



circuit breaker 3VA6 UL frame 250 breaking capacity class H 65kA @ 480V  
 3-pole, line protection ETU550, LSI,  $I_n=250A$  overload protection  
 $I_r=100A...250A$  short-circuit protection  $I_{sd}=0.6..10x I_n$ ,  $I_i=1.5..10x I_n$  N  
 conductor protection optionally with external current transformer, up to  
 160% without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HFAE-Y
Product version	System protection
design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU550
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
Tension assignée d'isolement $U_i$	600 V
power loss [W] / maximum	42 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	6 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 000
electrical endurance (switching cycles) / at 480 V	6 000
electrical endurance (switching cycles) / at 600 V	7 500
Neutral conductors / upgradeable/retrofitable	Yes
ground-fault monitoring version	Without
product function	
• communication function	Yes
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	Yes
operational current	
• at 55 °C	238 A
• at 60 °C	225 A
• at 65 °C	213 A
• at 70 °C	200 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
breaking capacity maximum short-circuit current ( $I_{cu}$ )	
• at 240 V	110 kA

<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	85 kA 3 kA
breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	110 kA 85 kA 3 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 690 V</li> </ul>	242 kA 187 kA 4.5 kA

#### Switching capacity according to UL 489

breaking capacity current <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 Y/347 V</li> <li>• at 600 V</li> </ul>	100 kA 65 kA 22 kA 22 kA
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#### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	0.5 s
Adjustable response value current / I <sub>i</sub> min.	375 A
Adjustable response value current / I <sub>i</sub> max.	2 500 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No

#### Mechanical Design

height [in]	7.8 in
Height	198 mm
width [in]	4.1 in
Width	105 mm
depth [in]	3.4 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"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	-25 °C 70 °C -40 °C 80 °C

#### Certificates

reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes

#### General Product Approval

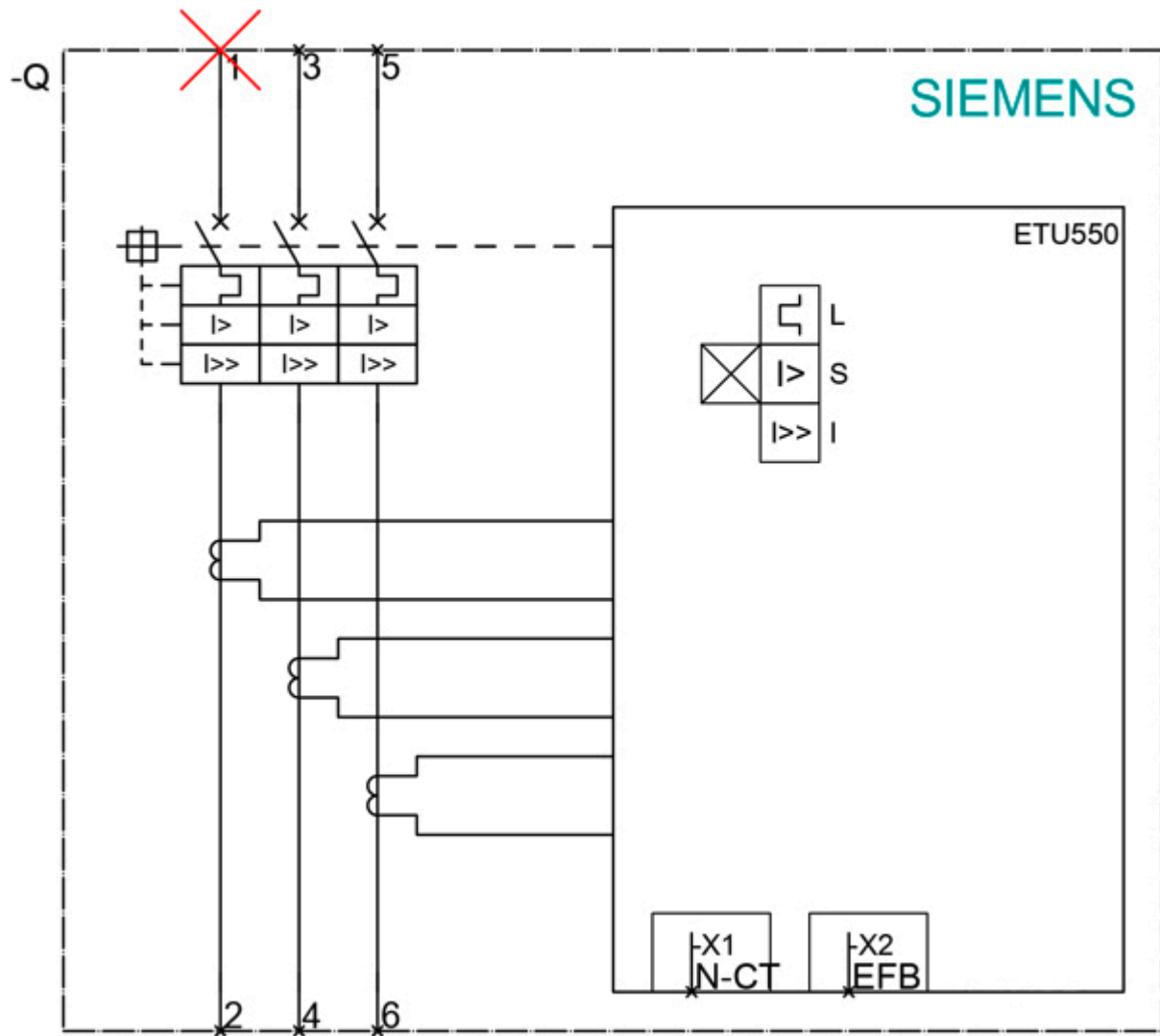


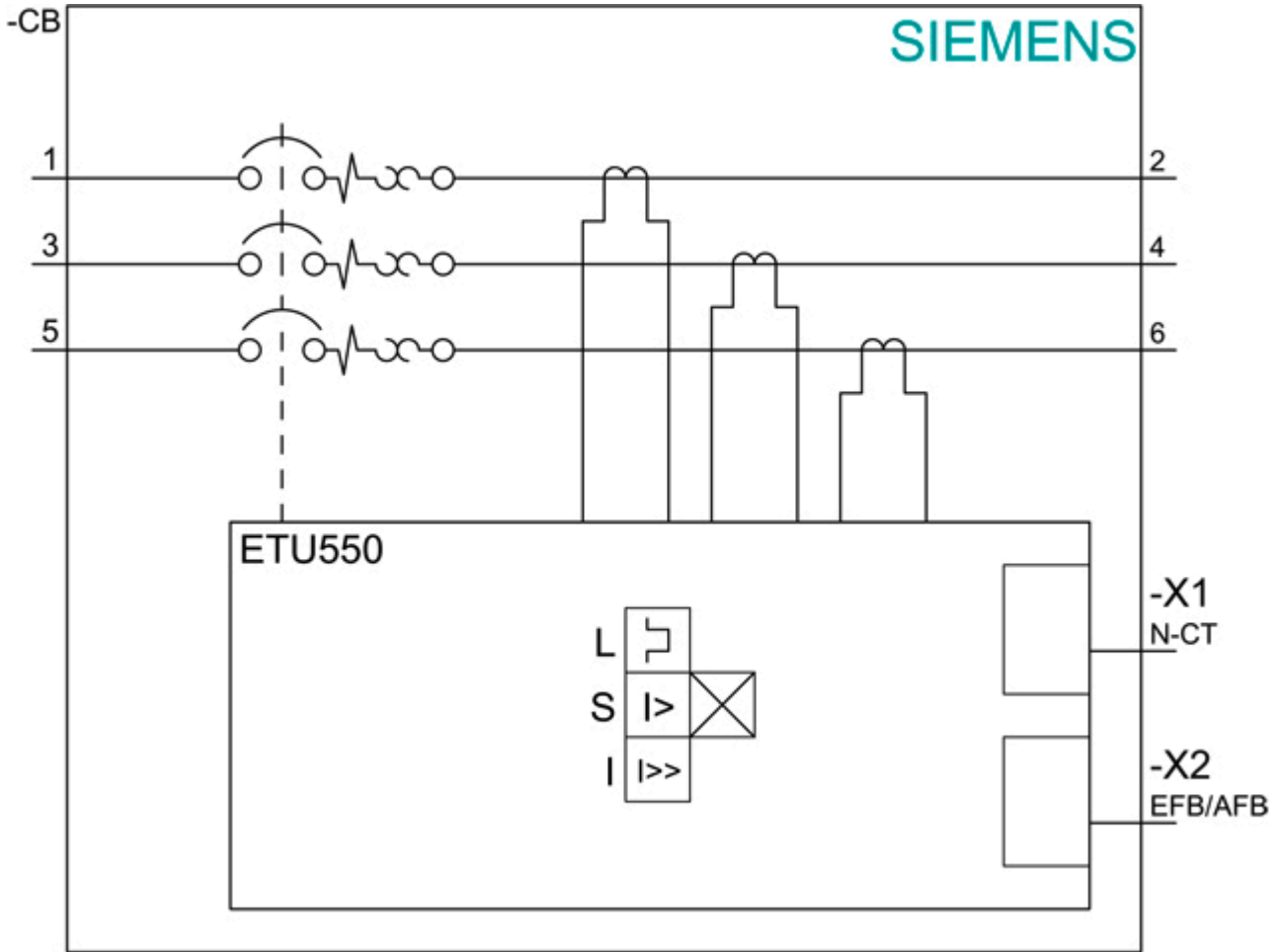
[Miscellaneous](#)



EMC	Declaration of Conformity	Shipping Approval	other
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12/18/2020 