SIEMENS

Data sheet

3KD5430-0RE10-0



Switch disconnector 1600 A, Size 5, 3-pole Front operating mechanism left Basic unit without handle flat terminal

product brand name SENTRON product designation 3KD switch disconnector 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 motor drive No Cancral tochnical data Front operating mechanism number of poles 3 type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) (ypical 8:000 electrical endurance (operating cycles) 100 et at DC-21 A at 1000 V 100 et at DC-23 A at 440 V 500 Izt value with closed switch at 1000 V for combination switch e of the fisher at 500 V maximum 3:492 000 A*s or of the switch operating mechanism at the left end overvoltage in percent relative to the operating voltage at AC at 10 % overvoltage category IV overvoltage category IV overvoltage in genet relative to the operating voltage at AC at 10 %	Model	
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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 motor drive No Ceneral technical data Front operating mechanism number of poles 3 type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) typical 8 000 electrical endurance (operating cycles) 100 • at DC-23 A at 400 V 500 12 Value - • with closed switch at 1000 V for combination switch 3 492 000 A*s • gGrast STOR fuse at 1000 V maximum permissible 34 800 000 A*s • of the fuse at 500 V maximum permissible 34 800 000 A*s • of the fuse at 500 V maximum permissible 3 4800 000 A*s • of the fuse at 500 V maximum permissible 34 800 000 A*s • of the fuse at 500 V maximum permissible 3 4800 000 A*s • of the fuse at 500 V maximum permissible 34 800 000 A*s • of the fuse at 500 V maximum permissible 34 800 000 A*s • of the gCaM STICR fuse at 1000 V maximum 1800 000 A*s <td>product designation</td> <td>3KD switch disconnector</td>	product designation	3KD switch disconnector
operating mechanism Without handle design of the actuating element Without handle type of the driving mechanism motor drive No Ceneral technical data Index of operating mechanism number of poles 3 type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) typical 8 000 electrical endurance (operating cycles) 100 • at DC-21 A at 1000 V 100 • at AC-23 A at 800 V 500 • at DC-21 A at 1000 V for combination switch 3 492 000 A*s • at DC-23 A at 400 V 500 121 value • with closed switch at 1000 V for combination switch 3 492 000 A*s • of the gload SITOR fuse maximum 3 4800 000 A*s • of the gload SITOR fuse maximum 1 800 000 A*s • of the gload SITOR fuse at 1000 V maximum 1 800 000 A*s • of the gload SITOR fuse at 1000 V maximum 1 800 000 A*s • oth the gload SITOR fuse at 1000 V maximum 1 0 % voervoltage in percent relative to the operating voltage at AC at 10 % 400, 500, 690 V at 50/60 Hz	design of the product	Switch
type of the driving mechanism motor drive Front operating mechanism type of the driving mechanism motor drive No Ceneral technical data		ON-OFF
Type of the driving mechanism motor drive No Concrat technical data	design of the actuating element	Without handle
Conoral technical data number of poles 3 type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) 8 000 electrical endurance (operating cycles) 100 et DC-21 A at 1000 V 500 et DC-23 A at 800 V 500 et DC-23 A at 440 V 500 // et AC-23 A at 500 V maximum 3 492 000 A ² ·s + of the fuse at 500 V maximum permissible 3 4800 000 A ² ·s • of the fuse at 500 V maximum permissible 1800 000 A ² ·s position of the switch operating mechanism at the left end overvoltage in percent relative to the operating voltage at AC at 400, 500, 600 V at 50:00 Hz 10% overvoltage category IV degree of pollution 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 1000 V	type of the driving mechanism	Front operating mechanism
number of poles 3 type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) typical 8 000 electrical endurance (operating cycles) 8 000 • at DC-21 A at 1000 V 100 • at AC-23 A at 690 V 500 • at AC-23 A at 440 V 500 !2t value • with closed switch at 1000 V for combination switch • of the fuse at 500 V maximum permissible 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 1 800 000 A ² s position of the switch operating mechanism at the left end overvoltage in percent relative to the operating voltage at AC at 400, 500, 600 V at 50/60 Hz 10 % overvoltage category IV operating voltage with current paths in series 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • vare voltage resistance rated value 10 0 V surge voltage resistance rated value 10 0 V surge voltage resistance rated value 10 0 V everton class IP IP00 protection class IP IP00 protection class IP IP20 </td <td>type of the driving mechanism motor drive</td> <td>No</td>	type of the driving mechanism motor drive	No
type of device fixed mounting size of switch disconnector 5 mechanical service life (operating cycles) typical 8 000 electrical endurance (operating cycles) 9 • at DC-21 A at 1000 V 100 • at DC-23 A at 690 V 500 • at DC-23 A at 440 V 500 !21 value 3 492 000 A² s • of the dosed switch at 1000 V for combination switch 3 492 000 A² s • of the dosed switch at 1000 V maximum 3 480 0000 A² s • of the dosed switch at 1000 V maximum 3 480 0000 A² s • of the dose at 500 V maximum permissible 34 800 000 A² s • of the dose at 500 V maximum 1 800 000 A² s position of the switch operating mechanism at the left end overvoltage in percent relative to the operating voltage at AC at 10 % voervoltage category IV operating voltage with current paths in series 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 100 V surge voltage resistance rated value 1000 V surge voltage	General technical data	
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mechanical service life (operating cycles) typical 8 000 electrical endurance (operating cycles) 100 • at DC-21 A at 1000 V 100 • at AC-23 A at 690 V 500 • at DC-23 A at 440 V 500 I2t value • with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum 3 492 000 A²-s • of the gas at 500 V maximum permissible 34 800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum permissible 1800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum permissible 1800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum 1 800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum 1 800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum 1 800 000 A²-s • of the gG/aM SITOR fuse at 1000 V maximum 1 800 000 A²-s • oth the Switch operating mechanism at the left end • overvoltage in percent relative to the operating voltage at AC at 10 % voervoltage category IV degree of pollution 2 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 1 000 V • ated value 1 000 V surge voltage resistance rated value 1 2 kV Protection class IP IP00	type of device	fixed mounting
electrical endurance (operating cycles) 100 • at DC-21 A at 1000 V 100 • at AC-23 A t 690 V 500 • at DC-23 A at 440 V 500 Izt value 500 • with closed switch at 1000 V for combination switch 4 492 000 A ² ·s +gC/aM SITOR fuse maximum 3 492 000 A ² ·s • of the gC/aM SITOR fuse at 1000 V maximum 1 800 000 A ² ·s 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 IV degree of pollution 3 Voltage 440 V / 3 • with degree of pollution 2 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 100 V surge voltage resistance rated value 1 2kV Protection class IP IP00 protection class IP IP00 protection class IP IP20	size of switch disconnector	5
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• at AC-23 A at 690 V 500 • at DC-23 A at 440 V 500 I2t value	electrical endurance (operating cycles)	
• at DC-23 A at 440 V 500 I2t value - • with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum 3 492 000 A²·s • of the fuse at 500 V maximum permissible 34 800 000 A²·s • of the gG/aM SITOR fuse at 1000 V maximum permissible 1 800 000 A²·s 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 IV degree of pollution 3 voltage	• at DC-21 A at 1000 V	100
I2t value 3 492 000 Ų.s • with closed switch at 1000 V for combination switch 3 492 000 Ų.s +gG/aM SITOR fuse maximum 34 800 000 Ų.s • of the fuse at 500 V maximum permissible 34 800 000 Ų.s • of the gG/aM SITOR fuse at 1000 V maximum 1 800 000 Ų.s 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 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 insulation voltage 1 000 V • rated value 1 000 V surge voltage resistance rated value 12 kV Protection class IP IP00 protection class IP IP00 • with closed switch with cover or cable lug cover IP20	• at AC-23 A at 690 V	500
 with closed switch at 1000 V for combination switch +gG/aM SITOR fuse maximum of the fuse at 500 V maximum permissible of the gG/aM SITOR fuse at 1000 V maximum permissible 1800 000 A²·s 1800 000 A²·s 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 overvoltage category Voltage overvoltage vith current paths in series with degree of pollution 2 at DC rated value with degree of pollution 3 at DC rated value 440 V / 3 insulation voltage rated value 1000 V surge voltage resistance rated value tVV Protection class IP with closed switch with cover or cable lug cover IP20 	• at DC-23 A at 440 V	500
+gG/aM SITOR fuse maximum34 800 000 A²-s• of the fuse at 500 V maximum permissible34 800 000 A²-s• of the gG/aM SITOR fuse at 1000 V maximum permissible1 800 000 A²-sposition of the switch operating mechanismat the left endovervoltage in percent relative to the operating voltage at AC at 400, 500, 690 V at 50/60 Hz10 %overvoltage categoryIVdegree of pollution3VoltageVoltageoperating voltage with current paths in series • with degree of pollution 2 at DC rated value440 V / 3• with degree of pollution 3 at DC rated value440 V / 3• rated value1 000 Vsurge voltage resistance rated value1 2 kVProtection class IP • with closed switch with cover or cable lug coverIP20	l2t value	
• of the gG/aM SITOR fuse at 1000 V maximum permissible1 800 000 A²·sposition of the switch operating mechanismat the left endovervoltage in percent relative to the operating voltage at AC at 400, 500, 690 V at 50/60 Hz10 %overvoltage categoryIVdegree of pollution3Voltageoperating voltage with current paths in series • with degree of pollution 2 at DC rated value440 V / 3440 V / 3• with degree of pollution 3 at DC rated value440 V / 3• rated value1 000 Vsurge voltage resistance rated value12 kVProtection class IP • with closed switch with cover or cable lug coverIP00protection class IP • with closed switch with cover or cable lug coverIP20		3 492 000 A²·s
permissible at the left end 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 IV degree of pollution 3 Voltage overvoltage 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 1 000 V surge voltage resistance rated value 12 kV Protection class IP IP00 protection class IP IP00 • with closed switch with cover or cable lug cover IP20	 of the fuse at 500 V maximum permissible 	34 800 000 A ² ·s
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 3 operating voltage with current paths in series 440 V / 3 • with degree of pollution 2 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • with degree of pollution 3 at DC rated value 440 V / 3 • rated value 1000 V surge voltage resistance rated value 12 kV Protection class IP IP00 protection class IP IP00 with closed switch with cover or cable lug cover IP20		1 800 000 A²·s
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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 440 V / 3 • rated value 1 000 V surge voltage resistance rated value 12 kV Protection class IP00 protection class IP IP00 • with closed switch with cover or cable lug cover IP20		10 %
Voltage operating voltage with current paths in series • with degree of pollution 2 at DC rated value • with degree of pollution 3 at DC rated value • with degree of pollution 3 at DC rated value • with degree of pollution 3 at DC rated value • rated value • rated value • rated value • rated value 1 000 V surge voltage resistance rated value 12 kV Protection class protection class IP • with closed switch with cover or cable lug cover IP20	overvoltage category	IV
operating voltage with current paths in series 440 V / 3 • 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 1 000 V • rated value 1 000 V surge voltage resistance rated value 12 kV Protection class IP00 protection class IP IP00 • with closed switch with cover or cable lug cover IP20	degree of pollution	3
 with degree of pollution 2 at DC rated value with degree of pollution 3 at DC rated value 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 Protection class IP protection class IP insulation voltage IP with closed switch with cover or cable lug cover IP20 	Voltage	
with degree of pollution 3 at DC rated value insulation voltage rated value 1 000 V surge voltage resistance rated value 12 kV Protection class protection class IP protection class IP with closed switch with cover or cable lug cover IP20	operating voltage with current paths in series	
insulation voltage 1 000 V • rated value 1 000 V surge voltage resistance rated value 12 kV Protection class 1000 V protection class IP IP00 • with closed switch with cover or cable lug cover IP20	 with degree of pollution 2 at DC rated value 	440 V / 3
rated value i 1 000 V surge voltage resistance rated value 12 kV Protection class protection class IP oruth closed switch with cover or cable lug cover IP20	with degree of pollution 3 at DC rated value	440 V / 3
surge voltage resistance rated value 12 kV Protection class IP00 protection class IP IP00 protection class IP IP00 • with closed switch with cover or cable lug cover IP20	insulation voltage	
Protection class protection class IP protection class IP owith closed switch with cover or cable lug cover IP20	rated value	1 000 V
protection class IP IP00 protection class IP IP20	surge voltage resistance rated value	12 kV
• with closed switch with cover or cable lug cover IP20	Protection class	
with closed switch with cover or cable lug cover IP20	protection class IP	IP00
	protection class IP	
• on the front IP00	 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 	57 W
per pole	
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 disconnector	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 (Icw) at 1000 V AC/440 V DC limited to 1 s rated value	55 kA
short-circuit current making capacity (Icm) for switch disconnector	
• 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	
 with combination of AI conductor+switch 	680A / 2x 300 mm²
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	152.5 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		
Approvals Certificates				
General Product Approval				Declaration of Con- formity
General Product Approval	DE	Miscellaneous	EAC	
	VDE Marine / Shippi		ERC	formity CE
Confirmation				formity CE

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3KD5430-0RE10-0

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

https://support.industry.siemens.com/cs/ww/en/ps/3KD5430-0RE10-0

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

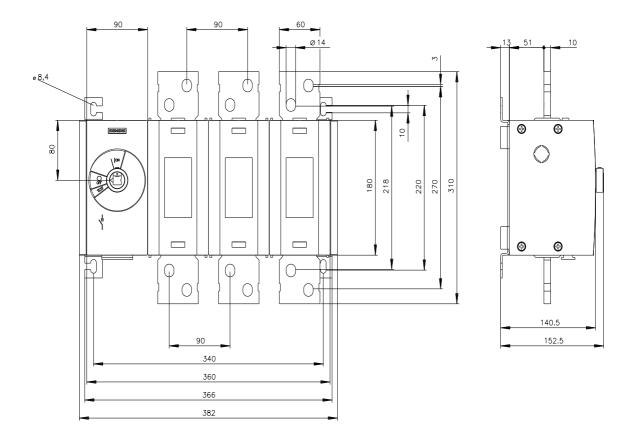
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD5430-0RE10-0

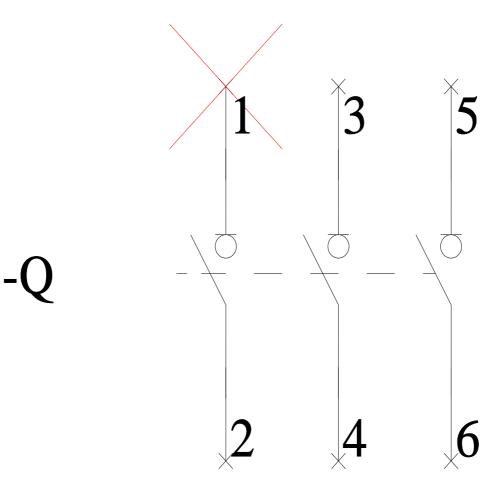
CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

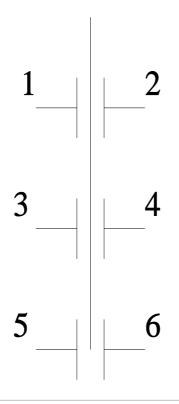
http://www.siemens.com/specifications





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last modified:

