



circuit breaker 3VA6 UL Frame 150 breaking capacity class C 100 kA @ 480 V 4-pole, line protection ETU350, LSI, In=100 A overload protection Ir=40 A...100 A short-circuit protection I_{sd}=1.5...10 x I_r, I_i=12 x I_n neutral conductor protection adjustable (OFF, 50%, 100%) 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	ETU350
protection function of the overcurrent release	LSI
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	13 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.33 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	without
product function	
• communication function	No
• other measurement function	No
Net Weight	3.2 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
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	C
maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
operating short-circuit current breaking capacity (I _{cs})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	330 kA
• at 415 V	242 kA
• at 690 V	3.8 kA
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum	40 A
• maximum	100 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (I _{sd}) / of S-trip / with I _{0t} characteristic	
• minimum	150 A
• maximum	1 000 A
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic	
• minimum	150 A
• maximum	1 000 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic	
• minimum	0.0001 s
• maximum	0.4 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum	1 200 A
• maximum	1 200 A
adjustable setting current (I _{nN}) / for N-tripping	
• minimum	50 A
• maximum	100 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
product function / grounding protection	No
Mechanical Design	
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

Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
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
Environmental footprint	
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
reference code / according to IEC 81346-2	Q
Approvals / Certificates	
General Product Approval	



[Miscellaneous](#)



[Miscellaneous](#)



General Product Approval				EMV	Test Certificates
	Confirmation	 EG-Konf.		 RCM	Type Test Certificates/Test Report

Maritime application					other
 ABS	 BUREAU VERITAS	 DNV	 LRS	 RMRS	Miscellaneous

other	Dangerous goods	Environment
Confirmation	Transport Information	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=3VA6110-7HN41-0AA0	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)	

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6110-7HN41-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6110-7HN41-0AA0

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='HAUPT'></mmp_prod_no>)





