



circuit breaker 3VA2 IEC frame 160 breaking capacity class E Icu=200 kA @ 415 V 4-pole, line protection ETU320, LI, In=100A overload protection Ir=40A ... 100A short circuit protection Ii=1,5...12 x In neutral protection adjustable(OFF 50% 100%) cable connection

### Model

product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU320
protection function of the overcurrent release	LI
number of poles	4

### General technical data

insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	7.7 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	2.57 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	3.3 kg

### Current

continuous current / rated value / maximum	160 A
continuous current / rated value	100 A
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 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

<ul style="list-style-type: none"> <li>• at 690 V</li> </ul>	65 kA	
short-circuit current making capacity (I <sub>cm</sub> )		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	440 kA 187 kA	
<b>Adjustable parameters</b>		
product feature / for L-tripping / can be switched on/off	No	
adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	40 A 100 A	
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.5 s 17 s	
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	150 A 1 200 A	
adjustable absolute value setting current (I <sub>nN</sub> ) / for N-tripping		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	50 A 100 A	
adjustable current response value current / of instantaneous short-circuit trip unit		
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0 A 0 A	
design of the N-conductor protection	adjustable OFF; 50%; 100%	
product function / grounding protection	No	
<b>Mechanical Design</b>		
product component		
<ul style="list-style-type: none"> <li>• undervoltage release</li> <li>• voltage trigger</li> <li>• trip indicator</li> </ul>	No No No	
height [in]	7.13 in	
height	181 mm	
width [in]	5.51 in	
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (6 - 120 mm <sup>2</sup> )	
width	140 mm	
depth [in]	3.39 in	
depth	86 mm	
<b>Connections</b>		
arrangement of electrical connectors / for main current circuit	Front terminal	
type of electrical connection / for main current circuit	double-sided box terminal	
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	tin	
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin	
<b>Auxiliary circuit</b>		
number of CO contacts / for auxiliary contacts	0	
<b>Accessories</b>		
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	
<b>Certificates</b>		
reference code / according to IEC 81346-2	Q	
<b>General Product Approval</b>		<b>EMC</b>

[Confirmation](#)[Miscellaneous](#)

Declaration of Conformity

Test Certificates

Marine / Shipping

[Miscellaneous](#)[Special Test Certificate](#)

Marine / Shipping

other

Dangerous Good

Environment

[CCS / China Classification Society](#)[Miscellaneous](#)[Confirmation](#)[Miscellaneous](#)[Transport Information](#)[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=3VA2110-0HL46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2110-0HL46-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2110-0HL46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2110-0HL46-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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





