



circuit breaker 3VA2 IEC frame 1000 breaking capacity class M  $I_{cu}=55kA$  @ 415V 4-pole, line protection ETU550, LSI,  $I_n=800A$  overload protection  $I_r=320A...800A$  short-circuit protection  $I_{sd}=0.6..10x I_n$ ,  $I_i=1.5..12x I_n$  N conductor protection adjustable (OFF, up to 160%) nut keeper kit


Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU550
protection function of the overcurrent release	LSI
number of poles	4
General technical data	
Tension assignée d'isolement $U_i$	800 V
Max. rated operational voltage $U_e$ with AC 50/60Hz	690 V
power loss [W] / maximum	231 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	77 W
mechanical service life (switching cycles) / typical	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 600
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 200
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	Yes
• other measurement function	No
Current	
Max. rated operational current of the frame size	1 000 A
Courant permanent assigné $I_u$	800 A
operational current	
• at 40 °C	800 A
• at 45 °C	800 A
• at 50 °C	800 A
• at 55 °C	800 A
• at 60 °C	800 A
• at 65 °C	767 A
• at 70 °C	703 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current ( $I_{cu}$ )	
• at 240 V	85 kA

<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	36 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	25 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 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	85 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	36 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	19 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 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	187 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	121 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	121 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	76 kA		
<ul style="list-style-type: none"> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	53 kA		
<b>Adjustable parameters</b>			
Adjustable response value current / I <sub>g</sub> min.	320 A		
Adjustable response value current / I <sub>g</sub> min.	800 A		
Adjustable response value current / I <sub>g</sub> min.	0.5		
Adjustable response value current / I <sub>g</sub> min.	25		
Adjustable response value current / I <sub>g</sub> min.	480 A		
Adjustable response value current / I <sub>g</sub> min.	8 000 A		
Adjustable response value current / I <sub>g</sub> min.	0.05 s		
Adjustable response value current / I <sub>g</sub> min.	0.5 s		
Adjustable response value current / I <sub>g</sub> min.	0.05 s		
Adjustable response value current / I <sub>g</sub> min.	0.5 s		
Adjustable response value current / I <sub>i</sub> min.	1 200 A		
Adjustable response value current / I <sub>i</sub> max.	8 000 A		
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No		
<b>Mechanical Design</b>			
height [in]	12.6 in		
Height	320 mm		
width [in]	11 in		
Width	280 mm		
depth [in]	4.7 in		
depth	120 mm		
<b>Connections</b>			
arrangement of electrical connectors / for main current circuit	Front terminal		
type of electrical connection / for main current circuit	on both sides nut keeper kit		
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 4 mm		
<b>Auxiliary circuit</b>			
number of CO contacts / for auxiliary contacts	0		
<b>Environmental conditions</b>			
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		
<b>Certificates</b>			
reference code / acc. to IEC 81346-2	Q		
<b>General Product Approval</b>		<b>EMC</b>	<b>Declaration of Conformity</b>



[Miscellaneous](#)



Test Certificates		Shipping Approval		other	
<a href="#">Miscellaneous</a>	<a href="#">Miscellaneous</a>	 LRS	<a href="#">CCS / China Classification Society</a>	<a href="#">Manufacturer Declaration</a>	<a href="#">Miscellaneous</a>

**Further information**

**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=3VA2580-5JP42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2580-5JP42-0AA0>

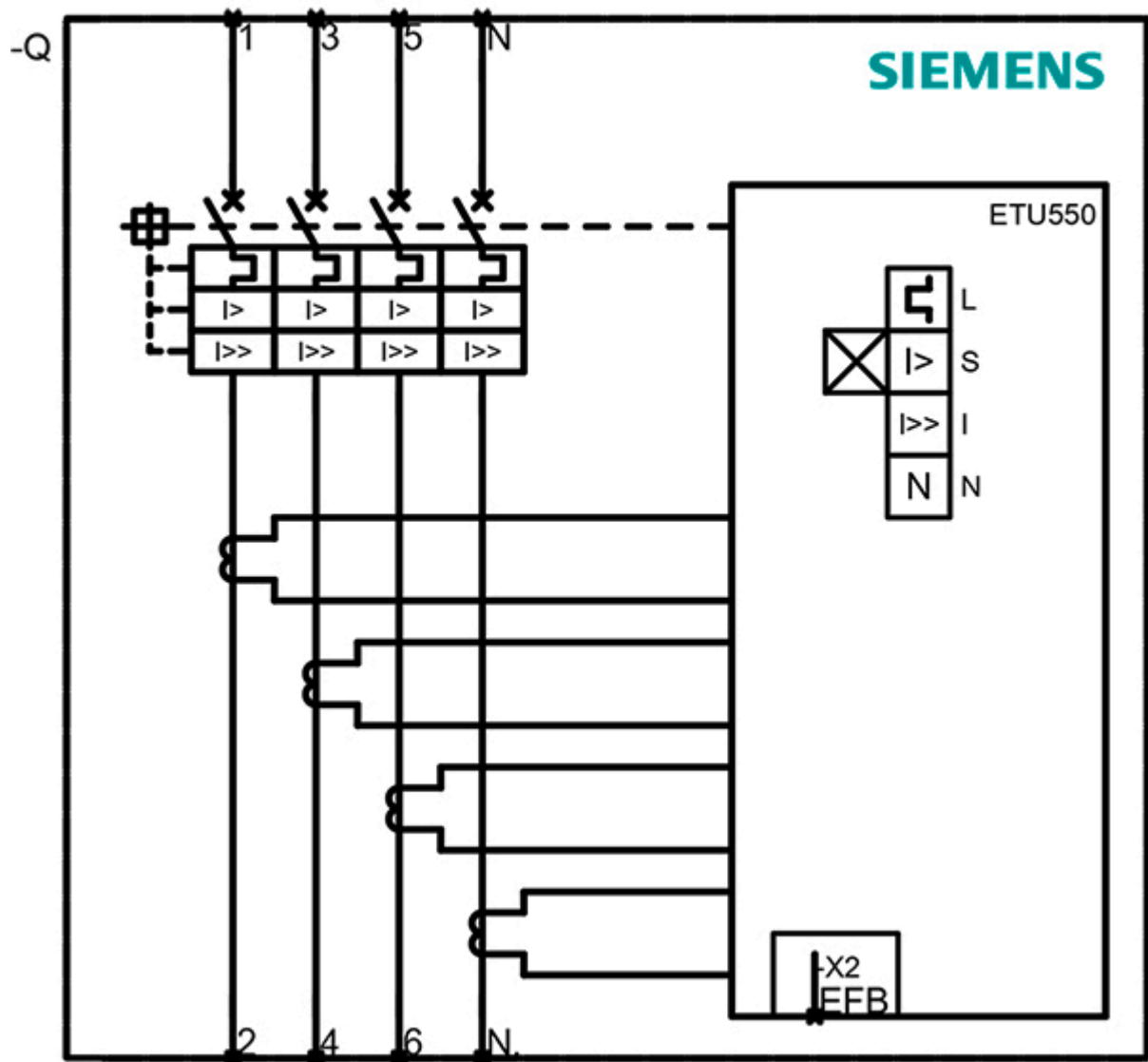
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2580-5JP42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2580-5JP42-0AA0)

**Tender specifications**

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





last modified:

12/18/2020