

SWITCH-DISCONNECTOR 250A, FRAME SIZE 2, 3-POLE FRONT
OPERATING LEFT BASIC UNIT WITHOUT HANDLE FLAT
TERMINAL INCL. PHASE BARRIERS



Model	
product brand name	SETRON
product designation	3KD switch disconnecter
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 disconnecter	2
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 500
• at DC-23 A / at 440 V	1 000
• I _{2t} value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	19 815 A ² ·s

• I2t value / of the fuse / at 500 V / maximum permissible	780 000 A ² ·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	525 000 A ² ·s
• I2t value / of the aM fuse / at 690 V / maximum permissible	565 000 A ² ·s
• I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	48 000 A ² ·s
• I2t value / of the molded case circuit breaker / at 415 V / maximum permissible	1 750 000 A ² ·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	250 A
operating voltage	
• at AC / at 50/60 Hz / rated value	1 000 V

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	8.2 W
• with conventional rated thermal current / per device	24.6 W
• for rated value of the current / at AC / in hot operating state / per pole	8.2 W

Current

• operating current / at AC-23 A / at 690 V / rated value	160 A
• operating current / at AC-23 A / at 500 V / rated value	160 A
• operating current / at AC-23 A / at 400 V / rated value	160 A
• operating current / at AC-22 A / at 690 V / rated value	200 A
• operating current / at AC-22 A / at 500 V / rated value	200 A
• operating current / at AC-22 A / at 400 V / rated value	250 A
• operating current / at AC-20 A / at 1000 V / maximum	200 A
• operating current / at AC-21 A / at 400 V / rated value	250 A
• operating current / at AC-21 A / at 500 V / rated value	200 A
• operating current / at AC-21 A / at 690 V / rated value	200 A
• operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	160 A
• operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	200 A
• operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	250 A
• operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	200 A
• operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	160 A
• operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	160 A
• operating current / at DC-20 A / at 1000 V / maximum	250 A / 1
• operating current / at DC-23 A / at 440 V / rated value / note	160 A / 3
• operating current / at DC-23 A / at 220 V / rated value / note	160 A / 2
• operating current / at DC-22 A / at 440 V / rated value / note	160 A / 3
• operating current / at DC-22 A / at 220 V / rated value / note	160 A / 2
• operating current / at DC-21 A / at 440 V / rated value / note	160 A / 3

operating current / at DC-21 A / at 220 V / rated value	160 A / 2
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	238 A
at 65 °C / rated value	225 A
at 70 °C / rated value	213 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	250 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 (I _{cw})	
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	90 kW
at AC-23 A / at 500 V / rated value	110 kW
at AC-23 A / at 690 V / at 50/60 Hz / rated value	110 kW
operating current / rated value	250 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 disconnecter	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 (I _{cw}) / at AC 1000 V/DC 440 V / limited to 1 s / rated value	4 kA
short-circuit current making capacity (I _{cm})	
• for switch disconnecter / at 400 V AC / without fuse link / rated value / minimum	30 kA
• for switch disconnecter / at 1000 V AC / without fuse link / rated value / minimum	12 kA
• for switch disconnecter / at DC 440 V / 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 mm ²)
type of connectable conductor cross-sections	
• for copper busbar	1x (20x4 mm ²)

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	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
mounting position	any
net weight	1 052 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
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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=3KD3830-0NE10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3830-0NE10-0>

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

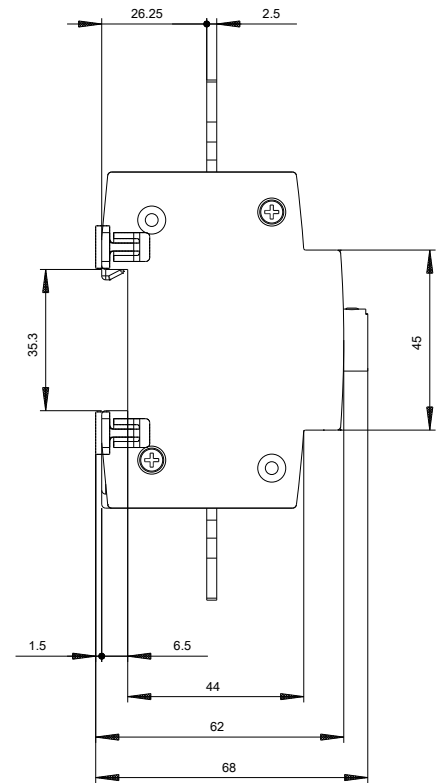
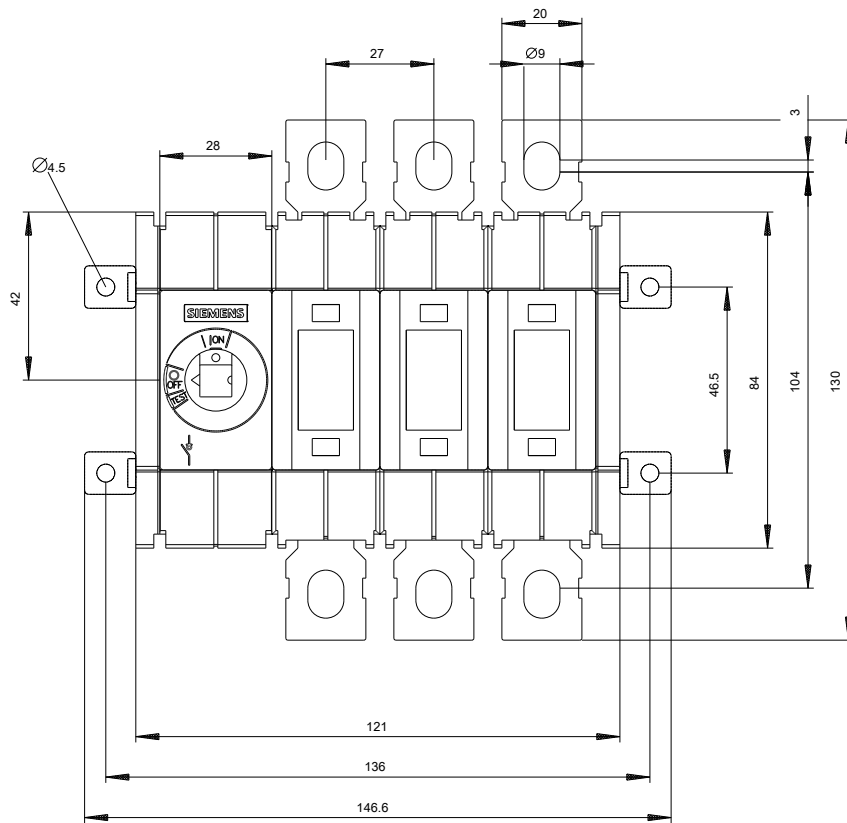
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3830-0NE10-0

CAX-Online-Generator

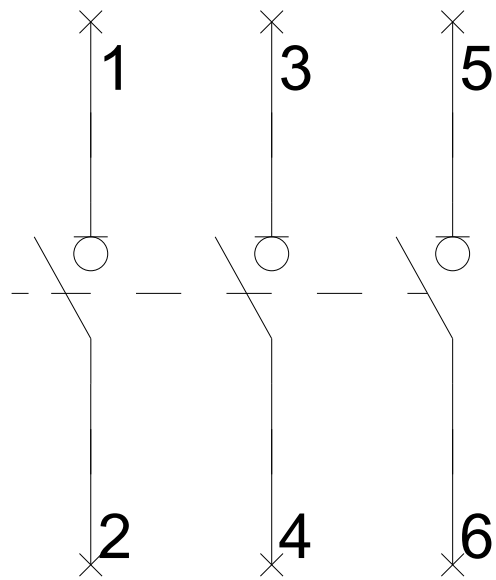
<http://www.siemens.com/cax>

Tender specifications

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



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