

Switch disconnecter 125 A, Size 2, 3-pole Front operating mechanism center 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	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	2
mechanical service life (switching cycles) / typical	15 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	1 500
• at DC-23 A / at 440 V	1 000

<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 	560 000 A ² ·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	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 • 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	125 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 • on the front 	IP20
	IP20

Dissipation

power loss [W] <ul style="list-style-type: none"> • 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 	3.2 W
	9.6 W
	3.2 W

Current

• operating current / at AC-23 A / at 690 V / rated value	125 A
• operating current / at AC-23 A / at 500 V / rated value	125 A
• operating current / at AC-23 A / at 400 V / rated value	125 A
• operating current / at AC-22 A / at 690 V / rated value	125 A
• operating current / at AC-22 A / at 500 V / rated value	125 A
• operating current / at AC-22 A / at 400 V / rated value	125 A
• operating current / at AC-20 A / at 1000 V / maximum	125 A
• operating current / at AC-21 A / at 400 V / rated value	125 A
• operating current / at AC-21 A / at 500 V / rated value	125 A
• operating current / at AC-21 A / at 690 V / rated value	125 A
• operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	125 A
• operating current / at DC-20 A / at 1000 V / maximum	125 A / 1
• operating current / at DC-23 A / at 440 V / rated value / note	125 A / 3
• operating current / at DC-23 A / at 220 V / rated value / note	125 A / 2
• operating current / at DC-22 A / at 440 V / rated value / note	125 A / 3
• operating current / at DC-22 A / at 220 V / rated value / note	125 A / 2
• operating current / at DC-21 A / at 440 V / rated value / note	125 A / 3

<ul style="list-style-type: none"> operating current / at DC-21 A / at 220 V / rated value 	125 A / 2
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	160 A
operating current / at DC / rated value	125 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	22 500 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 75 kW 110 kW
operating current / rated value	125 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 switch disconnecter EMERGENCY OFF switch safety switch 	Yes Yes Yes Yes
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- maintenance/repair switch

Yes

Product details

product feature / interlock	No
product component	
<ul style="list-style-type: none"> • trip indicator 	No
<ul style="list-style-type: none"> • voltage trigger 	No
<ul style="list-style-type: none"> • undervoltage release 	No
<ul style="list-style-type: none"> • undervoltage release with leading contact 	No
product extension / auxiliary switch	Yes
product extension / optional	
<ul style="list-style-type: none"> • motor drive 	No
<ul style="list-style-type: none"> • 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})	
<ul style="list-style-type: none"> • for switch disconnecter / at 400 V AC / without fuse link / rated value / minimum 	30 kA
<ul style="list-style-type: none"> • for switch disconnecter / at 1000 V AC / without fuse link / rated value / minimum 	12 kA
<ul style="list-style-type: none"> • for switch disconnecter / at DC 440 V / without fuse link / rated value / minimum 	12 kA
<ul style="list-style-type: none"> • for switch disconnecter / without fuse link / rated value / minimum 	12 kA
conditional short-circuit current / with line-side fuse protection	
<ul style="list-style-type: none"> • at 415 V / by molded case circuit breaker / rated value 	65 kA
<ul style="list-style-type: none"> • at 500 V / by gG fuse / rated value 	100 kA
<ul style="list-style-type: none"> • at 690 V / by gG fuse / rated value 	100 kA

Connections

type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for copper busbar 	'1 x (3 x 14 mm ²)
type of connectable conductor cross-sections / for copper conductor	
<ul style="list-style-type: none"> • solid 	1x (2.5 ... 16 mm ²)
<ul style="list-style-type: none"> • finely stranded / with core end processing 	1x (2.5 ... 70 mm ²)
<ul style="list-style-type: none"> • stranded 	1x (10 ... 70 mm ²)
type of electrical connection	
<ul style="list-style-type: none"> • for main current circuit 	box terminal

Mechanical Design

height	126 mm
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width	121 mm
depth	68 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	1 143 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
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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=3KD3230-2NE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD3230-2NE20-0>

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

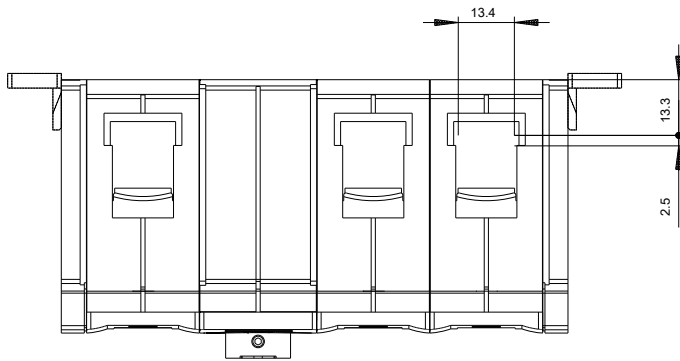
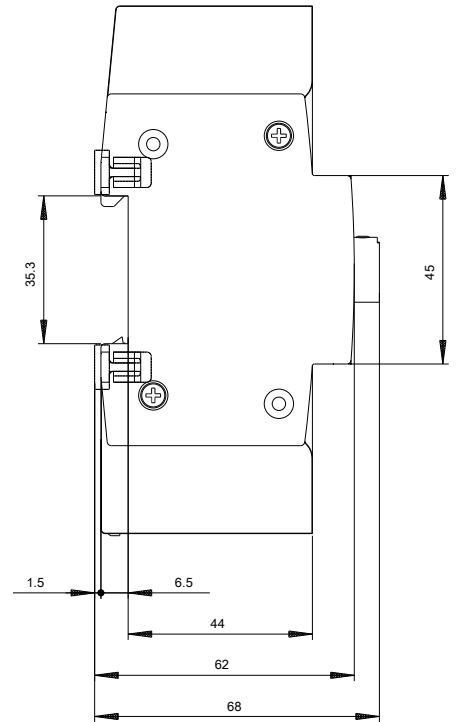
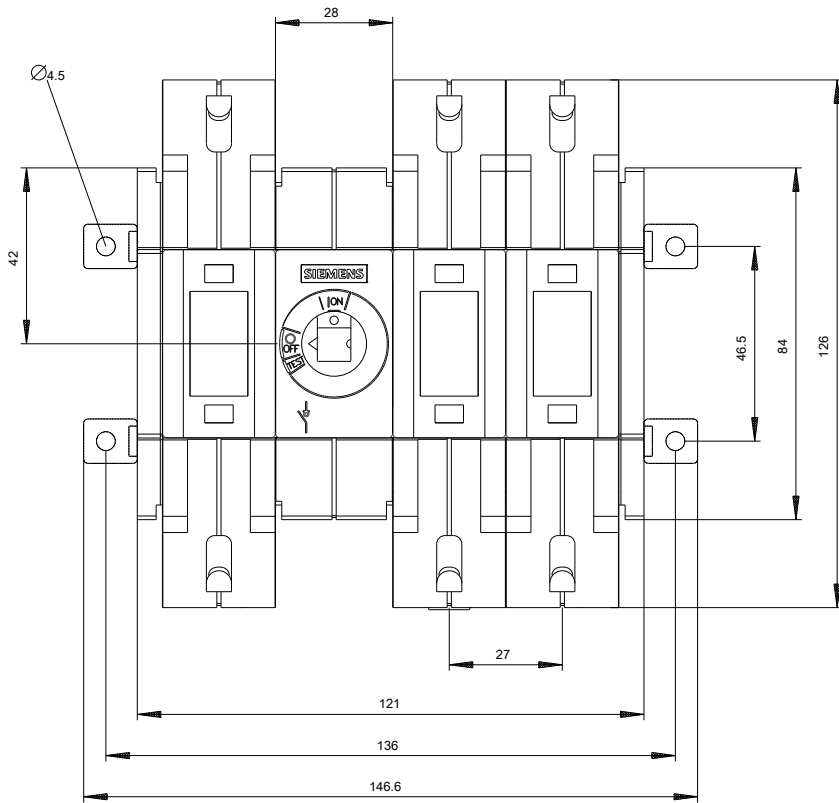
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3230-2NE20-0

CAX-Online-Generator

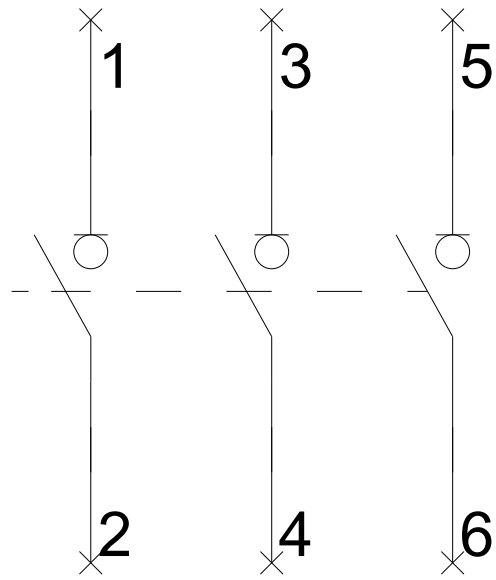
<http://www.siemens.com/cax>

Tender specifications

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



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