

Siemens
EcoTech



circuit breaker 3VA6 UL Frame 150 breaking capacity class L 150 kA @ 480 V 4-pole, line protection ETU856, LSI, In=40 A overload protection Ir=16 A...40 A short-circuit protection I_{sd}=0.6..10x I_n, I_i=1.5..12x I_n neutral conductor protection adjustable (OFF, up to 160%) ground fault alarm signaled via EFB300 or COM without connection



Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	LDAE
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	ETU856
protection function of the overcurrent release	LSI-G-alarm only
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	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 + N-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	3.2 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	L
maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	200 kA
• at 415 V	150 kA
• at 690 V	2.5 kA
operating short-circuit current breaking capacity (I _{cs})	
• at 240 V	200 kA
• at 415 V	150 kA
• at 690 V	2.5 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	440 kA
• at 415 V	330 kA
• at 690 V	3.8 kA

Switching capacity according to UL 489

current breaking capacity	
• at 240 V	200 kA
• at 480 V	150 kA
• at 600 V	50 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 _{sd}) / of S-trip / with I _{0t} characteristic	
• minimum	24 A
• maximum	400 A
adjustable response value setting current (I _{sd}) / of S-trip / with I _{2t} characteristic	
• minimum	24 A
• maximum	400 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	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 _n) / for N-tripping	

<ul style="list-style-type: none"> • minimum • maximum 	15 A 64 A
design of the N-conductor protection	adjustable OFF; 40% to 160%
product function / grounding protection	Yes

Mechanical Design

product component	
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No No 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
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Accessories

product extension / optional / motor drive	Yes
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Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-25 °C 70 °C -40 °C 80 °C

Environmental footprint

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



[Confirmation](#)



General Product Approval	EMV	Marine / Shipping
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[Miscellaneous](#)



Marine / Shipping	other	Dangerous goods	Environment
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[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)



Environment

Further information

Information on the packaging

<http://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)

<http://mall.industry.siemens.com/mall/en/en/Catalog/product?mifb=3VA6140-8KT41-0AA0>

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

<http://support.industry.siemens.com/cs/ww/en/ps/3VA6140-8KT41-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mifb=3VA6140-8KT41-0AA0

CAX-Online-Generator

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

Tender specifications

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





