

SWITCH-DISCONNECTOR 500A, FRAME SIZE 3, 3-POLE FRONT OPERATING CENTER BASIC UNIT WITHOUT HANDLE FLAT TERMINAL



Model	
product brand name	SENTRON
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 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 disconnecter	3
mechanical service life (operating cycles) typical	15 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	1 000
• at DC-23 A at 440 V	1 000
I2t value	
• with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum	239 650 A²·s
• of the fuse at 500 V maximum permissible	2 700 000 A²·s
• of the gG fuse at 690 V maximum permissible	2 500 000 A²·s
• of the gG/aM SITOR fuse at 1000 V maximum permissible	260 000 A²·s
• of the molded case circuit breaker at 415 V maximum permissible	4 750 000 A²·s
position of the switch operating mechanism	after the first pole
overvoltage in percent relative to the operating voltage at AC at 400, 500, 690 V at 50/60 Hz	10 %
overvoltage category	IV
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	12 kV
operational current at AC-22 A at 1000 V maximum	400 A
Protection class	
protection class IP	IP00
protection class IP	

• with closed switch with cover or cable lug cover • on the front	IP20 IP00
Dissipation	
power loss [W]	
• with conventional rated thermal current per pole • with conventional rated thermal current per device • for rated value of the current at AC in hot operating state per pole	17.2 W 51.6 W 17.2 W
Main circuit	
operating power	
• at AC-23 A at 500 V rated value	250 kW
operational current rated value	400 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	0
number of NC contacts for auxiliary contacts	6
number of NO contacts for auxiliary contacts	6
Suitability	
suitability for use	
• main switch • switch disconnecter • EMERGENCY OFF switch • safety switch • maintenance/repair switch	Yes 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	13 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 • without fuse link rated value minimum	36 kA 36 kA 36 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	65 kA 100 kA 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 busbar	'1 x (30 x 10 mm²)
type of connectable conductor cross-sections for copper conductor	
• stranded with lug according to DIN 46234 • stranded with lug according to DIN 46235	1x (6 ... 240 mm²), 2x (6 ... 150 mm²) 1x (16 ... 185 mm²), 2x (16 ... 150 mm²)
type of electrical connection for main current circuit	flat connector
Mechanical Design	
height	164 mm
width	190 mm

depth	94 mm
fastening method	screw fixing
fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	No
• rail mounting	No
mounting position	any
net weight	2 894 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 according to IEC 81346-2	Q
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Approvals Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Test Certificates	Marine / Shipping	other	Environment
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[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

[Confirmation](#)

[Environmental Confirmations](#)

Environment

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3KD4430-0PE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD4430-0PE20-0>

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

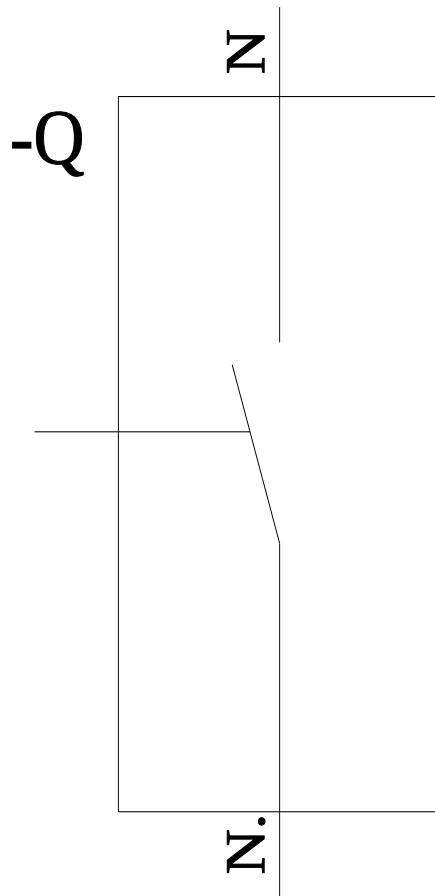
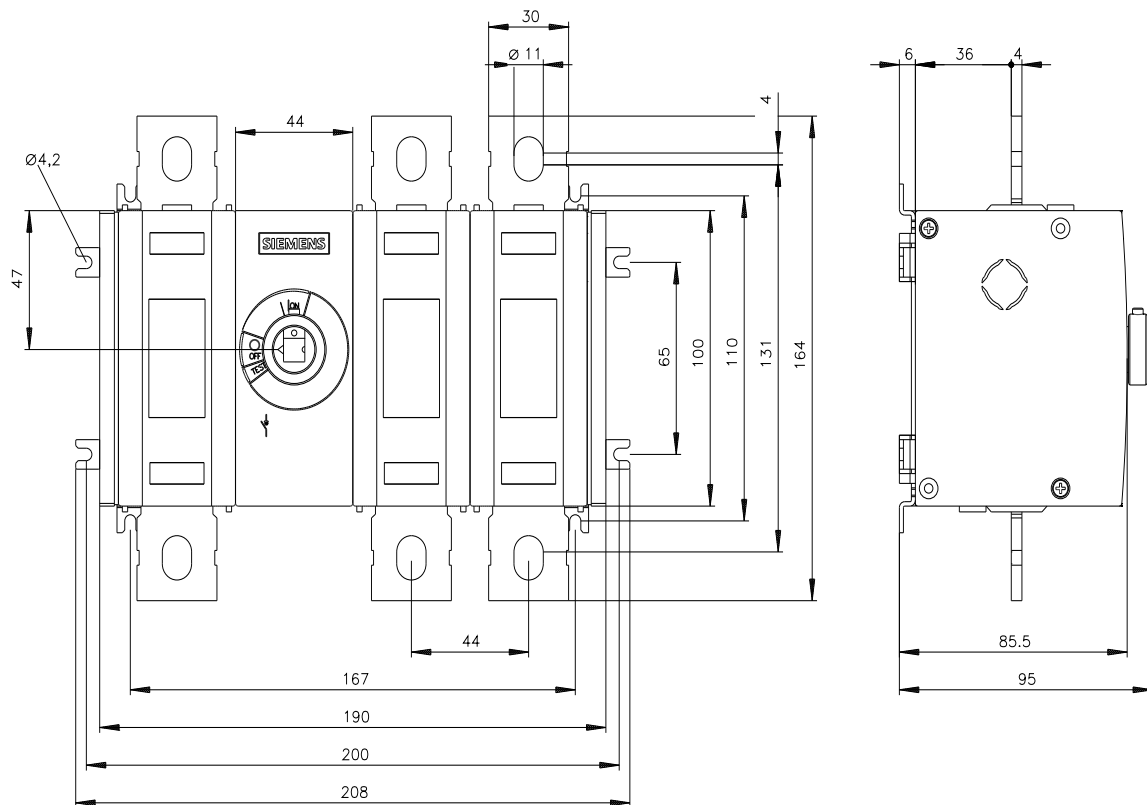
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD4430-0PE20-0

CAX-Online-Generator

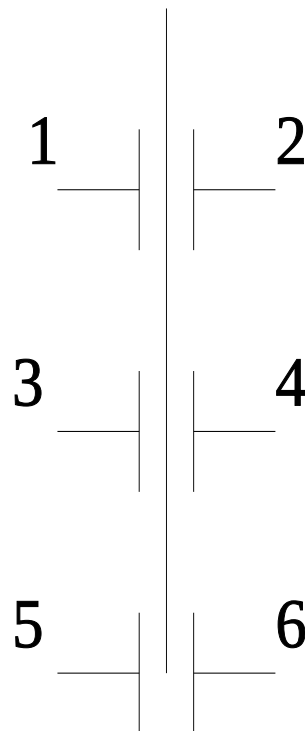
<http://www.siemens.com/cax>

Tender specifications

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



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