



circuit breaker 3VA6 UL frame 250 breaking capacity class M 35kA @ 480V 3-pole, line protection ETU830, LIG, In=100A overload protection Ir=40A...100A short-circuit protection Ii=1.5...12 x In ground-fault protection Ig=0.2...1 x In, tg=0.05-0.8s without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MFAE-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	ETU830
protection function of the overcurrent release	LIG
number of poles	3
General technical data	
Tension assignée d'isolement Ui	600 V
power loss [W] / maximum	6.7 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	2.23 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	No
ground-fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Current	
marking / acc. to UL 489 / 100%-rated breaker	Yes
operational current	
• 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	M
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	85 kA

<ul style="list-style-type: none"> • at 415 V • at 690 V 	55 kA 3 kA
breaking capacity operating short-circuit current (Ics) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	85 kA 55 kA 3 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	187 kA 121 kA 4.5 kA
Switching capacity according to UL 489	
breaking capacity current <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 Y/347 V • at 600 V 	100 kA 35 kA 18 kA 18 kA
Adjustable parameters	
Adjustable response value current / I _g min.	40 A
Adjustable response value current / I _g min.	100 A
Adjustable response value current / I _i min.	150 A
Adjustable response value current / I _i max.	1 200 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	Yes
Adjustable response value current / I _g min.	20 A
Adjustable response value current / I _g max.	100 A
Adjustable response value current / t _g min.	0.05 s
Adjustable response value current / I _g min.	0.8 s
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
Accessories	
product extension / optional / motor drive	Yes
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
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
 RCM	 EG-Konf.	 ABS	 ABS	 LRS	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?mfb=3VA6210-5KM31-2AA0>

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

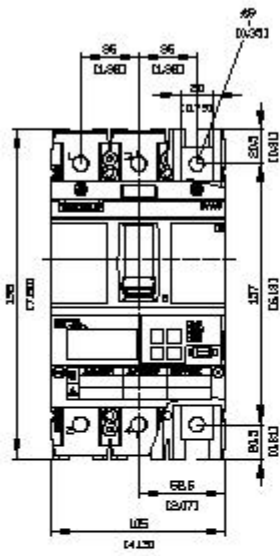
<https://support.industry.siemens.com/cs/ww/en/ps/3VA6210-5KM31-2AA0>

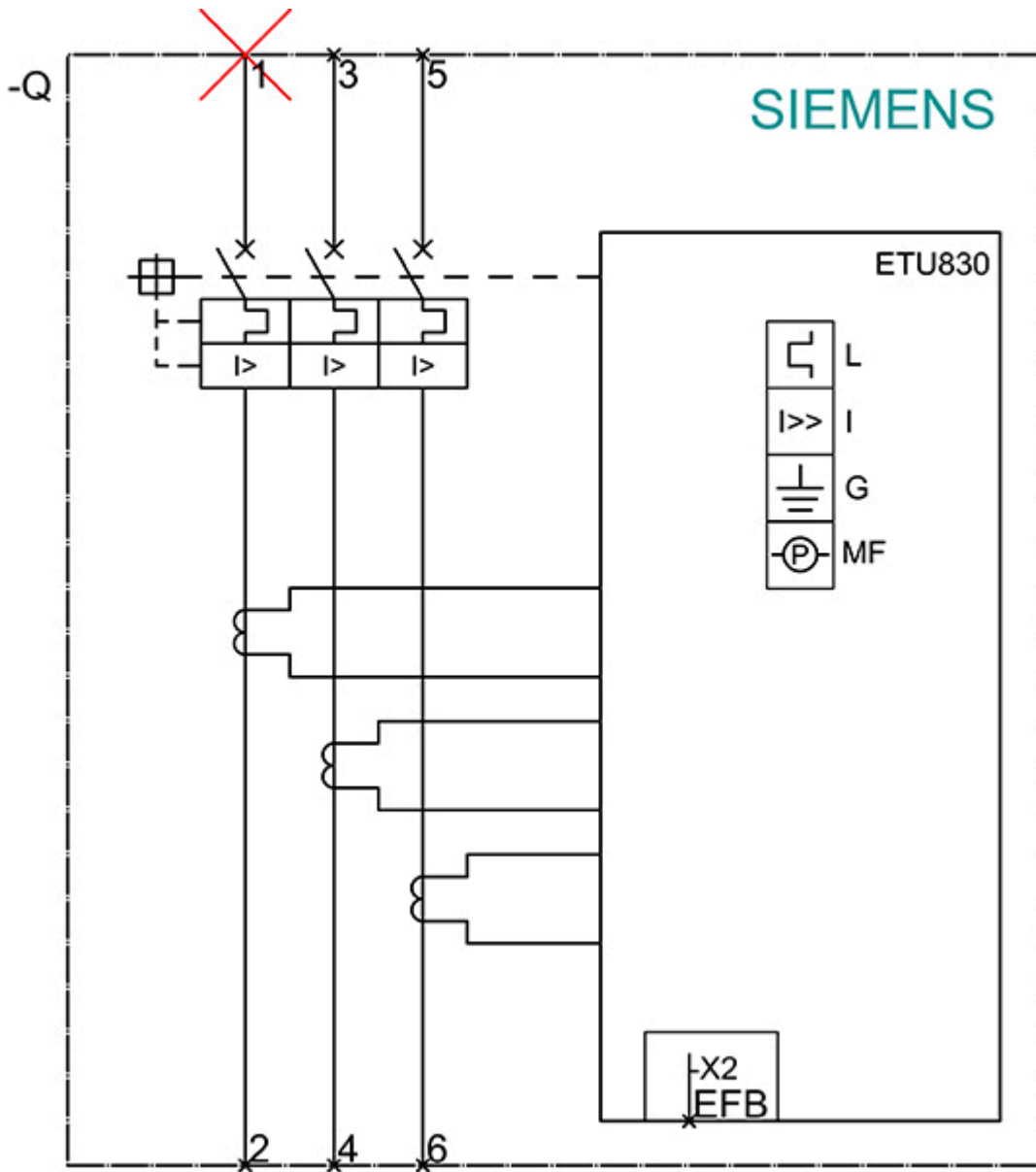
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

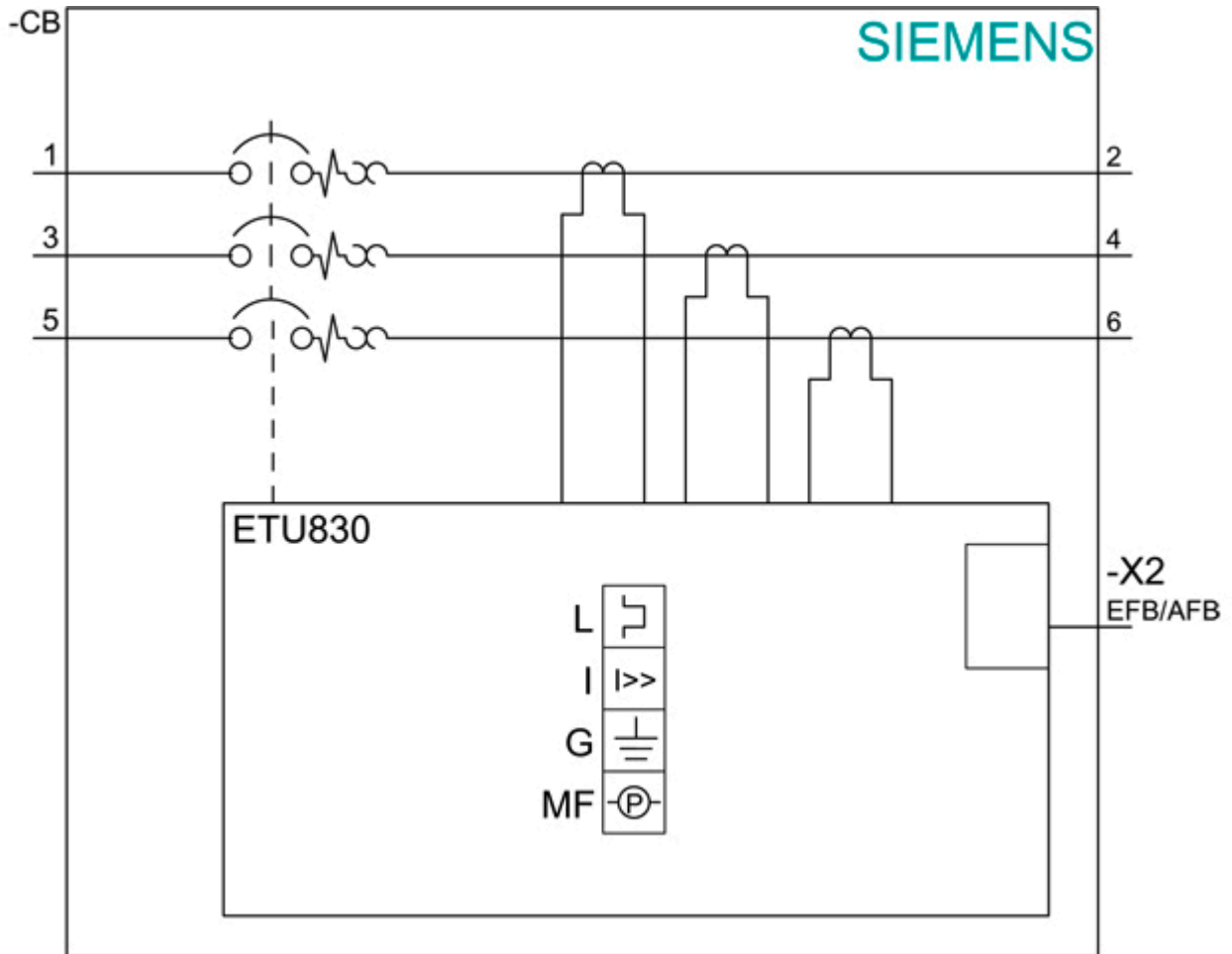
http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA6210-5KM31-2AA0

Tender specifications

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







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