

Siemens  
EcoTech



circuit breaker 3VA6 UL Frame 150 breaking capacity class C 100 kA @ 480 V 4-pole, line protection ETU330, LIG,  $I_n=40$  A overload protection, 100% rated  $I_r=16$  A...40 A short-circuit protection  $I_i=1.5...12 \times I_n$  neutral conductor protection adjustable (OFF, 100%) ground-fault protection  $I_g=0.375...1 \times I_n$   $t_g=0.1/0.3s$  without connection



Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CDAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
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	2.4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.8 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
electrical endurance (operating cycles) / at 480 V	14 000
electrical endurance (operating cycles) / at 600 V	9 800
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N-conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	2.9 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational 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
<b>Switching capacity according to IEC 60947</b>	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
operating short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	330 kA
• at 415 V	242 kA
• at 690 V	3.8 kA
<b>Switching capacity according to UL 489</b>	
current breaking capacity	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 V	35 kA
<b>Adjustable parameters</b>	
adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic	
• minimum	15 A
• maximum	40 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping	
• minimum	60 A
• maximum	480 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	15 A
• full-scale value	40 A
adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>0t</sub> characteristic	
• minimum	0.1 s
• maximum	0.3 s
adjustable setting current (I <sub>nN</sub> ) / for N-tripping	
• minimum	40 A
• maximum	40 A
design of the N-conductor protection	adjustable OFF; 100%
product function / grounding protection	Yes
<b>Mechanical Design</b>	
product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	7.8 in
height	198 mm
width [in]	5.51 in
width	140 mm
depth [in]	3.39 in
depth	86 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
<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	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C
<b>Environmental footprint</b>	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] / total	61.814 kg
global warming potential [CO2 eq] / during manufacturing	14.6 kg
global warming potential [CO2 eq] / during operation	48.9 kg
global warming potential [CO2 eq] / after end of life	-2.2 kg
Siemens Eco Profile (SEP)	Siemens EcoTech
<b>reference code / according to IEC 81346-2</b>	Q

**Approvals / Certificates**

**General Product Approval**



[Confirmation](#)



EG-Konf.



UL



UL

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



RCM



ABS

[Confirmation](#)

other	Dangerous goods	Environment
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[Miscellaneous](#)

[Transport Information](#)



Siemens EcoTech



[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=3VA6140-7HM41-2AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-7HM41-2AA0>

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

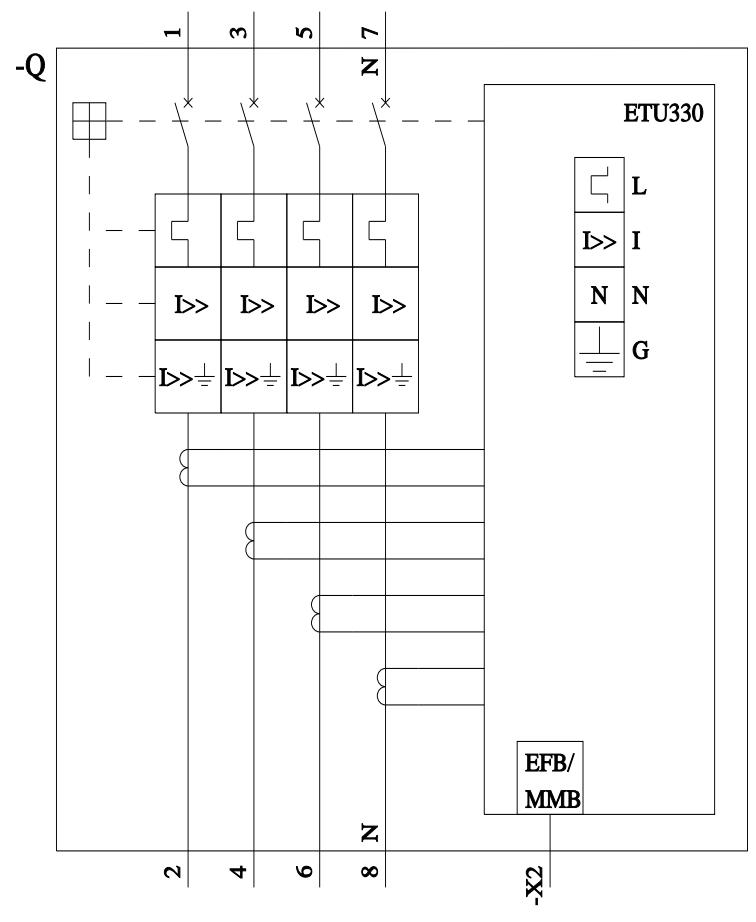
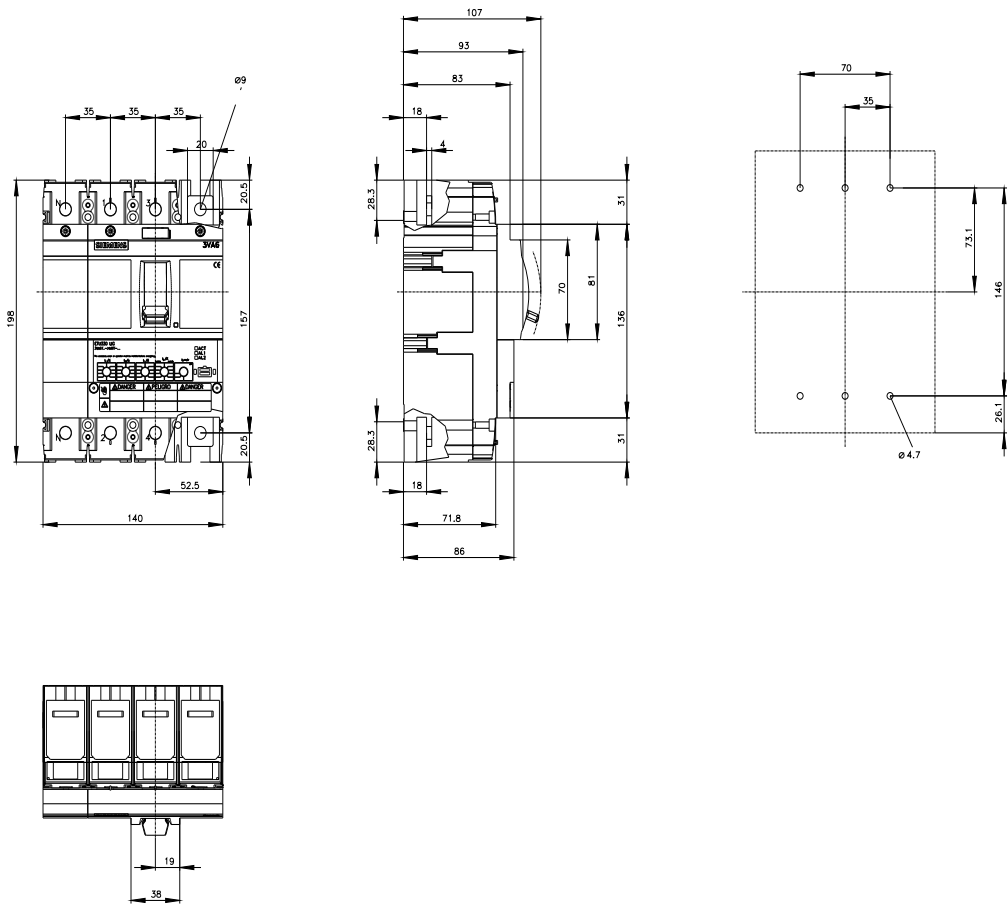
[https://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA6140-7HM41-2AA0](https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6140-7HM41-2AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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





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