

SWITCH-DISCONNECTOR 500A, FRAME SIZE 3, 3-POLE
LATERAL DRIVE RIGHT BASIC UNIT WITHOUT HANDLE FLAT
TERMINAL



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	Side 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
Electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 000
• at DC-23 A / at 440 V	1 000
• I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum	3 580 000 A²·s

• I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum	3 580 000 A ² ·s
• I2t value / with closed switch / at 415 V / for combination switch +molded case circuit breaker / maximum	2 195 000 A ² ·s
• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	2 010 000 A ² ·s
• I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum	239 650 A ² ·s
• I2t value / of the fuse / at 500 V / maximum permissible	2 700 000 A ² ·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	2 500 000 A ² ·s
• I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	260 000 A ² ·s
• I2t value / of the molded case circuit breaker / at 415 V / maximum permissible	4 750 000 A ² ·s
circuit-breaker / Design	3KD4
Mechanical service life (switching cycles) / typical	15 000
Position / of the switch operating mechanism	at the right end
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
Insulation voltage • rated value	1 000 V
Surge voltage resistance / rated value	12 kV
Current / at AC / rated value	500 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 • on the front	IP20 IP00

Dissipation

Power loss [W]	
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• with conventional rated thermal current / per pole	17.2 W
• with conventional rated thermal current / per device	51.6 W
• for rated value of the current / at AC / in hot operating state / per pole	17.2 W

Current

Operating current

• at AC-23 A / at 690 V / rated value	400 A
• at AC-23 A / at 500 V / rated value	400 A
• at AC-23 A / at 400 V / rated value	400 A
• at AC-22 A / at 690 V / rated value	400 A
• at AC-22 A / at 500 V / rated value	400 A
• at AC-22 A / at 400 V / rated value	500 A
• at AC-20 A / at 1000 V / maximum	500 A
• at AC-21 A / at 400 V / rated value	500 A
• at AC-21 A / at 500 V / rated value	400 A
• at AC-21 A / at 690 V / rated value	400 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	500 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	400 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	400 A
• at 45 °C / rated value	500 A

Continuous current

• rated value	400 A
• at 40 °C / rated value	500 A
• at 45 °C / rated value	500 A
• at 50 °C / rated value	500 A
• at 55 °C / rated value	500 A
• at 60 °C / rated value	500 A
• at 65 °C / rated value	500 A
• at 70 °C / rated value	475 A

Continuous current / of upstream fuse / at 500 V and 690 V / rated value	500 A
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Continuous current / of upstream fuse / at 1000 V / rated value	500 A
Continuous current / of upstream molded case circuit breaker / at 415 V / rated value	630 A
Operating current / at DC / rated value	500 A
Let-through current / of the fuse / at 500 V / maximum permissible	54 800 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	45 200 A
Let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	21 500 A
Let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	43 500 A
Let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	42 300 A
• at 415 V / for combination switch +molded case circuit breaker / maximum permissible	36 150 A
• at 1000 V / for combination switch +gG/aM SITOR fuse / maximum permissible	20 215 A
• for combination switch + fuse / at 400 V / maximum permissible	49 000 A
• for combination switch + fuse / at 500 V / maximum permissible	49 000 A

Main circuit

Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	200 kW
• at AC-23 A / at 500 V / rated value	250 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	400 kW
Operating 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	Yes
• switch disconnecter	Yes

- EMERGENCY OFF switch
- safety switch
- maintenance/repair switch

No
Yes
Yes

Product details

Product feature / interlock	No
Product component	
• Trip indicator	No
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No

Short circuit

Short-time withstand current (I _{cw}) / at AC 1000 V/DC 440 V / limited to 1 s / rated value	13 kA
Short-circuit current making capacity (I _{cm})	
• for switch disconnector / at 1000 V AC / without fuse link / rated value / minimum	36 kA
• for switch disconnector / at DC 440 V / without fuse link / rated value / minimum	36 kA
• for switch disconnector / without fuse link / rated value / minimum	36 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 electrical connection	
• for main current circuit	flat connector

Mechanical Design

Height	164 mm
Width	198.5 mm
Depth	95 mm
Mounting type	screw fixing
Mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	No
Mounting position	any
Net weight	2 949 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	 EG-Konf.	 LRS	 VDE

[Miscellaneous](#)

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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=3KD4434-0PE40-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD4434-0PE40-0>

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

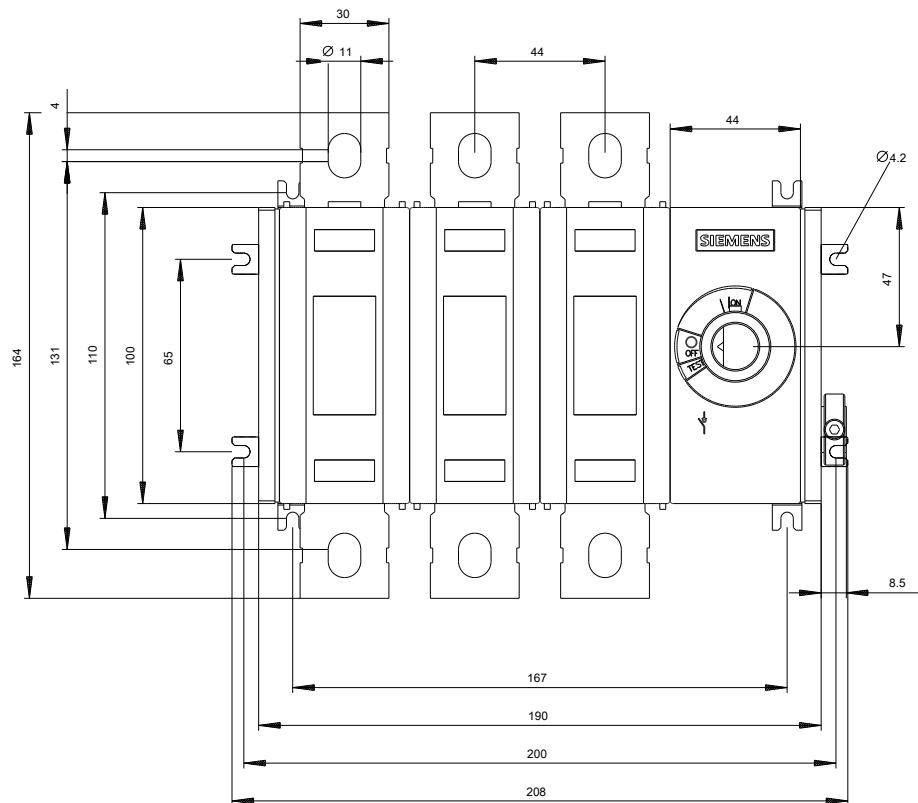
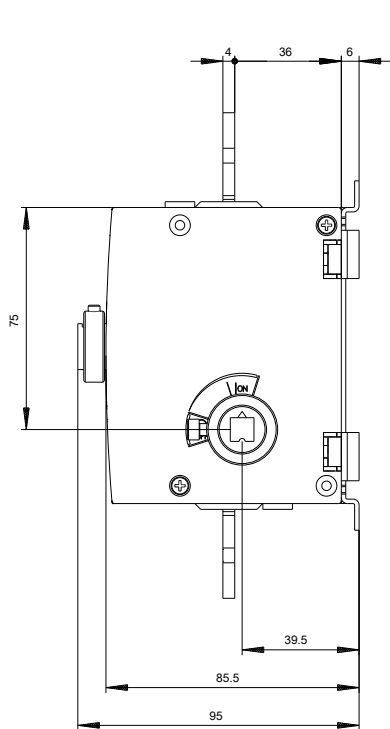
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD4434-0PE40-0

CAX-Online-Generator

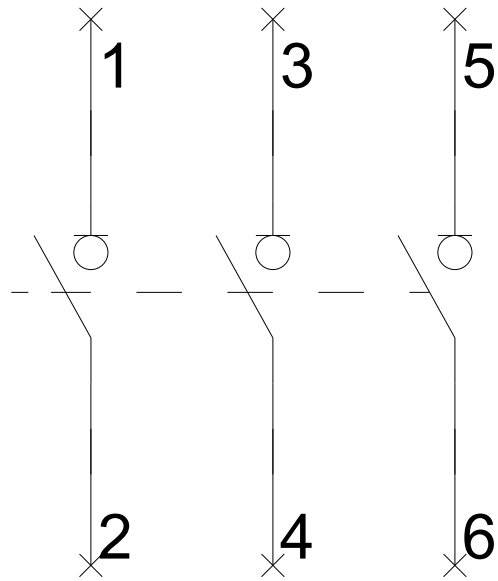
<http://www.siemens.com/cax>

Tender specifications

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



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