



circuit breaker 3VA2 IEC Frame 630 breaking capacity class E Icu=200 kA @ 415 V 3-pole, motor starter protection ETU310M, I, In=500 A short-circuit protection Ii=3...12 x In nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Starter protection
design of the overcurrent release	ETU310M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	99 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	3 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No
Net Weight	5.145 kg
Current	
short-time withstand current (Icw) / limited to 1 s	6 kA
operational current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	495 A
• at 60 °C	490 A
• at 65 °C	485 A
• at 70 °C	480 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (Icu)	
• at 415 V	200 kA
• at 690 V	85 kA
operating short-circuit current breaking capacity (Ics)	
• at 415 V	200 kA
• at 690 V	65 kA
short-circuit current making capacity (Icm)	
• at 415 V	440 kA
• at 690 V	187 kA
Adjustable parameters	
adjustable response value setting current (Ii) / for I-tripping	
• minimum	1 500 A

<ul style="list-style-type: none"> <li>• maximum</li> </ul>	6 000 A
adjustable setting current (InN) / for N-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	0 A
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	0 A
product function / grounding protection	No

### Mechanical Design

product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>• voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• trip indicator</li> </ul>	No
height [in]	9.76 in
height	248 mm
width [in]	5.43 in
width	138 mm
depth [in]	4.33 in
depth	110 mm

### Connections

arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	on both sides nut keeper kit
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	20 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	35 x 10 mm
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

### Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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### Accessories

product extension / optional / motor drive	Yes
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### Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation / minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul>	70 °C
<ul style="list-style-type: none"> <li>• during storage / minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• during storage / maximum</li> </ul>	80 °C

### Environmental footprint

global warming potential [CO2 eq] / total	495 kg
global warming potential [CO2 eq] / during manufacturing	28.7 kg
global warming potential [CO2 eq] / during operation	470 kg
global warming potential [CO2 eq] / after end of life	-4.07 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

### Approvals / Certificates

#### General Product Approval



[Miscellaneous](#)



[Confirmation](#)


#### General Product Approval



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Maritime application	other			Dangerous goods
<a href="#">CCS (China Classification Society)</a>	<a href="#">Miscellaneous</a>	<a href="#">Miscellaneous</a>	<a href="#">Confirmation</a>	 <a href="#">Transport Information</a>

## Environment

[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=3VA2450-0MS32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2450-0MS32-0AA0>

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

[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2450-0MS32-0AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2450-0MS32-0AA0)

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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