



switch disconnecter 3VA1 IEC frame 250 3-pole SD100, In=250A without overload protection w/o short-circuit protection nut keeper kit undervoltage release (UVR) 24V DC

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
product version	General applications
design of the product	in MCCB design
number of poles	3
design of the auxiliary release	Undervoltage release (UVR)
design of the auxiliary switch	Without
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	500 V
operating voltage / at AC / rated value	690 V
surge voltage resistance / rated value	8 kV
power loss [W] / maximum	57 W
mechanical service life (operating cycles) / typical	20 000
type of device	fixed mounting
suitability for use / switch disconnecter	Yes
suitability for use / main switch	Yes
suitability for use / safety switch	Yes
suitability for use / EMERGENCY OFF switch	Yes
suitability for use / maintenance/repair switch	Yes
product function / communication function	No
Net Weight	1.7 kg
Current	
short-time withstand current (I <sub>cw</sub> ) / at AC / limited to 0.5 s / rated value	3 kA
operational current / rated value	250 A
operational current	
• at 40 °C	250 A
• at 45 °C	250 A
• at 50 °C	250 A
• at 55 °C	243 A
• at 60 °C	237 A
• at 65 °C	230 A
• at 70 °C	223 A
let-through I <sub>2t</sub> value / at AC-23 B	
• at 400 V / maximum permissible	1 810 000 A <sup>2</sup> ·s
• at 500 V / maximum permissible	1 660 000 A <sup>2</sup> ·s
• at 690 V / maximum permissible	1 140 000 A <sup>2</sup> ·s

let-through current (Ic) / at AC-23 B	
<ul style="list-style-type: none"> <li>• at 400 V / maximum permissible</li> <li>• at 500 V / maximum permissible</li> <li>• at 690 V / maximum permissible</li> </ul>	29 kA 18.7 kA 14.9 kA
<b>Switching capacity according to IEC 60947</b>	
<b>short-circuit current making capacity (Icm) / with line-side fuse protection</b>	
<ul style="list-style-type: none"> <li>• at 690 V / by molded case circuit breaker / maximum</li> <li>• at 415 V / by molded case circuit breaker / maximum</li> </ul>	17 kA 154 kA
conditional short-circuit current (Iq) / rated value	3 000 A
<b>conditional short-circuit current (Iq) / with line-side fuse protection</b>	
<ul style="list-style-type: none"> <li>• at 690 V / by molded case circuit breaker / rated value</li> <li>• at 240 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value</li> <li>• at 415 V / by LV HRC fuse link 3NA, 3ND (sizes 00/000, 1, 2, type gL/gG) / rated value</li> </ul>	10 kA 100 kA 70 kA
<b>Mechanical Design</b>	
overvoltage category	IV
fastening method	screw fixing
fastening method / 4-hole front mounting	Yes
fastening method / front mounting with central attachment	No
fastening method / rail mounting	No
product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• undervoltage release with leading contact</li> <li>• trip indicator</li> </ul>	Yes No No No
product feature / interlock	No
height	158 mm
width	105 mm
depth	70 mm
display version / for switch position indicator	Handle switch position On, Trip, Off
design of the actuating element	toggle handle
type of the driving mechanism / motor drive	No
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	busbar connection
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	Silver
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
number of NC contacts / for auxiliary contacts	0
number of NO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / auxiliary switch	No
product extension / optional / motor drive	Yes
<b>Environmental conditions</b>	
protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	-25 °C 70 °C -40 °C 80 °C
reference code / according to IEC 81346-2	Q
<b>Approvals / Certificates</b>	
<b>General Product Approval</b>	



[Miscellaneous](#)



[Confirmation](#)



General Product Approval	EMV	Test Certificates			Maritime application
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[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Maritime application	other				
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[Miscellaneous](#)

[Confirmation](#)

other	Environment				
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[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

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

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA1225-1AA32-0BA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1225-1AA32-0BA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1225-1AA32-0BA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1225-1AA32-0BA0)

##### CAX-Online-Generator

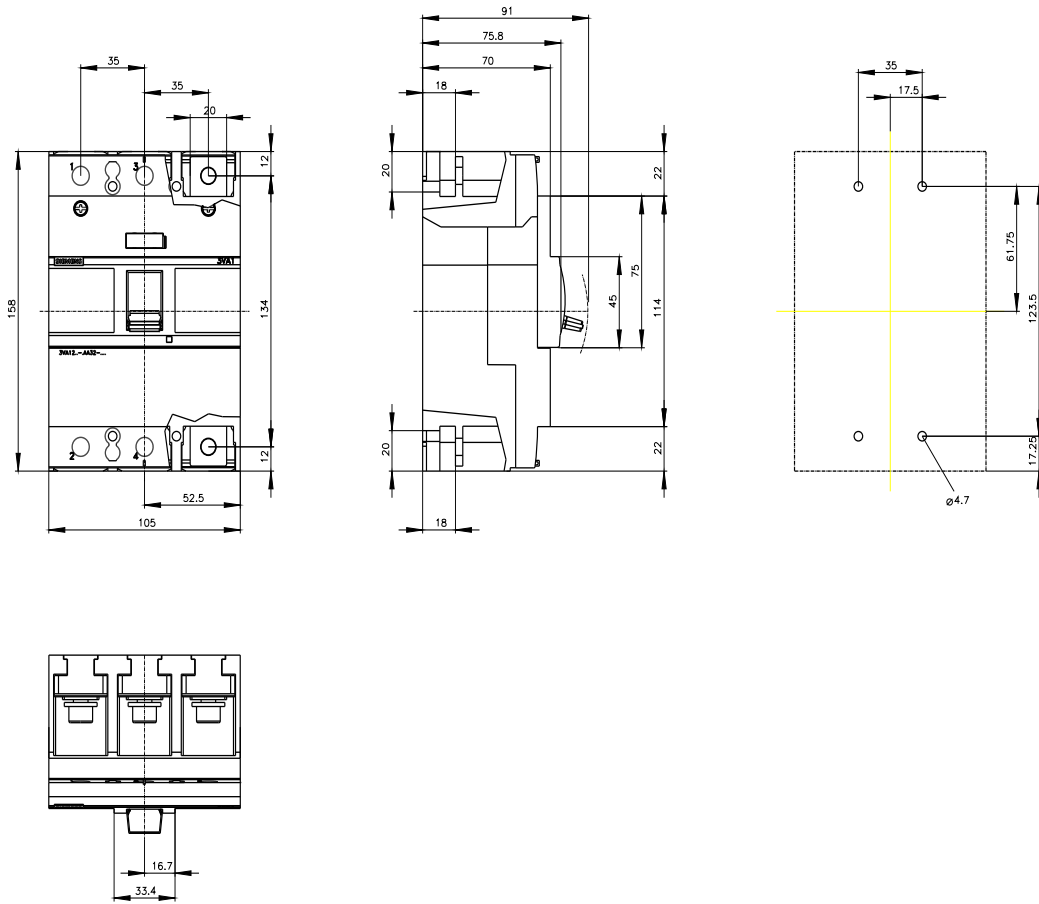
<https://www.siemens.com/cax>

##### Tender specifications

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

##### Characteristic curves

[https://curves.simaris.siemens.com/curves/?mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/?mmp_prod_noCOMP=)



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