

**Siemens
EcoTech**



circuit breaker 3VA6 UL frame 150 3-pole, starter protection ETU310M, I, In=90A without overload protection short-circuit protection Ii=3...15 x In cable connection on both sides



Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CDAR
design of the product	Starter 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	ETU310M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	12.2 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.07 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/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	without
product function	
• communication function	No
• other measurement function	No
Net Weight	2.709 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	90 A
• at 45 °C	90 A
• at 50 °C	90 A
• at 55 °C	90 A
• at 60 °C	90 A
• at 65 °C	90 A
• at 70 °C	90 A

Switching capacity according to IEC 60947	
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
Adjustable parameters	
adjustable response value setting current (I _i) / for I-tripping	
• minimum	270 A
• maximum	1 350 A
adjustable setting current (I _{nN}) / for N-tripping	
• minimum	0 A
• maximum	0 A
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]	4.13 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (14 AWG ... 1/0)
width	105 mm
depth [in]	3.39 in
depth	86 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	circular conductor terminal on both sides
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 [CO ₂ eq] / total	61.814 kg
global warming potential [CO ₂ eq] / during manufacturing	14.6 kg
global warming potential [CO ₂ eq] / during operation	48.9 kg
global warming potential [CO ₂ 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](#)



Confirmation

Miscellaneous

Transport Information

Environment



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Environmental Con- firmations

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,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA6190-1MS36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6190-1MS36-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6190-1MS36-0AA0

CAX-Online-Generator

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

Tender specifications

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





