

Switch disconnecter 16A, Size 1, 4-pole Front operating mechanism
left Basic unit without handle Box 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 operating mechanism	Without handle
Type of the driving mechanism / motor drive	No
General technical data	
Number of poles	4
Type of device	fixed mounting
Size of switch disconnecter	1
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> at AC-23 A / at 690 V / at 50/60 Hz 	6 000
<ul style="list-style-type: none"> at DC-23 A / at 440 V 	1 500
<ul style="list-style-type: none"> I²t value / with closed switch / for combination switch + fuse / at 500 V / maximum 	13 300 A ² ·s
<ul style="list-style-type: none"> I²t value / with closed switch / for combination switch + fuse / at 400 V / maximum 	13 300 A ² ·s

• I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum	13 700 A ² ·s
• I2t value / of the fuse / at 500 V / maximum permissible	26 505 A ² ·s
• I2t value / of the gG fuse / at 690 V / maximum permissible	24 005 A ² ·s
circuit-breaker / Design	3KD1
Mechanical service life (switching cycles) / typical	15 000
Position / of the switch operating mechanism	at the left end
Overvoltage category	III

Voltage

Operating voltage / with current paths in series	
• with degree of pollution 2 / at DC / rated value / Note	440 V / 3
• with degree of pollution 3 / at DC / rated value / Note	440 / 3
Insulation voltage	
• rated value	1 000 V
Surge voltage resistance / rated value	8 kV
Overvoltage in percent / relative to the operating voltage / at AC / at 50/60 Hz	10 %

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	0.1 W
• with conventional rated thermal current / per device	0.4 W
• for rated value of the current / at AC / in hot operating state / per pole	0.1 W

Electricity

Operating current	
• at AC-21 A / at 400 V / maximum	16 A
• at AC-21 A / at 500 V / maximum	16 A
• at AC-21 A / at 690 V / maximum	16 A
• at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	16 A

• at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	16 A
• at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	16 A
Current / at AC / rated value	16 A
Continuous current	
• rated value	16 A
• at 40 °C / rated value	16 A
• at 45 °C / rated value	16 A
• at 50 °C / rated value	16 A
• at 55 °C / rated value	16 A
• at 60 °C / rated value	16 A
• at 65 °C / rated value	16 A
• at 70 °C / rated value	16 A
Continuous current / at DC / rated value	16 A
Let-through current / of the fuse / at 500 V / maximum permissible	8 135 A
Let-through current / of the gG fuse / at 690 V / maximum permissible	8 805 A
Let-through current / with closed switch	
• at 690 V / for combination switch + gG fuse / maximum permissible	7 500 A
• for combination switch + fuse / at 400 V / maximum permissible	7 000 A
• for combination switch + fuse / at 500 V / maximum permissible	7 000 A
Short-time current resistance (I _{cw})	
• at 690 V AC/440 V DC / limited to 1 s / rated value	3 kA
Main circuit	
Operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	7.5 kW
• at AC-23 A / at 500 V / at 50/60 Hz / rated value	7.5 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	11 kW
Operating voltage	
• at AC / at 50/60 Hz / rated value	690 V
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
• optional	
— motor drive	No
— Voltage trigger	No

Short circuit

Short-circuit current making capacity (I _{cm})	
• for switch disconnecter / at 690 V AC/440 V DC / without fuse link / rated value / minimum	7 kA
• for switch disconnecter / without fuse link / rated value / minimum	7 kA
Conditional short-circuit current / with line-side fuse protection	
• at 500 V / by gG fuse / rated value	100 kA


Connections

• Type of connectable conductor cross-sections / for copper conductor / solid	1x (1 ... 16 mm ²)
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<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper conductor / finely stranded / with core end processing 	1x (1 ... 35 mm ²)
<ul style="list-style-type: none"> • Type of connectable conductor cross-sections / for copper conductor / stranded 	1x (6 ... 35 mm ²)
Type of electrical connection <ul style="list-style-type: none"> • for main current circuit 	box terminal

Mechanical Design	
Height	119 mm
Width	112 mm
Depth	68 mm
Mounting position	any
Mounting type	Screw fixing and standard rail mounting 35 mm
Mounting type <ul style="list-style-type: none"> • front mounting with 4-hole attachment • front mounting with central attachment • rail mounting 	No No Yes
Net weight	770 g

Environmental conditions	
Degree of pollution	3
Ambient temperature <ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-25 °C 70 °C -50 °C 80 °C

Certificates	
Reference code <ul style="list-style-type: none"> • acc. to DIN EN 61346-2 • acc. to DIN EN 81346-2 	Q Q
Waste electronic equipment must not be disposed as unsorted municipal waste, e.g. household waste. For disposing the waste electronic equipment it is necessary to observe the current local national/international regulations. 	

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=3KD1640-2ME10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD1640-2ME10-0>

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

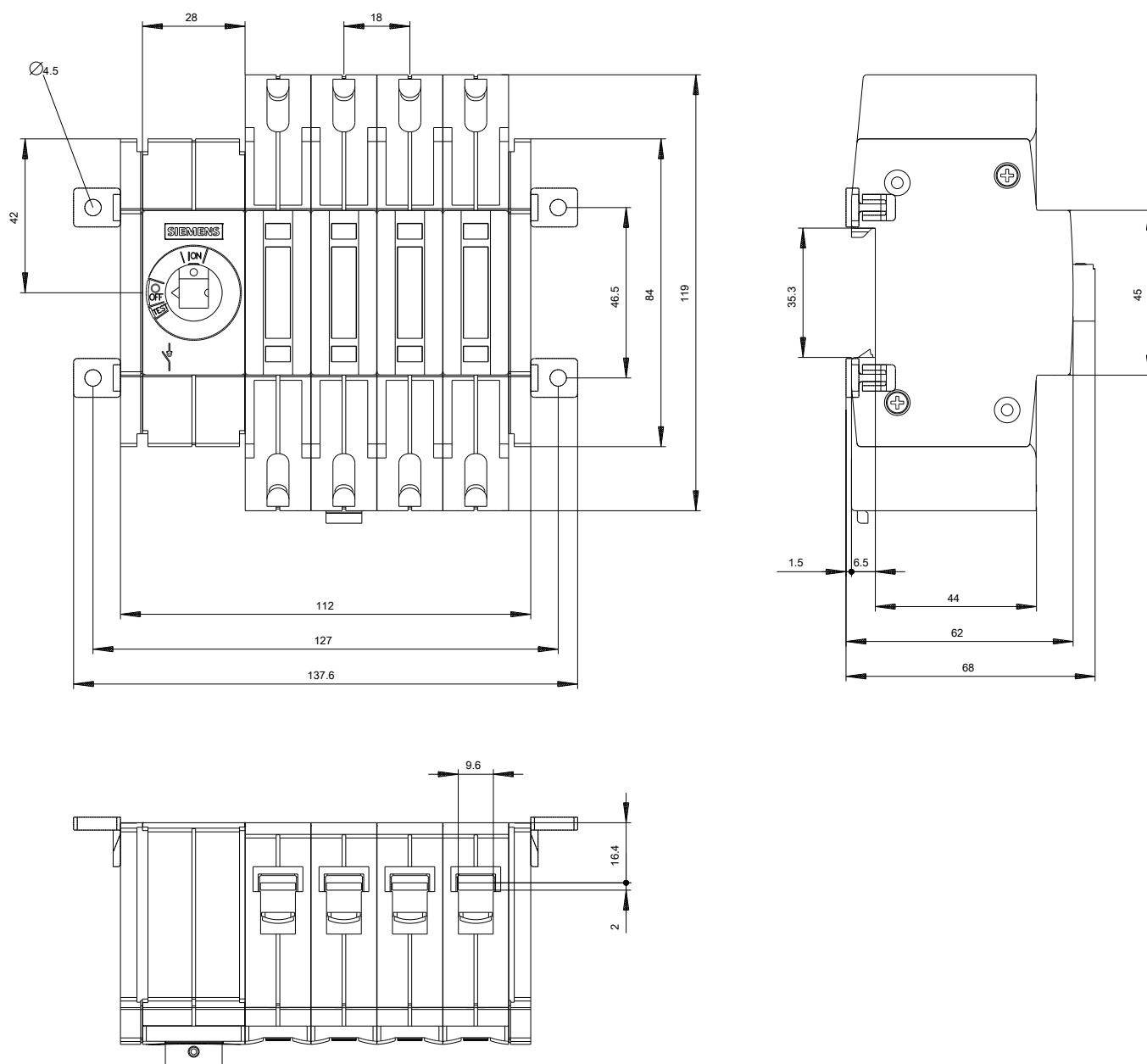
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD1640-2ME10-0

CAX-Online-Generator

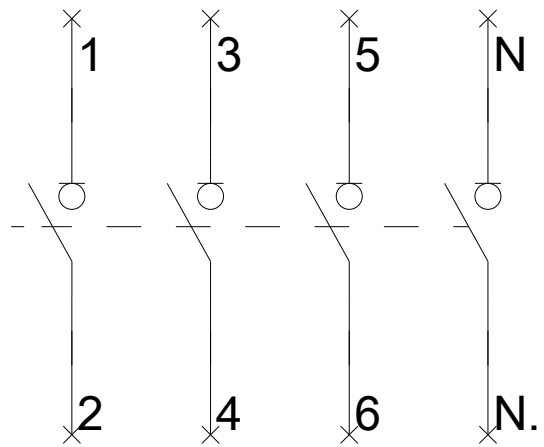
<http://www.siemens.com/cax>

Tender specifications

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



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