

Switch disconnecter 80A, size 02, 4-pole Front operating mechanism center Complete unit with direct operating mechanism gray Box terminal



Model	
product brand name	SETRON
product designation	3KD switch disconnecter
design of the product	Switch
display version / for switch position indicator manual operation	O-I
design of the operating mechanism	Short 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	02
mechanical service life (switching cycles) / typical	100 000
electrical endurance (switching cycles)	
• at AC-23 A / at 690 V	6 000
• I _{2t} value / of the fuse / at 400 V / maximum permissible	80 000 A ² ·s

<ul style="list-style-type: none"> • I_{2t} value / of the fuse / at 500 V / maximum permissible 	80 000 A ² ·s
<ul style="list-style-type: none"> • I_{2t} value / of the gG fuse / at 690 V / maximum permissible 	75 000 A ² ·s
position / of the switch operating mechanism	central
overvoltage in percent / relative to the operating voltage / at AC / at 400, 500, 690 V / at 50/60 Hz	5 %
overvoltage category	III
degree of pollution	3

Voltage

insulation voltage	
<ul style="list-style-type: none"> • rated value 	750 V
surge voltage resistance / rated value	8 kV

Supply voltage

operating current / at AC / rated value	80 A
operating voltage	
<ul style="list-style-type: none"> • at AC / at 50/60 Hz / rated value 	690 V

Protection class

protection class IP	IP10
protection class IP	
<ul style="list-style-type: none"> • with closed switch / with cover or cable lug cover 	IP10
<ul style="list-style-type: none"> • on the front 	IP40

Dissipation

power loss [W]	
<ul style="list-style-type: none"> • with conventional rated thermal current / per pole 	5 W
<ul style="list-style-type: none"> • with conventional rated thermal current / per device 	5 W
<ul style="list-style-type: none"> • for rated value of the current / at AC / in hot operating state / per pole 	14.8 W

Current

<ul style="list-style-type: none"> • operating current / at AC-23 A / at 690 V / rated value 	30 A
<ul style="list-style-type: none"> • operating current / at AC-23 A / at 500 V / rated value 	30 A
<ul style="list-style-type: none"> • operating current / at AC-23 A / at 400 V / rated value 	75 A
<ul style="list-style-type: none"> • operating current / at AC-22 A / at 690 V / rated value 	80 A
<ul style="list-style-type: none"> • operating current / at AC-22 A / at 500 V / rated value 	80 A

• operating current / at AC-22 A / at 400 V / rated value	80 A
• operating current / at AC-21 A / at 400 V / rated value	80 A
• operating current / at AC-21 A / at 500 V / rated value	80 A
• operating current / at AC-21 A / at 690 V / rated value	80 A
• operating current / at AC-23 A / at 500 V / at 50/60 Hz / rated value / maximum	30 A
• operating current / at AC-22 A / at 500 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-22 A / at 400 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-22 A / at 690 V / at 50/60 Hz / rated value / maximum	80 A
• operating current / at AC-23 A / at 400 V / at 50/60 Hz / rated value / maximum	75 A
• operating current / at AC-23 A / at 690 V / at 50/60 Hz / rated value / maximum	30 A
continuous current	
• rated value	80 A
continuous current / of upstream fuse / at 500 V and 690 V / rated value	100 A
let-through current / of the fuse / at 400 V / maximum permissible	10 000 A
let-through current / of the fuse / at 500 V / maximum permissible	7 000 A
let-through current / of the gG fuse / at 690 V / maximum permissible	7 000 A

Main circuit

operating power	
• at AC-23 A / at 400 V / at 50/60 Hz / rated value	37 kW
• at AC-23 A / at 500 V / rated value	18.5 kW
• at AC-23 A / at 690 V / at 50/60 Hz / rated value	30 kW
operating current / rated value	80 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	1
number of NO contacts / for auxiliary contacts	1
Suitability	
suitability for use	
• main switch	Yes
• switch disconnecter	Yes
• 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-circuit current making capacity (I _{cm})	
• for switch disconnecter / without fuse link / rated value / minimum	3.55 kA
conditional short-circuit current / with line-side fuse protection	
• at 500 V / by gG fuse / rated value	50 kA
• at 690 V / by gG fuse / rated value	50 kA
Connections	
type of connectable conductor cross-sections / for copper conductor	
• solid	1 x (4 ... 50) mm ²
• finely stranded / with core end processing	1 x (4 ... 35) mm ²
• stranded	1 x (4 ... 50) mm ²
type of electrical connection	
• for main current circuit	box terminal
Mechanical Design	
height	110 mm
width	96 mm
depth	95 mm
mounting type	Screw fixing and standard rail mounting 35 mm

mounting type	
• front mounting with 4-hole attachment	No
• front mounting with central attachment	No
• rail mounting	Yes
mounting position	any
net weight	475 g

Environmental conditions

ambient temperature / during operation	
• minimum	-5 °C
• maximum	40 °C
ambient temperature / during storage	
• minimum	-25 °C
• maximum	55 °C

Certificates

reference code	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q

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=3KD0442-2LG20-3>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3KD0442-2LG20-3>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD0442-2LG20-3

CAX-Online-Generator

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

Tender specifications

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



