

CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 3-POLE, MOTOR STARTER PROTECTION ETU310M, I, IN=100A WITHOUT OVERLOAD PROTECTION SHORT CIRCUIT PROTECTION II=6...15 X IN CABLE CONNECTION



Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Starter protection
Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
Design of the overcurrent release	ETU310M
Protective function of the overcurrent release	I
Number of poles	3
General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Operating power / at AC-3 / at 400 V	55 000 W
Operating power / at AC-3 / at 230 V	30 000 W
Active power loss / for rated value of the current / at AC / in hot operating state / per device	75 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	25 W

Mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	2.4 kg

#### Electricity

Marking / according to UL 489 / 100%-rated breaker	No
Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	100 A
Operating current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	97 A
• at 60 °C	95 A
• at 65 °C	92 A
• at 70 °C	88 A

#### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	C
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	330 kA
• at 415 V	242 kA
• at 440 V	242 kA

- at 500 V
- at 690 V

187 kA

3.8 kA

### Adjustable parameters

Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	No
Adjustable response value current / I <sub>i</sub> min.	300 A
Adjustable response value current / I <sub>i</sub> max.	1 500 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No

### Mechanical Design

Height [in]	7.1 in
Height	181 mm
Width [in]	4.1 in
Width	105 mm
Depth [in]	3.4 in
Depth	86 mm

### Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	Box terminal
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (6-120 mm <sup>2</sup> )

### 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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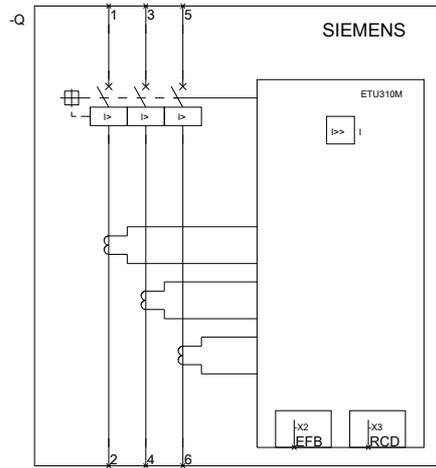
### Environmental conditions

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

### Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB	No





Siemens

3VA2xxx-xMS3x-0AA0

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