



circuit breaker 3VA6 UL frame 250 breaking capacity class H 65kA @ 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	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	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 (operating 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	H
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	110 kA

<ul style="list-style-type: none"> • at 415 V • at 690 V 	85 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 	110 kA 85 kA 3 kA
short-circuit current making capacity (Icm) <ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	242 kA 187 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 65 kA 22 kA 22 kA
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Adjustable parameters

Adjustable response value current / li min.	150 A
Adjustable response value current / li max.	1 200 A
Ground fault protection / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value current / Ig min.	20 A
Adjustable response value current / Ig max.	100 A
Adjustable response value current / tg min.	0.05 s
Adjustable response value current / Ig 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
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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"> • during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum 	-25 °C 70 °C -40 °C 80 °C

Certificates

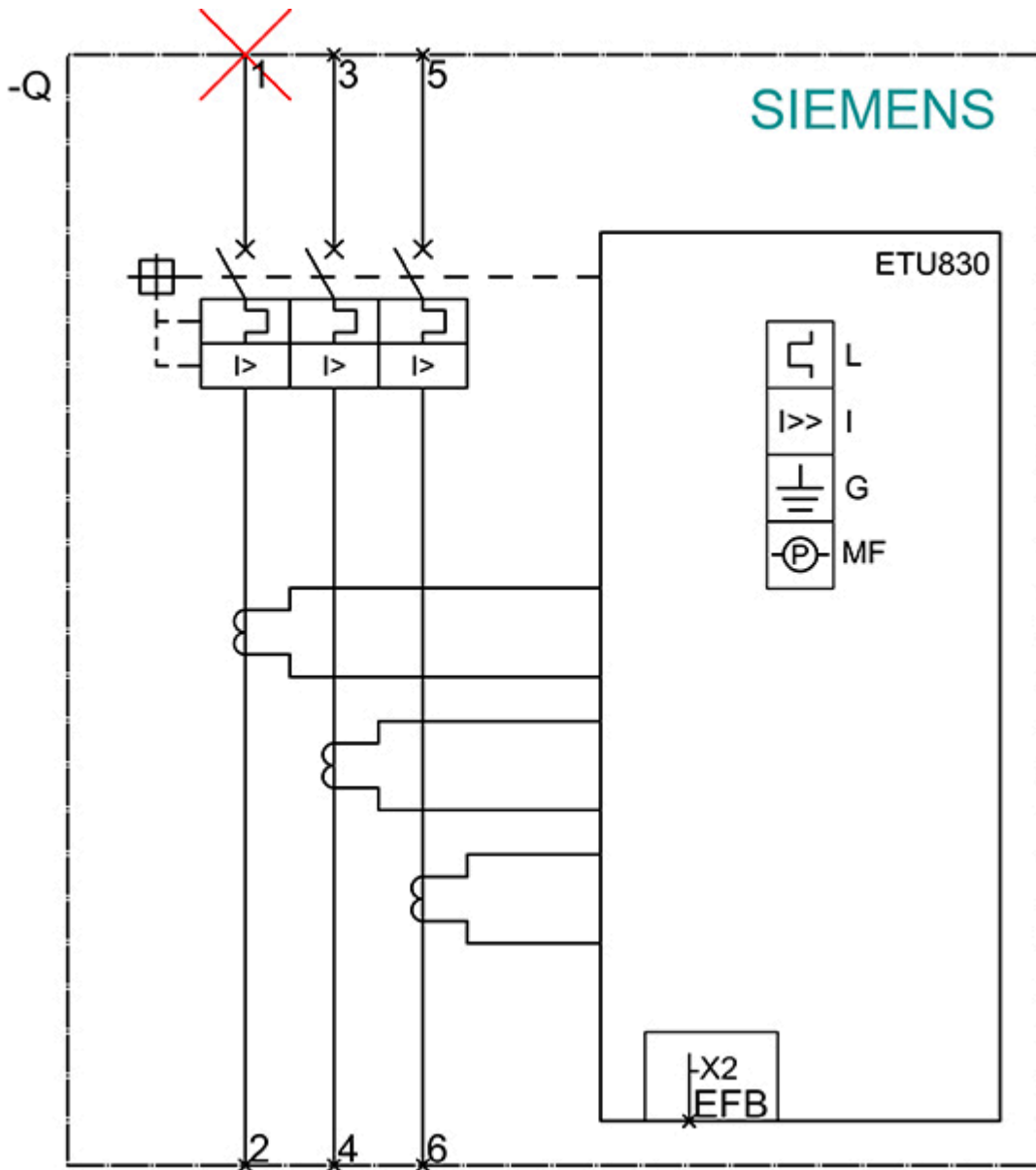
reference code / acc. to IEC 81346-2	Q
certificate of suitability / as approval for NAVAL (no combat vessels) / supplement SB	Yes

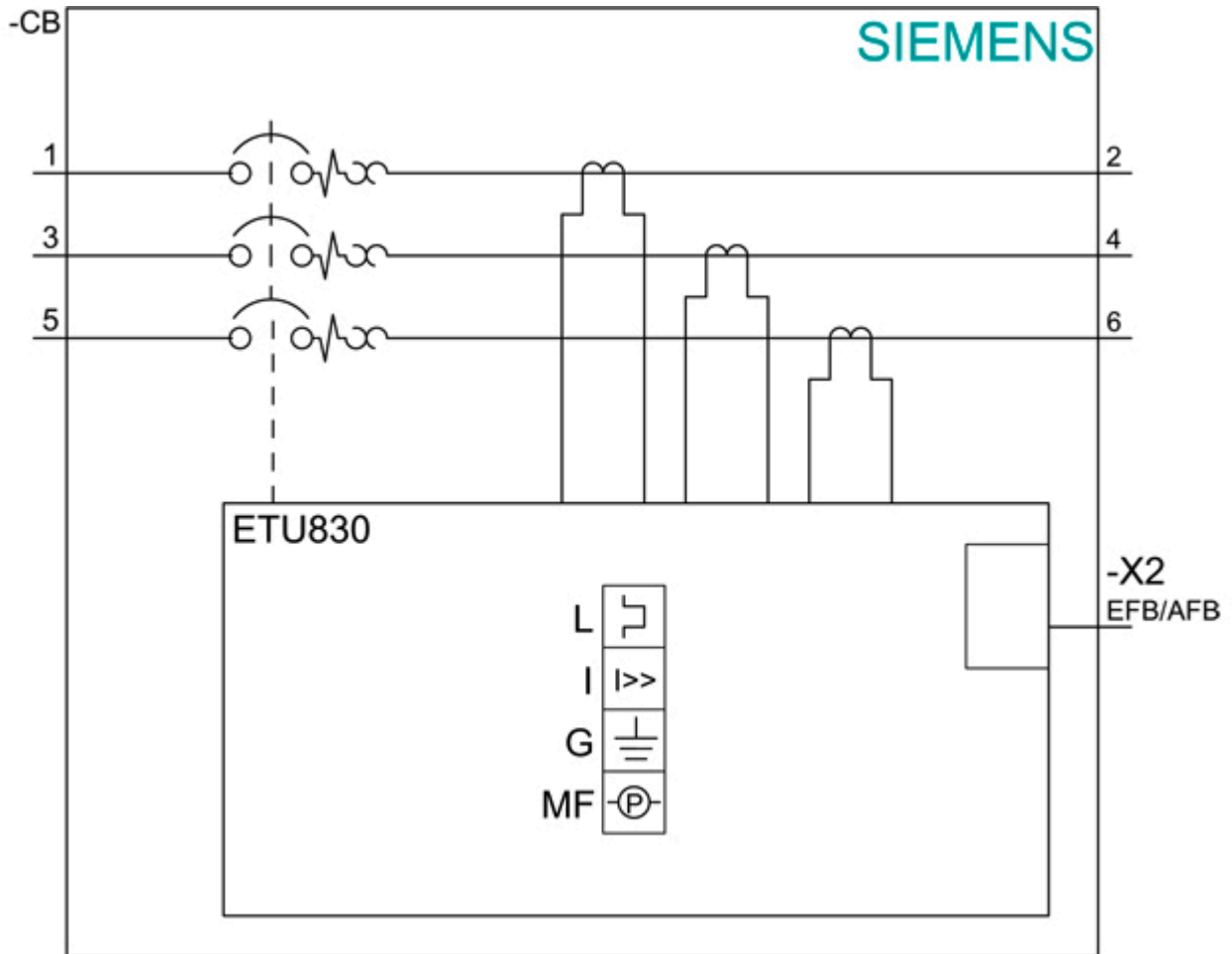
General Product Approval



[Miscellaneous](#)







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