



Circuit breaker 3VA5 UL Frame 250 3-pole, starter protection TM120M, AM, In=250A Without overload protection Short-circuit protection Ii=5...10 x In Without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HFAP
Product version	Starter 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	TM120M
protection function of the overcurrent release	LI
number of poles	3
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	58 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	19.33 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Without
product function	
• communication function	No
• phase failure detection	No
• other measurement function	No
Current	
marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational current of the frame size	250 A
Courant permanent assigné Iu	250 A
Switching capacity according to IEC 60947	
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA

breaking capacity operating short-circuit current (Ics)	
<ul style="list-style-type: none"> • at 415 V • at 440 V • at 690 V 	200 kA 110 kA 10 kA
short-circuit current making capacity (Icm)	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	440 kA 242 kA 17 kA
Adjustable parameters	
Adjustable response value current / I _g min.	250 A
Adjustable response value current / I _g min.	250 A
Adjustable response value current / I _i min.	1 500 A
Adjustable response value current / I _i max.	3 000 A
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No
Mechanical Design	
height [in]	7.3 in
Height	185 mm
width [in]	4.1 in
Width	105 mm
depth [in]	3.3 in
depth	83 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	No
General Product Approval	EMC



[Miscellaneous](#)



Declaration of
Conformity

Shipping Approval

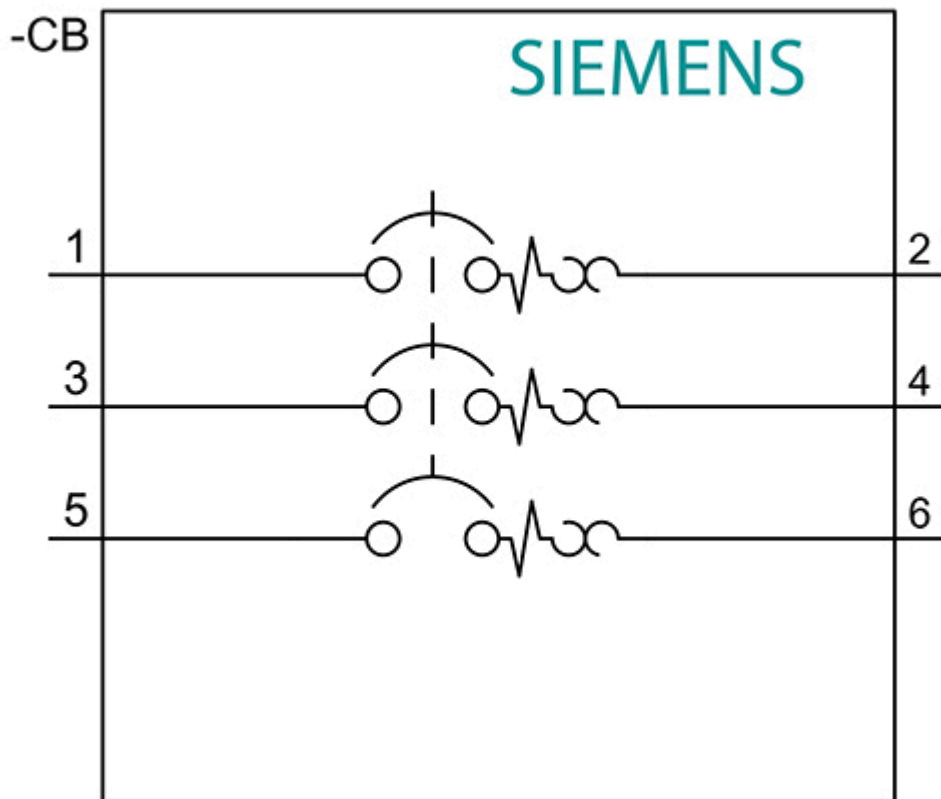
other



[Miscellaneous](#)

Further information





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