SIEMENS

Data sheet 3KD2830-2NE10-0

Switch disconnector 80 A, Size 2, 3-pole Front operating mechanism 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 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	1 500
• I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	19 815 A²·s

• I2t value / of the fuse / at 500 V / maximum permissible	223 005 A²·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	226 005 A²·s
• I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	48 000 A²·s
• I2t value / of the molded case circuit breaker / at 415 V / maximum permissible	560 000 A²·s
mechanical service life (switching cycles) / typical	15 000
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

Supply voltage	
operating current / at AC / rated value	80 A
operating voltage	
• at AC / at 50/60 Hz / rated value	1 000 V

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	1.1 W
• with conventional rated thermal current / per device	3.3 W
• for rated value of the current / at AC / in hot operating state / per pole	1.1 W

Current	
• operating current / at AC-23 A / at 690 V / rated value	80 A

• operating current / at AC-23 A / at 500 V / rated value	80 A
• operating current / at AC-23 A / at 400 V / rated value	80 A
• operating current / at AC-22 A / at 690 V / rated value	80 A
• operating current / at AC-22 A / at 500 V / rated value	80 A
• operating current / at AC-22 A / at 400 V / rated value	80 A
• operating current / at AC-20 A / at 1000 V / maximum	80 A
• operating current / at AC-21 A / at 400 V / rated value	80 A
• operating current / at AC-21 A / at 500 V / rated value	80 A
• operating current / at AC-21 A / at 690 V / rated value	80 A
• operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at DC-20 A / at 1000 V / maximum	80 A / 1
• operating current / at DC-23 A / at 440 V / rated value / note	80 A / 3
• operating current / at DC-23 A / at 220 V / rated value / note	80 A / 2
• operating current / at DC-22 A / at 440 V / rated value / note	80 A / 3
• operating current / at DC-22 A / at 220 V / rated value / note	80 A / 2
• operating current / at DC-21 A / at 440 V / rated value / note	80 A / 3
• operating current / at DC-21 A / at 220 V / rated value	80 A / 2
continuous current	

• 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
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	160 A
operating 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	22 500 A
short-time withstand current (Icw)	
• at 400 V AC / limited to 0.15 s / rated value	15 kA

Main circuit	
operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	45 kW
• at AC-23 A / at 500 V / rated value	55 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	75 kW
operating 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 (Icw) / at AC 1000 V/DC 440 V / limited to 1 s / rated value	4 kA
short-circuit current making capacity (Icm)	
• for switch disconnector / at 400 V AC / without fuse link / rated value / minimum	30 kA
• for switch disconnector / at 1000 V AC / without fuse link / rated value / minimum	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	
• 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 copper busbar	'1 x (3 x 14 mm²)
type of connectable conductor cross-sections / for copper conductor	
• solid	1x (2.5 ... 16 mm²)

• finely stranded / with core end processing	1x (2.5 ... 70 mm²)
• stranded	1x (10 ... 70 mm²)
type of electrical connection	
• for main current circuit	box terminal

Mechanical Design

height	126 mm
width	121 mm
depth	68 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	1 145 g

Environmental conditions

ambient temperature / during operation	
• minimum	-25 °C
• maximum	70 °C
ambient temperature / during storage	
• minimum	-50 °C
• maximum	80 °C

Certificates

reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

General Product Approval			Declaration of Conformity	Shipping Approval	other
CCC	VDE	Miscellaneous	EG-Konf.	LRS	Miscellaneous

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/lowvoltage/catalogs

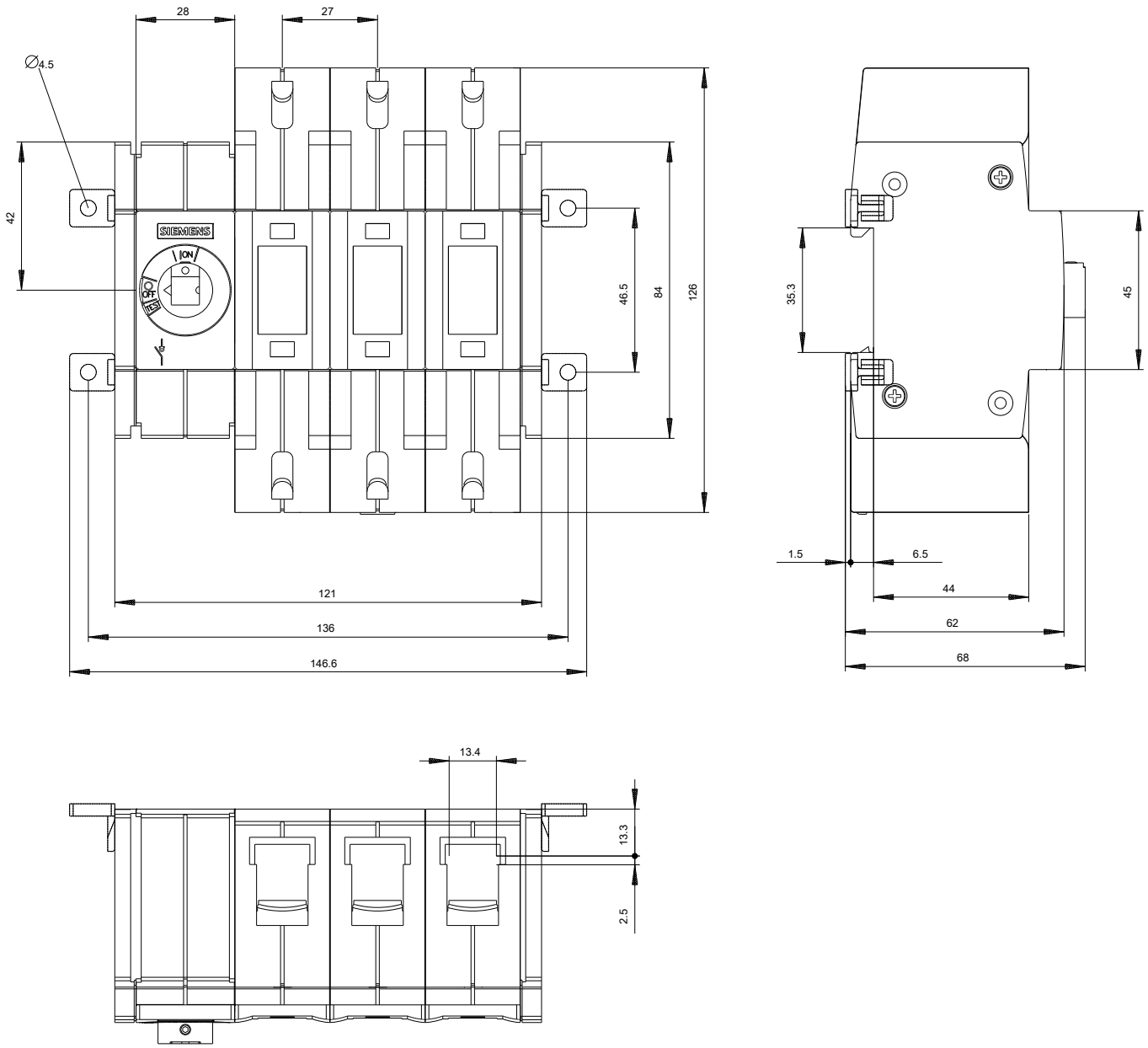
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3KD2830-2NE10-0

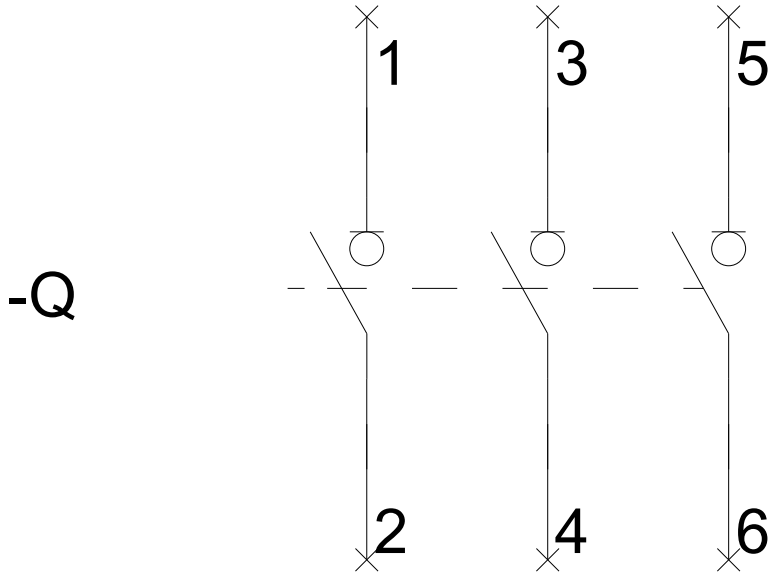
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3KD2830-2NE10-0

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

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications





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