



SETRON switch disconnecter 3LD in molded-plastic enclosure , repair and maintenance switch with EMC plate, 3-pole Iu: 16A, AC23A 400V at 50/60Hz: 7,5kW, used with frequency converter: AC20 400V at 0-550Hz: 4kW, 1NO + 1NC 20-150ms leading, molded-plastic encapsulation for metric cable gland, knob-operated mechanism, black, lockable in 0- and I-position, incl. cable shield clamps

Model	
product brand name	SETRON
product designation	Switch disconnecter
design of the product	Switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Molded-plastic enclosure for metric threaded joint
design of the actuating element	selector switch
color of the actuating element	black
design of handle	knob-operated mechanism, black
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
number of poles note	PE isolated from cable shield
size of switch disconnecter	1
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	6 000
• between converter and motor when used as repair switch at AC-20 A at 690 V at 0-550 Hz	100 000
operating frequency maximum	50 1/h
degree of pollution	3
Voltage	
insulation voltage rated value	690 V
surge voltage resistance rated value	6 kV
operating voltage	
• at AC rated value	690 V
• between converter and motor at AC at 0-550 Hz rated value	480 V
operating frequency rated value	
• minimum	50 Hz
• maximum	60 Hz
Protection class	
protection class IP	IP65
degree of protection NEMA rating	1, 3R, 4X
protection class IP on the front	IP65
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.5 W
Main circuit	
operating frequency between converter and motor when	

<b>used as repair switch</b>	
• initial value	0 Hz
• full-scale value	550 Hz
<b>operational current</b>	
• at AC-21 at 690 V rated value	16 A
• at AC-21 A at 240 V rated value	16 A
• at AC-21 A at 400 V rated value	16 A
• at AC-21 A at 440 V rated value	16 A
• at AC-23 A at 400 V rated value	16 A
<b>operating power</b>	
• at AC-23 A at 240 V rated value	4 kW
• at AC-23 A at 440 V rated value	7.5 kW
• at AC-23 A at 690 V rated value	8 kW
• at AC-3 at 240 V rated value	3 kW
• at AC-3 at 400 V rated value	6 kW
• at AC-3 at 690 V rated value	5.5 kW
<b>operating active power [W] between converter and motor when used as repair switch at AC-20 A</b>	
• at 400 V at 0-550 Hz rated value	4 kW
<b>continuous current between converter and motor when used as repair switch at AC-20</b>	
• at 230 V rated value	10.4 A
• at 400 V rated value	10.2 A
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
operating voltage of auxiliary contacts at AC maximum	600 V
continuous current of the auxiliary contact rated value	10 A
insulation voltage of the auxiliary switch rated value	500 V
<b>Suitability</b>	
suitability for use main switch	Yes
suitability for use switch disconnecter	Yes
suitability for use EMERGENCY OFF switch	No
suitability for use safety switch	No
suitability for use maintenance/repair switch	Yes
<b>Product details</b>	
product feature can be locked in ON position	Yes
special product feature	inclusive EMC shield plate
product feature can be locked into OFF position	Yes
<b>accessories</b>	
<b>product extension optional</b>	
• motor drive	No
• voltage trigger	No
number of connectable NC contacts for auxiliary contacts attachable maximum	2
number of connectable NO contacts for auxiliary contacts attachable maximum	4
number of connectable CO contacts for auxiliary contacts attachable maximum	0
number of bracket locks maximum	3
hasp thickness of the bracket locks	4.5 ... 8.5 mm
<b>Short circuit</b>	
<b>conditional short-circuit current with line-side fuse protection</b>	
• at 690 V by gG fuse rated value	50 kA
<b>let-through current with closed switch</b>	
• at 240 V for combination switch + gG fuse maximum	3 kA
• at 440 V for combination switch + gG fuse maximum	3 kA
• at 690 V for combination switch + gG fuse maximum permissible	3 kA
<b>I<sup>2</sup>t value with closed switch</b>	

<ul style="list-style-type: none"> <li>• at 240 V for combination switch + gG fuse maximum</li> <li>• at 440 V for combination switch + gG fuse maximum</li> <li>• at 690 V for combination switch + gG fuse maximum</li> </ul>	2.5 kA2.s 2.5 kA2.s 3 kA2.s
<b>design of the fuse link</b>	
<ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit required</li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 20 A fuse gL/gG: 10 A
<b>operational current of upstream fuse rated value</b>	20 A
<b>according UL</b>	
<b>operational current at AC according to UL 508/UL 60947-4-1 rated value</b>	16 A
<b>operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value</b>	600 V
<b>active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value</b>	7.5
<b>active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value</b>	10
<b>short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1</b>	5 kA
<b>continuous current of upstream fuse according to UL rated value</b>	50 A
<b>type of fuse according to UL</b>	RK5
<b>Connections</b>	
<b>AWG number as coded connectable conductor cross section solid maximum</b>	
<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>	10 18
<b>type of connectable conductor cross-sections for copper conductor</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>	1x (1...6mm <sup>2</sup> ) 1x (1...4mm <sup>2</sup> ) 1x (1..6mm <sup>2</sup> )
<b>type of connectable conductor cross-sections for auxiliary contacts</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>	lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> ) lateral auxiliary switch 2x (0,75 ... 1,5mm <sup>2</sup> ), 1x 2,5mm <sup>2</sup> ; front auxiliary switch 1x 2,5mm <sup>2</sup> lateral auxiliary switch 2x (0,75 ... 2,5mm <sup>2</sup> ), 1x 4mm <sup>2</sup> ; front auxiliary switch 1x (0,75 ... 2,5mm <sup>2</sup> )
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary contacts</li> </ul>	box terminal connection terminals
<b>Mechanical Design</b>	
<b>height</b>	164 mm
<b>width</b>	100 mm
<b>depth</b>	117 mm
<b>type of device</b>	fixed mounting
<b>fastening method</b>	Complete unit in enclosure with EMC shield plate
<b>fastening method</b>	
<ul style="list-style-type: none"> <li>• 4-hole front mounting</li> <li>• front mounting with central attachment</li> <li>• rail mounting</li> </ul>	No Yes No
<b>net weight</b>	403 g
<b>Environmental conditions</b>	
<b>ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C
<b>ambient temperature during storage</b>	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	-25 °C 55 °C
<b>Approvals Certificates</b>	
<b>General Product Approval</b>	



[Confirmation](#)



Test Certificates	Marine / Shipping	other	Environment
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[Miscellaneous](#)



[Confirmation](#)

[Miscellaneous](#)

[Environmental Con-  
firmations](#)

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firmations](#)

#### 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=3LD2084-2GP21>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3LD2084-2GP21>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3LD2084-2GP21](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2084-2GP21)

CAX-Online-Generator

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

Tender specifications

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





