

Siemens  
EcoTech



circuit breaker 3VA6 UL Frame 150 breaking capacity class E 200 kA @ 480 V 3-pole, line protection ETU856, LSI, In=60 A overload protection Ir=24 A ...60 A short-circuit protection I<sub>sd</sub>=0.6..10x I<sub>n</sub>, I<sub>i</sub>=1.5..12x I<sub>n</sub> neutral conductor protection optionally with ext. CT; up to 160% ground fault alarm signaled via EFB300 or COM nut keeper kit on two sides



Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	EDAE
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	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	Yes
ground-fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	2.645 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 55 °C	60 A
• at 60 °C	60 A
• at 65 °C	60 A
• at 70 °C	60 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	E
maximum short-circuit current breaking capacity (I <sub>cu</sub> )	

<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	150 kA 3 kA
operating short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	150 kA 3 kA
short-circuit current making capacity (Icm)	
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	440 kA 4.5 kA

#### Switching capacity according to UL 489

current breaking capacity	
<ul style="list-style-type: none"> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	200 kA 100 kA

#### Adjustable parameters

adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	24 A 60 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.5 s 25 s
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>0t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	36 A 600 A
adjustable response value setting current (I <sub>sd</sub> ) / of S-trip / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	36 A 600 A
adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>0t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.5 s
adjustable response value delay time (t <sub>sd</sub> ) / for S-tripping / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.5 s
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	90 A 720 A
adjustable current response value current / for G-tripping / with standard characteristic	
<ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	15 A 60 A
adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>0t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.8 s
adjustable response value setting current (I <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	15 A 60 A
adjustable response value delay time (t <sub>g</sub> ) / for G-tripping / with I <sub>2t</sub> characteristic	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0.05 s 0.8 s
adjustable setting current (I <sub>nN</sub> ) / for N-tripping	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	0 A 0 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"> <li>• undervoltage release</li> </ul>	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	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	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8.5 mm

### 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	
• 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



[Miscellaneous](#)

General Product Approval	EMV	other	Dangerous goods
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[Confirmation](#)

[Miscellaneous](#)

[Transport Information](#)

### Environment



Siemens EcoTech

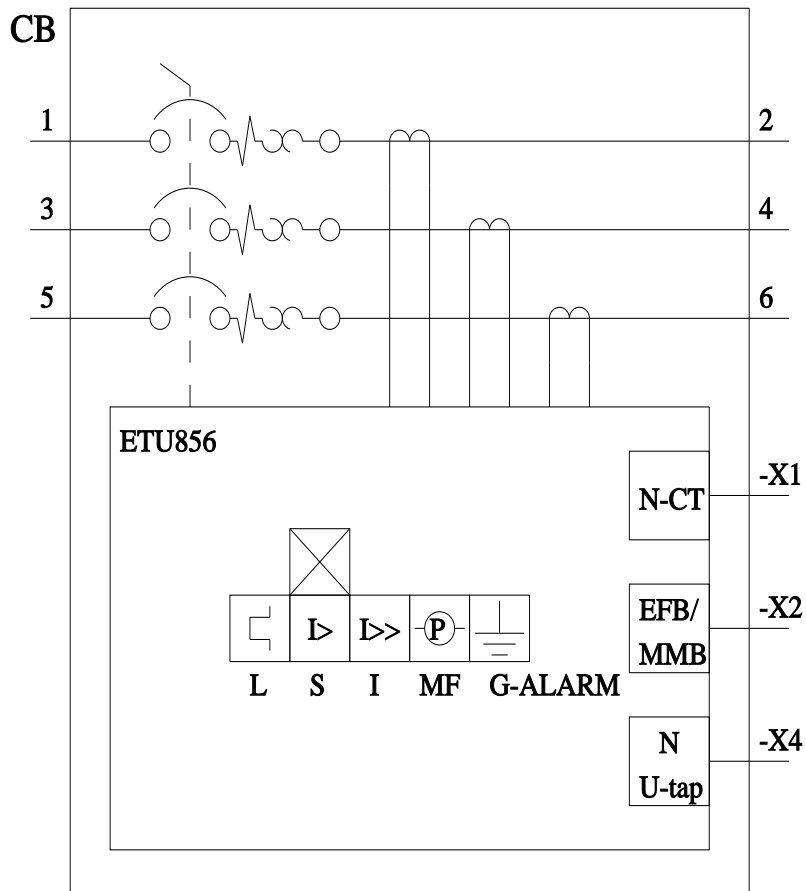


[Environmental Confirmations](#)

### 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>





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