



circuit breaker 3VA6 UL Frame 800 breaking capacity class H 65 kA @ 480 V 3-pole, line protection ETU860, LSIG, In=600 A overload protection, 100% rated Ir=240 A ...600 A short-circuit protection I_{sd}=0.6..12x I_n, I_i=1.5..12x I_n neutral conductor protection optionally with ext. CT up to 160% ground-fault protection IG=0.2... 1xI_n, t_g=0.05-0.8s

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HMAE
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	ETU860
protection function of the overcurrent release	LSIG
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	151 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	50.33 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	5 100
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 500
electrical endurance (operating cycles) / at 480 V	5 100
electrical endurance (operating cycles) / at 600 V	3 500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	Yes
ground-fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	14.33 kg
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	600 A
• at 45 °C	600 A
• at 50 °C	600 A
• at 55 °C	600 A
• at 60 °C	600 A
• at 65 °C	555 A
• at 70 °C	510 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H

maximum short-circuit current breaking capacity (Icu)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	35 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 690 V	19 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA
• at 415 V	187 kA
• at 690 V	74 kA

Switching capacity according to UL 489

current breaking capacity	
• at 240 V	150 kA
• at 480 V	65 kA
• at 600 V	35 kA

Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
• minimum	250 A
• maximum	600 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 _{sd}) / of S-trip / with I _{0t} characteristic	
• minimum	360 A
• maximum	7 200 A
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic	
• minimum	360 A
• maximum	7 200 A
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{0t} characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value delay time (t _{sd}) / for S-tripping / with I _{2t} characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum	900 A
• maximum	7 200 A
adjustable current response value current / for G-tripping / with standard characteristic	
• initial value	120 A
• full-scale value	600 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	120 A
• maximum	600 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
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	Yes

Mechanical Design

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	12.91 in
height	328 mm
width [in]	8.27 in
width	210 mm
depth [in]	4.72 in
depth	120 mm

Connections

arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	20 x 4 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	50 x 28 mm

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	No
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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
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval



[Confirmation](#)



EG-Konf.



UL

[Miscellaneous](#)

General Product Approval	EMV	Test Certificates	Maritime application	other
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RCM

[Type Test Certificates/Test Report](#)



DNV

[Confirmation](#)

[Miscellaneous](#)

Dangerous goods	Environment
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[Transport Information](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

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

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





