

Switch disconnecter 16A, Size 1, 4-pole Front operating mechanism
left Complete unit with direct operating mechanism gray Box terminal



Model	
Product brand name	SENTRON
Product designation	3KD switch disconnecter
Design of the product	Switch
Display version / for switch position indicator manual operation	ON-OFF-TEST
Design of the operating mechanism	Long rotary knob
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	1
Electrical endurance (switching cycles)	
<ul style="list-style-type: none"> • at AC-23 A / at 690 V • at DC-23 A / at 440 V • I²t value / with closed switch / for combination switch + fuse / at 500 V / maximum 	<p>6 000</p> <p>1 500</p> <p>34 100 A²·s</p>

<ul style="list-style-type: none"> • I2t value / with closed switch / for combination switch + fuse / at 400 V / maximum 	34 100 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 	187 000 A ² ·s
<ul style="list-style-type: none"> • I2t value / with closed switch / at 690 V / for combination switch + gG fuse / maximum 	41 190 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 	2 331 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the fuse / at 500 V / maximum permissible 	26 505 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the gG fuse / at 690 V / maximum permissible 	24 005 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the gG/aM SITOR fuse / at 1000 V / maximum permissible 	6 000 A ² ·s
<ul style="list-style-type: none"> • I2t value / of the molded case circuit breaker / at 415 V / maximum permissible 	480 000 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	
<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	16 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	IP20
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 	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

Current

Operating current	
• at AC-23 A / at 690 V / rated value	16 A
• at AC-23 A / at 500 V / rated value	16 A
• at AC-23 A / at 400 V / rated value	16 A
• at AC-22 A / at 690 V / rated value	16 A
• at AC-22 A / at 500 V / rated value	16 A
• at AC-22 A / at 400 V / rated value	16 A
• at AC-20 A / at 1000 V / maximum	16 A
• at AC-21 A / at 400 V / rated value	16 A
• at AC-21 A / at 500 V / rated value	16 A
• at AC-21 A / at 690 V / rated value	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
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 / of upstream fuse / at 500 V and 690 V / rated value	100 A
Continuous current / of upstream fuse / at 1000 V / rated value	100 A

Continuous current / of upstream molded case circuit breaker / at 415 V / rated value	100 A
Operating current / at DC / rated value	16 A
let-through current / of the fuse / at 500 V / maximum permissible	12 500 A
let-through current / of the gG fuse / at 690 V / maximum permissible	14 700 A
let-through current / of the gG/aM SITOR fuse / at 1000 V / maximum permissible	4 700 A
let-through current / of the molded case circuit breaker / at 415 V / maximum permissible	20 000 A
let-through current / with closed switch	
<ul style="list-style-type: none"> • at 690 V / for combination switch + gG fuse / maximum permissible 	11 500 A
<ul style="list-style-type: none"> • at 415 V / for combination switch +molded case circuit breaker / maximum permissible 	12 400 A
<ul style="list-style-type: none"> • at 1000 V / for combination switch +gG/aM SITOR fuse / maximum permissible 	5 057 A
<ul style="list-style-type: none"> • for combination switch + fuse / at 400 V / maximum permissible 	13 100 A
<ul style="list-style-type: none"> • for combination switch + fuse / at 500 V / maximum permissible 	13 100 A

Main circuit

Operating power	
<ul style="list-style-type: none"> • at AC-23 A / at 400 V / at 50/60 Hz / rated value 	7.5 kW
<ul style="list-style-type: none"> • at AC-23 A / at 500 V / rated value 	7.5 kW
<ul style="list-style-type: none"> • at AC-23 A / at 690 V / at 50/60 Hz / rated value 	11 kW
Operating current / rated value	16 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	
<ul style="list-style-type: none"> • Main switch 	Yes
<ul style="list-style-type: none"> • switch disconnecter 	Yes
<ul style="list-style-type: none"> • EMERGENCY OFF switch 	No

• safety switch	Yes
• maintenance/repair switch	Yes

Product details

Product feature / interlock	Yes
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	3 kA
Short-circuit current making capacity (I _{cm})	
• for switch disconnecter / at 1000 V AC / without fuse link / rated value / minimum	7 kA
• for switch disconnecter / at DC 440 V / 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 415 V / by molded case circuit breaker / rated value	36 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	
• with flexible busbar	2x (0,8x9 mm ²)
Type of connectable conductor cross-sections	
• for copper busbar	1 x (2 x 9 mm ²)
Type of connectable conductor cross-sections / for copper conductor	
• solid	1x (1 ... 16 mm ²)
• finely stranded / with core end processing	1x (1 ... 35 mm ²)
• stranded	1x (6 ... 35 mm ²)
Type of electrical connection	
• for main current circuit	box terminal

Mechanical Design

Height	119 mm
Width	112 mm
Depth	87 mm
Mounting type	Screw fixing and standard rail mounting 35 mm
Mounting type	<ul style="list-style-type: none"> • front mounting with 4-hole attachment No • front mounting with central attachment No • rail mounting Yes
Mounting position	any
Net weight	1 029 g

Environmental conditions

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

Certificates

Reference code	<ul style="list-style-type: none"> • acc. to DIN EN 61346-2 Q • acc. to DIN EN 81346-2 Q
----------------	--

General Product Approval	Declaration of Conformity	Shipping Approval	other
--------------------------	---------------------------	-------------------	-------



[Miscellaneous](#)



[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=3KD1642-2ME10-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD1642-2ME10-0>

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

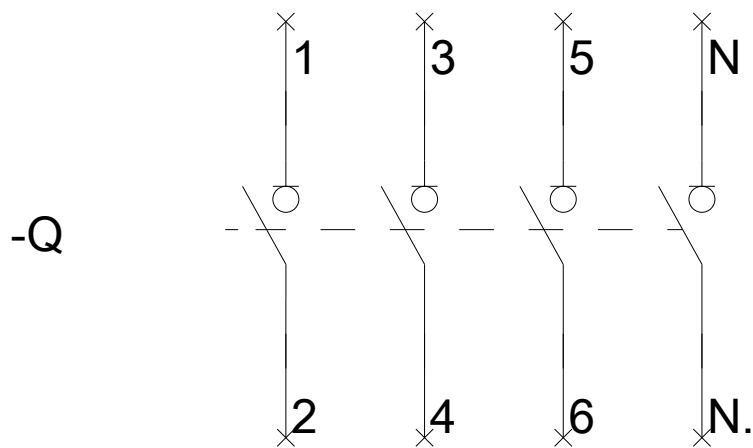
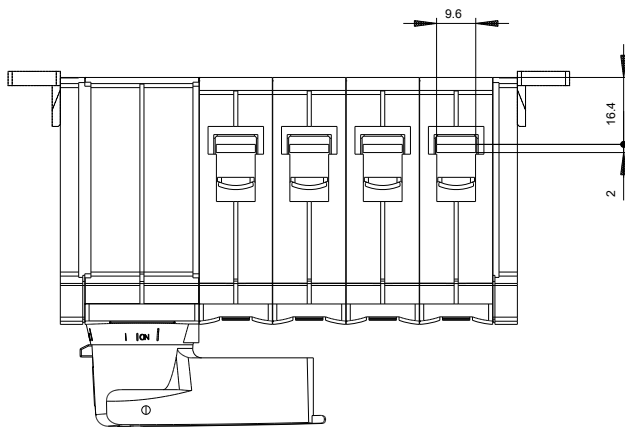
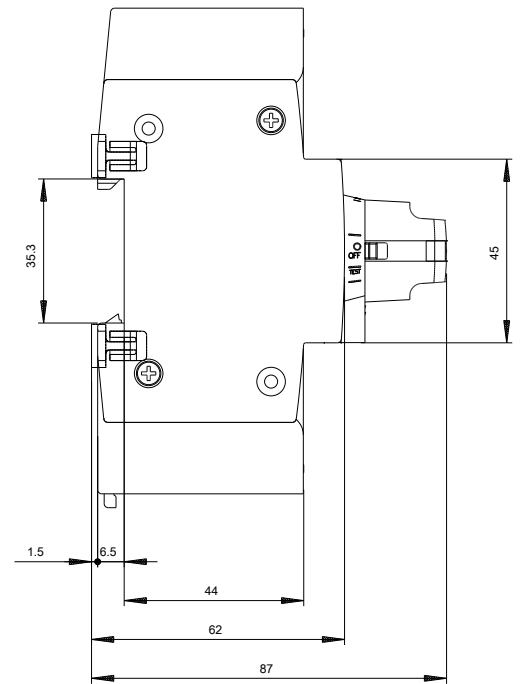
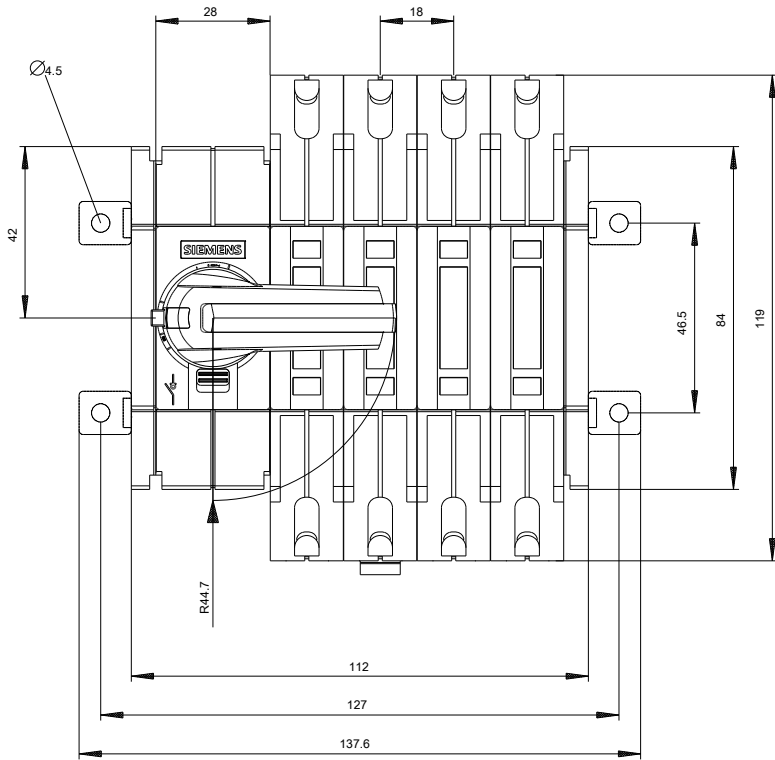
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD1642-2ME10-0

CAX-Online-Generator

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

Tender specifications

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



-CR

