

Switch disconnecter 1600 A, Size 5, 3-pole Front operating mechanism center
Basic unit without handle flat 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 actuating element	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	5
mechanical service life (operating cycles) typical	8 000
electrical endurance (operating cycles)	
• at DC-21 A at 1000 V	100
• at AC-23 A at 690 V	500
• at DC-23 A at 440 V	500
I ² t value	
• with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum	3 492 000 A ² ·s
• of the fuse at 500 V maximum permissible	34 800 000 A ² ·s
• of the gG/aM SITOR fuse at 1000 V maximum permissible	1 800 000 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	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
• with degree of pollution 3 at DC rated value	440 V / 3
insulation voltage	
• rated value	1 000 V
surge voltage resistance rated value	12 kV
operational current at AC-22 A at 1000 V maximum	1 600 A
Protection class	
protection class IP	IP00
protection class IP	
• with closed switch with cover or cable lug cover	IP20

• on the front	IP00
Dissipation	
power loss [W]	
• with conventional rated thermal current per pole	57 W
• with conventional rated thermal current per device	171 W
• for rated value of the current at AC in hot operating state per pole	57 W
Main circuit	
operating power	
• at AC-23 A at 500 V rated value	1 000 kW
operational current rated value	1 600 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	8
number of NO contacts for auxiliary contacts	8
Suitability	
suitability for use	
• main switch	Yes
• switch disconnecter	Yes
• EMERGENCY OFF switch	Yes
• safety switch	Yes
• maintenance/repair switch	Yes
Product details	
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 1000 V AC/440 V DC limited to 1 s rated value	55 kA
short-circuit current making capacity (I _{cm}) for switch disconnecter	
• at 1000 V AC without fuse link rated value minimum	121 kA
• at DC 440 V without fuse link rated value minimum	80 kA
• without fuse link rated value minimum	121 kA
conditional short-circuit current with line-side fuse protection	
• 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 (120 ... 300 mm²), 2x (95 ... 300 mm²)
type of connectable conductor cross-sections	
• for copper busbar	2 x (60 x 10 mm²)
type of connectable conductor cross-sections for copper conductor	
• stranded with lug according to DIN 46234	1x (120 ... 240 mm²), 2x (95 ... 240 mm²)
• stranded with lug according to DIN 46235	1x (120 ... 240 mm²), 2x (95 ... 240 mm²)
type of electrical connection for main current circuit	flat connector
Mechanical Design	
height	310 mm
width	382 mm
depth	153 mm
fastening method	screw fixing

fastening method	
• 4-hole front mounting	No
• front mounting with central attachment	No
• rail mounting	No
mounting position	any
net weight	17 080 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 according to IEC 81346-2	Q
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Approvals Certificates

General Product Approval

[Confirmation](#)



[Miscellaneous](#)

General Product Approval	Test Certificates	Marine / Shipping	other
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[Type Test Certificates/Test Report](#)



[Confirmation](#)

[Miscellaneous](#)

Environment

[Environmental Confirmations](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3KD5430-0RE20-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD5430-0RE20-0>

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

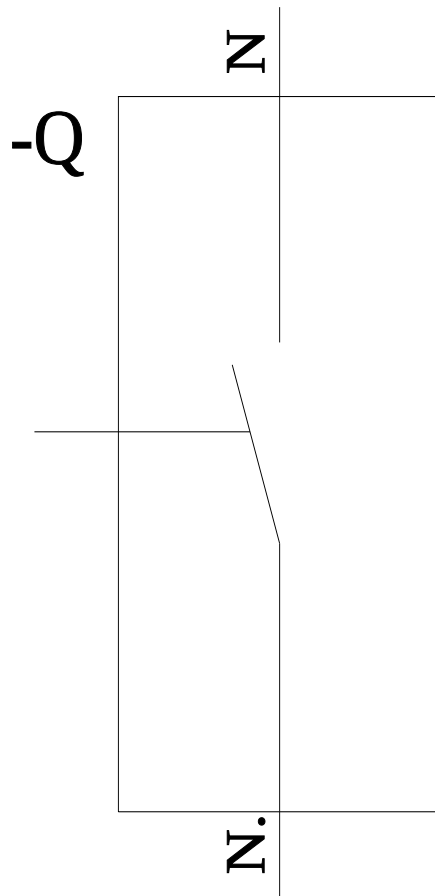
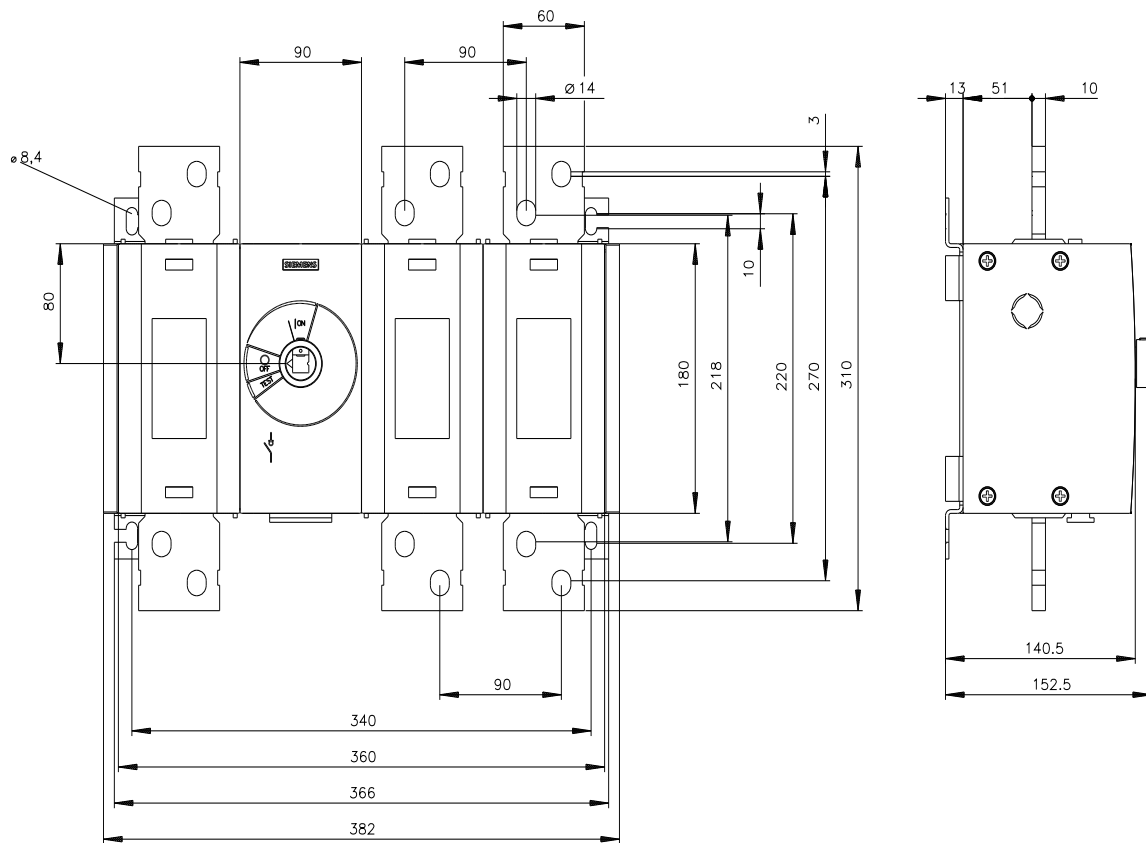
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD5430-0RE20-0

CAX-Online-Generator

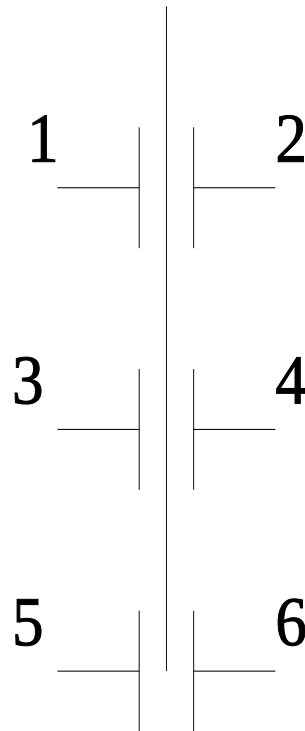
<http://www.siemens.com/cax>

Tender specifications

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



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