SIEMENS

Data sheet 3KD2830-0NE10-0



Switch disconnector 80 A, Size 2, 3-pole Front operating mechanism left 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-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	2
mechanical service life (switching cycles) / typical	15 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 500
● at DC-23 A / at 440 V	1 500
I2t value	
 with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum 	19 815 A ² ·s
 of the fuse / at 500 V / maximum permissible 	223 005 A ² ·s
 of the gG fuse / at 690 V / maximum permissible 	226 005 A ² ·s
 of the gG/aM SITOR fuse / at 1000 V / maximum permissible 	48 000 A ² ·s
 of the molded case circuit breaker / at 415 V / maximum permissible 	1 750 000 A²·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	IP00

protection class IP	
 with closed switch / with cover or cable lug cover 	IP20
on the front	IP00
Dissipation	
power loss [W]	
 with conventional rated thermal current / per pole 	1.1 W
 with conventional rated thermal current / per device 	3.3 W
for rated value of the current / at AC / in hot	1.1 W
operating state / per pole	
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
at DC-21 B / at 750 V / rated value / maximum	80 A / 3
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
operational current / at DC / rated value	80 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
short-time withstand current (lcw)	
• at 400 V AC / limited to 0.15 s / rated value	15 kA
Main circuit	
operating power	
• at AC-23 A / at 500 V / rated value	55 kW
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
 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
product extension / optional	
• motor drive	No
 voltage trigger 	No
Short circuit	
short-time withstand current (lcw) / at 1000 V AC/440 V DC / limited to 1 s / rated value	4 kA
short-circuit current making capacity (lcm) / for switch disconnector	
 at 400 V AC / without fuse link / rated value / minimum 	30 kA
 at 1000 V AC / without fuse link / rated value / minimum 	12 kA
 at DC 440 V / without fuse link / rated value / minimum 	12 kA
 without fuse link / rated value / minimum 	12 kA
conditional short-circuit current / with line-side fuse protection	
 at 415 V / by molded case circuit breaker / rated value 	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 connectable conductor cross-sections / for aluminum conductor	
stranded / with lug	1x (10 70 mm²)
type of connectable conductor cross-sections	
for copper busbar	'1x (20x3 mm²)
type of connectable conductor cross-sections / for copper conductor	
stranded / with lug / acc. to DIN 46235	1x (25 70 mm²), 2x (25 50 mm²)
type of electrical connection / for main current circuit	flat connector
Mechanical Design	
height	168 mm
width	121 mm
depth	68 mm
fastening method	Screw fixing and standard rail mounting 35 mm
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	No
rail mounting	Yes
mounting position	any

net weight	1 049 g		
Environmental conditions			
ambient temperature / during operation			
• minimum	-25 °C		
maximum	70 °C		
ambient temperature / during storage			
• minimum	-50 °C		
maximum	80 °C		
General Product Approval	Declaration of Conformity		





Miscellaneous



UK Declaration of Conformity



Marine / Shipping

other





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=3KD2830-0NE10-0

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

https://support.industry.siemens.com/cs/ww/en/ps/3KD2830-0NE10-0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD2830-0NE10-0

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications



