

Switch disconnecter 100 A, Size 2, 4-pole Front operating mechanism center 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	4
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	1 500
• I2t value / with closed switch / for combination switch + fuse / at 500 V / maximum	548 000 A²·s

<ul style="list-style-type: none"> • I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum 	548 000 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 415 V / for combination switch +molded case circuit breaker / maximum 	1 055 000 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum 	376 000 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 690 V / for combination switch + aM fuse / maximum 	596 500 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 1000 V / for combination switch +gG/aM SITOR fuse / maximum 	19 815 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the fuse / at 500 V / maximum permissible 	223 005 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the gG fuse / at 690 V / maximum permissible 	226 005 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible 	48 000 A ² ·s
<ul style="list-style-type: none"> • 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	after the second pole
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	
<ul style="list-style-type: none"> • with degree of pollution 2 / at DC / rated value 	440 V / 3
<ul style="list-style-type: none"> • with degree of pollution 3 / at DC / rated value 	440 V / 3
Insulation voltage	
<ul style="list-style-type: none"> • rated value 	1 000 V
Surge voltage resistance / rated value	8 kV

Supply voltage

Operating current / at AC / rated value	100 A
Operating voltage	
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value 	1 000 V

Protection class

Protection class IP	IP00
Protection class IP	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP20
<ul style="list-style-type: none"> • on the front 	IP00

Dissipation

Power loss [W]	
• with conventional rated thermal current / per pole	1.8 W
• with conventional rated thermal current / per device	7.2 W
• for rated value of the current / at AC / in hot operating state / per pole	1.8 W

Current

Operating current	
• at AC-23 A / at 690 V / rated value	100 A
• at AC-23 A / at 500 V / rated value	100 A
• at AC-23 A / at 400 V / rated value	100 A
• at AC-22 A / at 690 V / rated value	100 A
• at AC-22 A / at 500 V / rated value	100 A
• at AC-22 A / at 400 V / rated value	100 A
• at AC-20 A / at 1000 V / maximum	100 A
• at AC-21 A / at 400 V / rated value	100 A
• at AC-21 A / at 500 V / rated value	100 A
• at AC-21 A / at 690 V / rated value	100 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	100 A
• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	100 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	100 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	100 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	100 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	100 A
Continuous current	
• rated value	100 A
• at 40 °C / rated value	100 A
• at 45 °C / rated value	100 A
• at 50 °C / rated value	100 A
• at 55 °C / rated value	100 A
• at 60 °C / rated value	100 A
• at 65 °C / rated value	100 A
• at 70 °C / rated value	100 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	100 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
let-through current / with closed switch <ul style="list-style-type: none"> • at 690 V / for combination switch + aM fuse / maximum permissible • at 690 V / for combination switch + gG fuse / maximum permissible • at 415 V / for combination switch +molded case circuit breaker / maximum permissible • at 1000 V / for combination switch +gG/aM SITOR fuse / maximum permissible • for combination switch + fuse / at 400 V / maximum permissible • for combination switch + fuse / at 500 V / maximum permissible 	17 600 A 23 700 A 21 700 A 10 795 A 27 700 A 27 700 A
Short-time withstand current (I _{cw}) <ul style="list-style-type: none"> • at 400 V AC / limited to 0.15 s / rated value 	15 kA

Main circuit

Operating power <ul style="list-style-type: none"> • at AC-23 A / at 400 V / at 50/60 Hz / rated value • at AC-23 A / at 500 V / rated value • at AC-23 A / at 690 V / at 50/60 Hz / rated value 	55 kW 55 kW 90 kW
Operating current / rated value	100 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
• for switch disconnecter / 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 mm ²)
Type of connectable conductor cross-sections / for copper conductor	
• stranded / with lug / acc. to DIN 46235	1x (25 ... 70 mm ²), 2x (25 ... 50 mm ²)
Type of electrical connection	
• for main current circuit	flat connector

Mechanical Design

Height	168 mm
Width	148 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	1 311 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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[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=3KD3040-0NE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3040-0NE20-0>

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

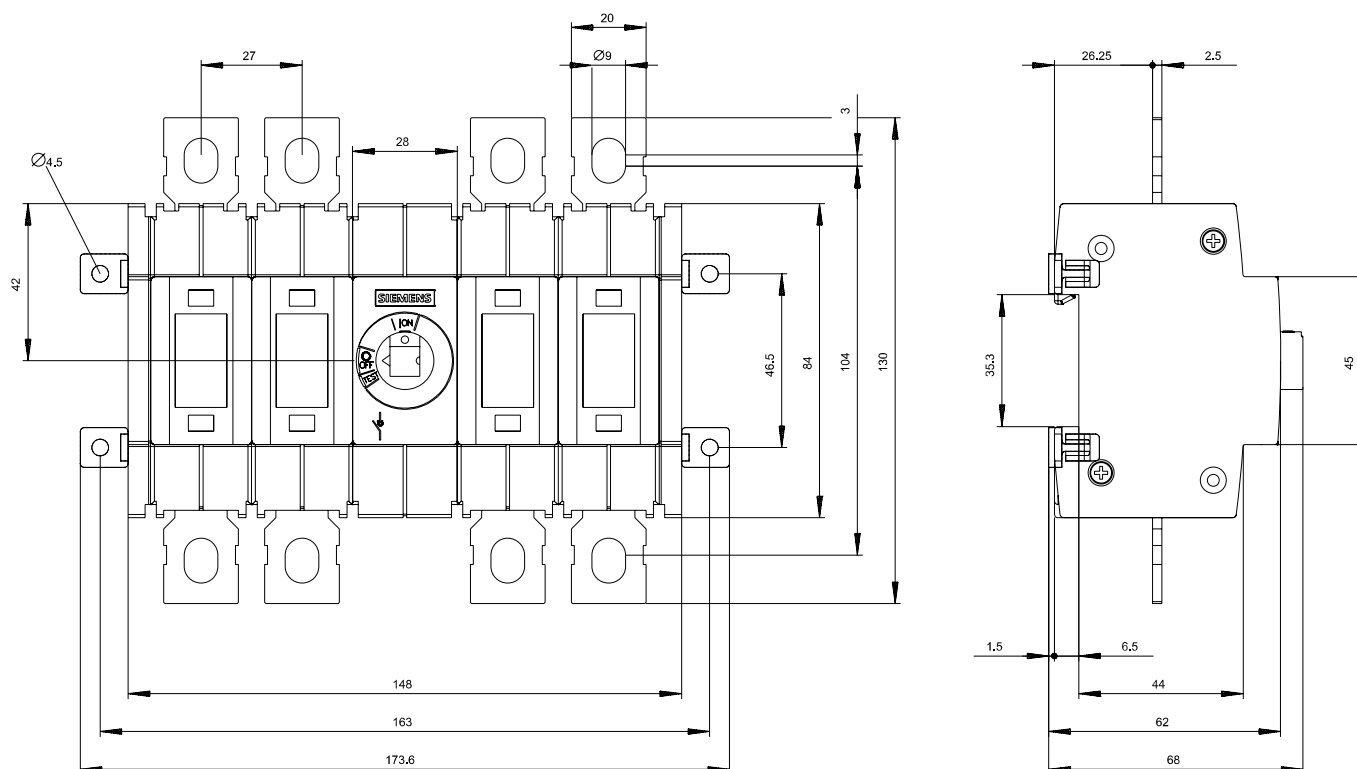
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3040-0NE20-0

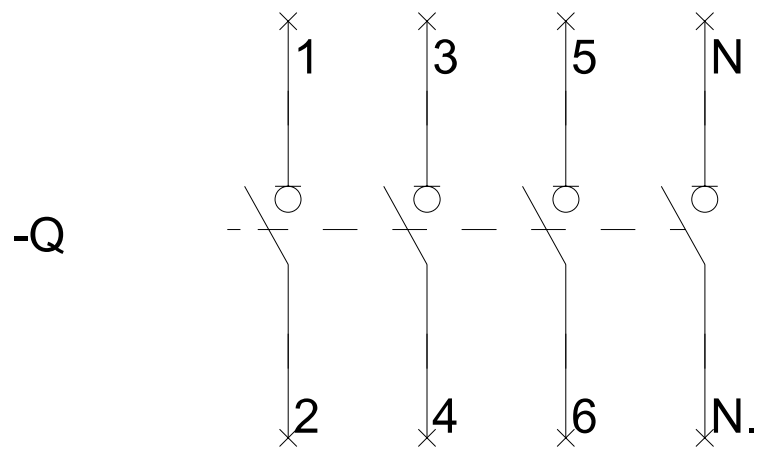
CAX-Online-Generator

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

Tender specifications

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





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