



circuit breaker 3VA2 IEC frame 100 breaking capacity class H Icu=85kA @ 415V 4-pole, line protection ETU850, LSI, In=100A overload protection Ir=40A...100A short-circuit protection Isd=0.6..10x In, li=1.5..12x In N conductor protection adjustable (OFF, up to 100%) nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU850
protection function of the overcurrent release	LSI
number of poles	4
General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
power loss [W] / maximum	13.5 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	4.5 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	14 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	Yes
• other measurement function	Yes
net weight	2.95 kg
Current	
Max. rated operational current of the frame size	100 A
Courant permanent assigné Iu	100 A
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
breaking capacity maximum short-circuit current (Icu)	

<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>	110 kA 85 kA 85 kA 55 kA 2 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>	110 kA 85 kA 85 kA 55 kA 2 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>	242 kA 187 kA 187 kA 121 kA 3 kA
<b>Adjustable parameters</b>	
Adjustable response value current / I <sub>g</sub> min.	40 A
Adjustable response value current / I <sub>g</sub> min.	100 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.	60 A
Adjustable response value current / I <sub>g</sub> min.	1 000 A
Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	Yes
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.	150 A
Adjustable response value current / I <sub>i</sub> max.	1 200 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No
<b>Mechanical Design</b>	
height [in]	7.1 in
Height	181 mm
width [in]	5.5 in
Width	140 mm
depth [in]	3.4 in
depth	86 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.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8.5 mm
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	Yes
<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

## Certificates

reference code / acc. to IEC 81346-2

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### General Product Approval



[Miscellaneous](#)



EMC	Declaration of Conformity	Test Certificates			Shipping Approval
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[Special Test Certificate](#)

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



Shipping Approval	other				
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[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

other
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[Miscellaneous](#)

## 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=3VA2010-6KP42-0AA0>

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

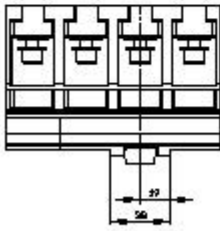
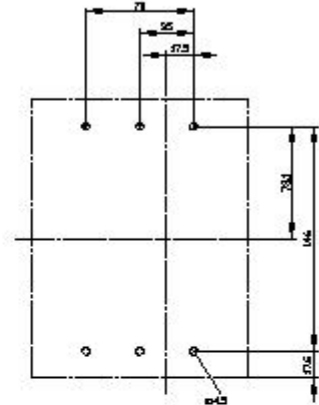
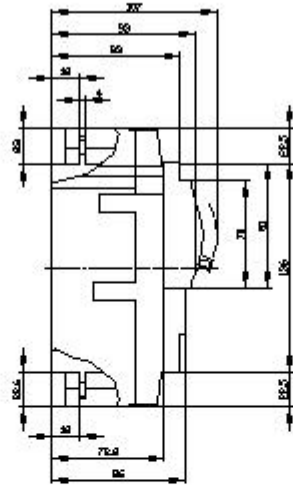
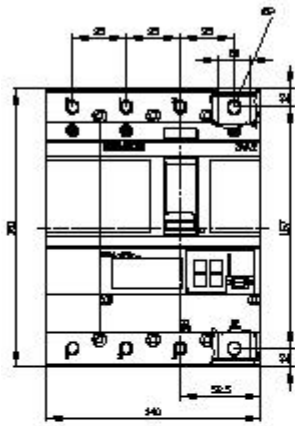
<https://support.industry.siemens.com/cs/ww/en/ps/3VA2010-6KP42-0AA0>

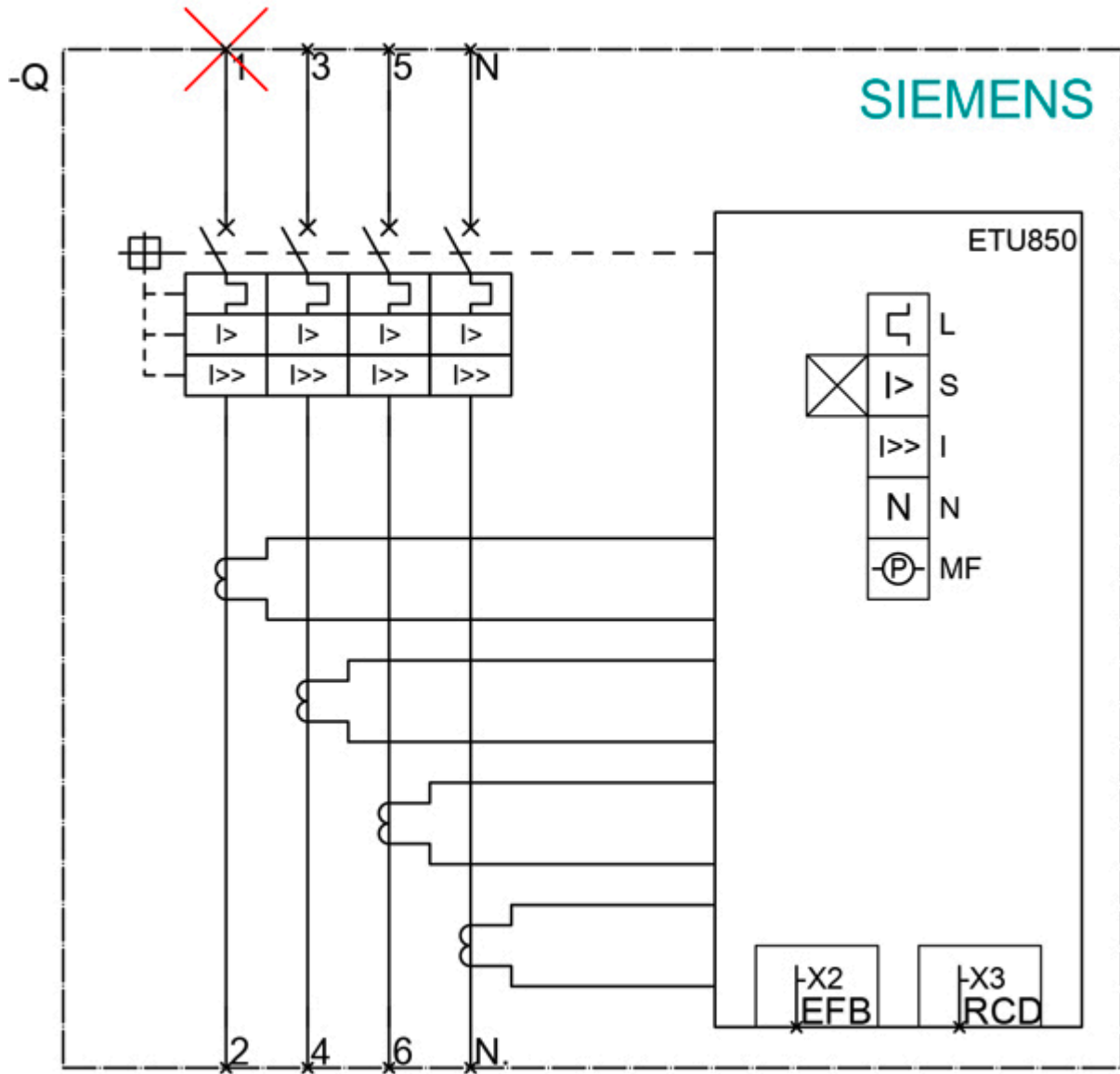
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2010-6KP42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-6KP42-0AA0)

Tender specifications

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





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