

Siemens
EcoTech



circuit breaker 3VA6 UL frame 400 breaking capacity class C 100kA @ 480V 4-pole, line protection ETU830, LIG, In=400A overload protection Ir=160A...400A short-circuit protection Ii=1.5...10 x In ground-fault protection Ig=0.2...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	CJAE
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	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	70 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.33 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	6 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 200
electrical endurance (operating cycles) / at 480 V	6 000
electrical endurance (operating cycles) / at 600 V	4 200
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	Yes
• other measurement function	Yes
Net Weight	6.9 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	400 A
• at 45 °C	400 A
• at 50 °C	400 A
• at 55 °C	375 A
• at 60 °C	350 A
• at 65 °C	325 A
• at 70 °C	300 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 • at 415 V • at 690 V	150 kA 110 kA 5 kA
operating short-circuit current breaking capacity (I _{cs}) • at 240 V • at 415 V • at 690 V	150 kA 110 kA 5 kA
short-circuit current making capacity (I _{cm}) • at 240 V • at 415 V • at 690 V	330 kA 242 kA 7.5 kA

Switching capacity according to UL 489

current breaking capacity • at 240 V • at 480 V • at 600 V	200 kA 100 kA 35 kA
--	---------------------------

Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic • minimum • maximum	150 A 400 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic • minimum • maximum	0.5 s 17 s
adjustable response value setting current (I _i) / for I-tripping • minimum • maximum	600 A 4 000 A
adjustable current response value current / for G-tripping / with standard characteristic • initial value • full-scale value	80 A 400 A
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic • minimum • maximum	0.05 s 0.8 s
adjustable response value setting current (I _g) / for G-tripping / with I _{2t} characteristic • minimum • maximum	80 A 400 A
adjustable response value delay time (t _g) / for G-tripping / with I _{2t} characteristic • minimum • maximum	0.05 s 0.8 s
adjustable setting current (I _n) / for N-tripping • minimum • maximum	80 A 400 A
adjustable current response value current / of instantaneous short-circuit trip unit • minimum • maximum	600 A 4 000 A
design of the N-conductor protection	adjustable OFF; 20% to 100%
product function / grounding protection	Yes
total break time / for G-tripping / with standard characteristic • initial value • full-scale value	0.05 s 0.8 s

Mechanical Design

product component • undervoltage release • voltage trigger	No No
--	----------

• trip indicator	No
height [in]	9.76 in
height	248 mm
width [in]	7.24 in
width	184 mm
depth [in]	4.33 in
depth	110 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

Siemens Eco Profile (SEP)	Siemens EcoTech
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval



[Confirmation](#)



General Product Approval

EMV

Marine / Shipping



[Miscellaneous](#)



Marine / Shipping

other

Dangerous Good



[Confirmation](#)

[Miscellaneous](#)

[Miscellaneous](#)

[Transport Information](#)

Environment



[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VA6340-7KM41-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA6340-7KM41-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA6340-7KM41-0AA0

CAX-Online-Generator

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

Tender specifications

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





