

circuit breaker 3VA2 IEC frame 160 breaking capacity class C  
 $I_{cu}=110\text{kA}$  @ 415V 4-pole, line protection ETU340, ELISA LI,  $I_n=40\text{A}$   
 overload protection  $I_r=16\text{A}\dots40\text{A}$  short-circuit protection  $I_i=15 \times I_n$  N  
 conductor protection adjustable (OFF, 100%) clamp connection



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU340
Protective function of the overcurrent release	ELISA LI
Number of poles	4
General technical data	
Rated insulation voltage $U_i$	800 V
Max. rated operational voltage $U_e$ with AC 50/60Hz	690 V
Power loss [W] / maximum	1.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	0.53 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
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No

Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No
Net weight	3.125 kg

### Current

Max. rated operational current of the frame size	160 A
Rated continuous current $I_u$	40 A
Operating current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	40 A
• at 60 °C	40 A
• at 65 °C	40 A
• at 70 °C	40 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	C
Maximum short-circuit current breaking capacity ( $I_{cu}$ )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	25 kA
Operational short-circuit current breaking capacity ( $I_{cs}$ )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	65 kA
• at 690 V	25 kA
Short-circuit current making capacity ( $I_{cm}$ )	
• at 240 V	330 kA
• at 415 V	242 kA
• at 440 V	242 kA
• at 500 V	187 kA
• at 690 V	53 kA

### Adjustable parameters

Adjustable response value current / $I_r$ min.	16 A
Adjustable response value current / $I_r$ max.	40 A
Adjustable response value time / $t_r$ min.	1300

Adjustable response value time / tr max.	1300
Short-term delayed / tripping switchable / I2t=ON/OFF	No
Adjustable response value current / li min.	600 A
Adjustable response value current / li max.	600 A
Design of the N-conductor protection	adjustable OFF; 100%
Ground fault protection / tripping switchable / I2t=ON/OFF	No

### Mechanical Design

Height [in]	7.1 in
Height	181 mm
Width [in]	5.5 in
Width	140 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	double-sided 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> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	<ul style="list-style-type: none"> <li>-25 °C</li> <li>70 °C</li> <li>-40 °C</li> <li>80 °C</li> </ul>

### Certificates

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC
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CCC



VDE

CB

CB

[Miscellaneous](#)

EAC



RCM

Declaration of Conformity	Test Certificates	Shipping Approval
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EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



LRS

[CCS / China Classification Society](#)

other
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[Manufacturer Declaration](#)

[Miscellaneous](#)

Further information
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**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=3VA2140-7HK46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-7HK46-0AA0>

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

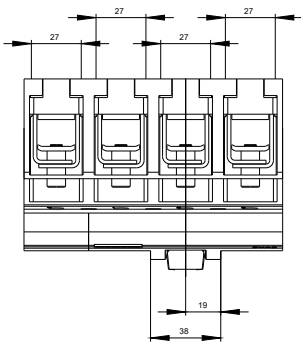
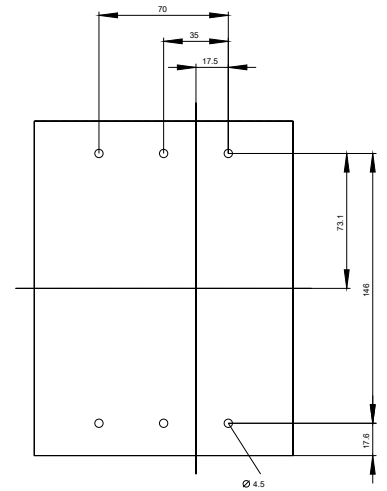
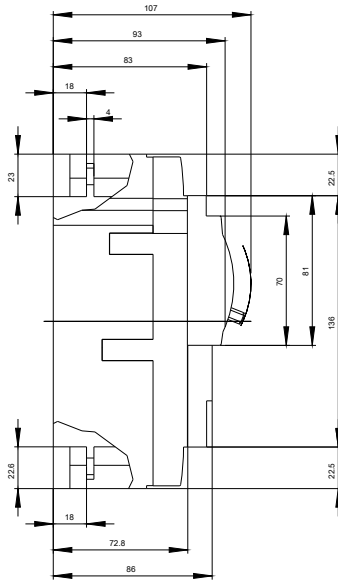
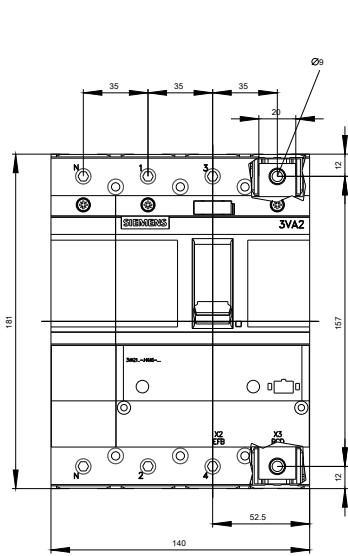
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2140-7HK46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-7HK46-0AA0)

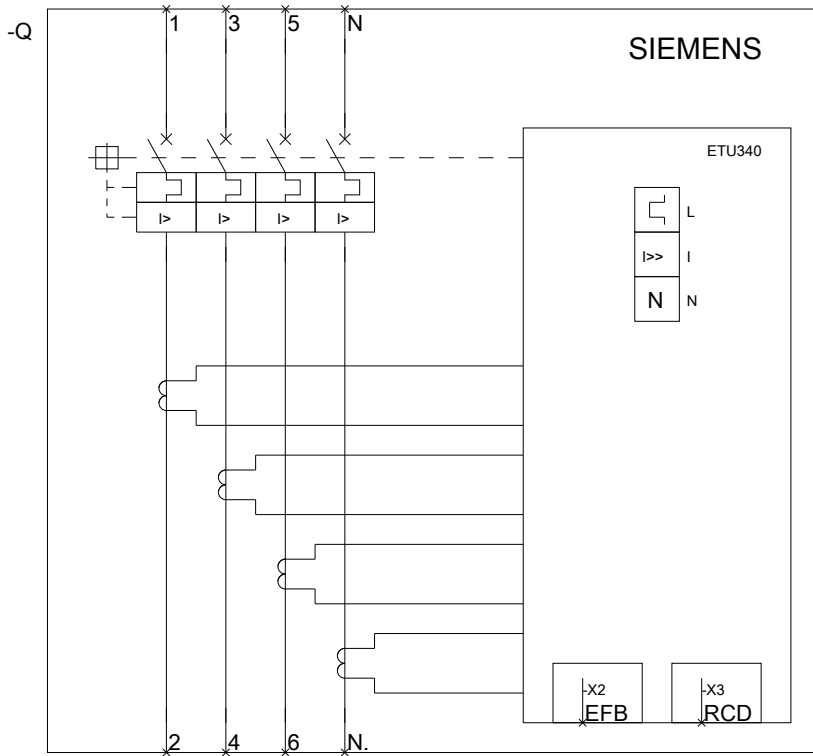
**CAX-Online-Generator**

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

**Tender specifications**

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





Siemens

3VA2xxx-xHK4x-C

Format / Size: Hybrid

last modified:

05/08/2020