

Siemens
EcoTech



circuit breaker 3VA6 UL Frame 150 breaking capacity class C 100 kA @ 480 V 3-pole, line protection ETU830, LIG, In=40 A overload protection Ir=16 A...40 A short-circuit protection Ii=1.5...12 x In ground-fault protection Ig=0.375...1 x In, tg=0.05-0.8s 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	ETU830
protection function of the overcurrent release	LIG
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	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-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	2.5 kg

Current

marking / according to UL 489 / 100%-rated breaker	No
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
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	15 A
• maximum	40 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum	0.5 s
• maximum	25 s
adjustable response value setting current (I _i) / 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 _g) / for G-tripping / with I _{0t} characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic	
• minimum	15 A
• maximum	40 A
adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable setting current (I _{nN}) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	Yes
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

width	105 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			
 CCC  EG-Konf.   UL  UL  VDE			
General Product Approval	EMV	Maritime application	
Miscellaneous	   RCM  ABS  BUREAU VERITAS		
Maritime application	other	Dangerous goods	
 DNV  LRS  RMRS	Confirmation	Miscellaneous	Transport Information
Environment			
 Siemens EcoTech   EPD	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/specifications>





