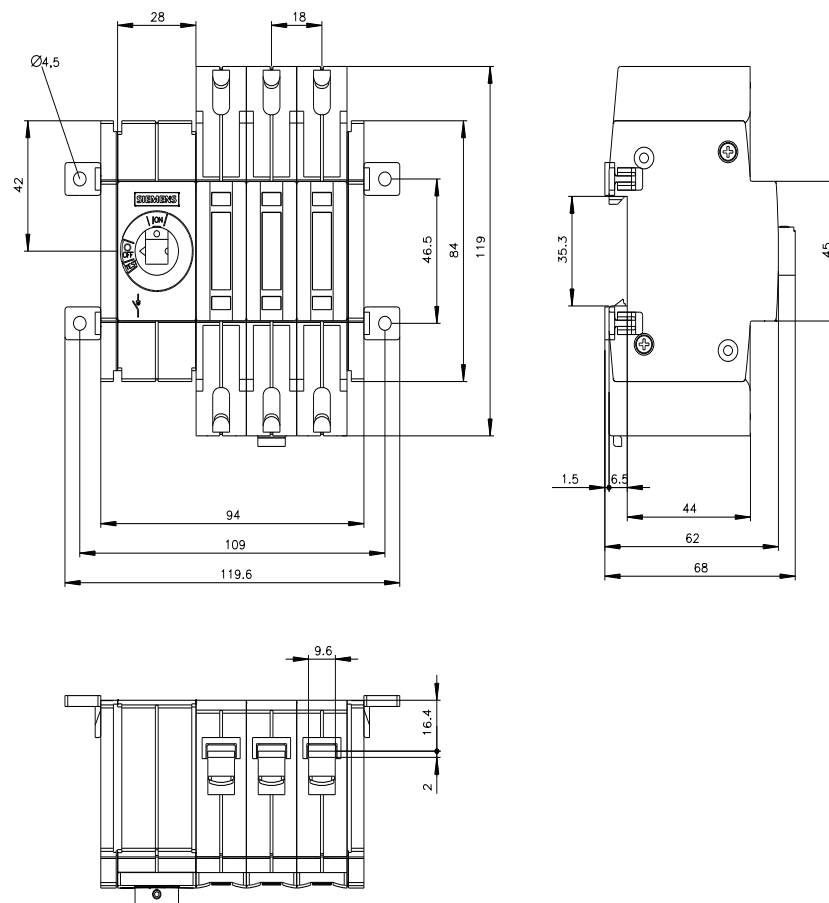
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD2830-2ME10-0

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>



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