



molded case switch 3VA5 UL frame 250 max short-circuit curr. rating 100kA @ 480 V 4-pole MCS110, In=250A without overload protection SELF PROTECTION li=10 x In w/o connection

Model	
product designation / according to UL file	CFAS
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High-Intensity-Discharge circuit breaker (HID Type)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	MCS110
protection function of the overcurrent release	I
number of poles	4
General technical data	
insulation voltage / rated value	800 V
Max. rated operational voltage U _e with DC	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	54.4 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	18.13 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 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
product function	
• communication function	No
• other measurement function	No
Net Weight	2.7 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	250 A
• at 45 °C	244 A
• at 50 °C	239 A
• at 55 °C	233 A
• at 60 °C	227 A
• at 65 °C	222 A
• at 70 °C	216 A
Switching capacity according to IEC 60947	
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case

circuit breaker device manual; link to be found under Service & Support in the last chapter

Adjustable parameters

adjustable response value setting current (Ii) / for I-tripping / maximum	2 500 A
adjustable response value setting current (Ii) / for I-tripping / minimum	2 500 A
adjustable absolute value setting current (InN) / for N-tripping / maximum	0 A
adjustable absolute value setting current (InN) / for N-tripping / minimum	0 A
Adjustable response value current / Ii min.	2 500 A
Adjustable response value current / Ii max.	2 500 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

height [in]	7.28 in
Height	185 mm
width [in]	5.51 in
Width	140 mm
depth [in]	3.27 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

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
number of CO contacts / for auxiliary contacts	0

Accessories

product extension / optional / motor drive	Yes
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Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

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

General Product Approval

Declaration of Conformity



[Confirmation](#)



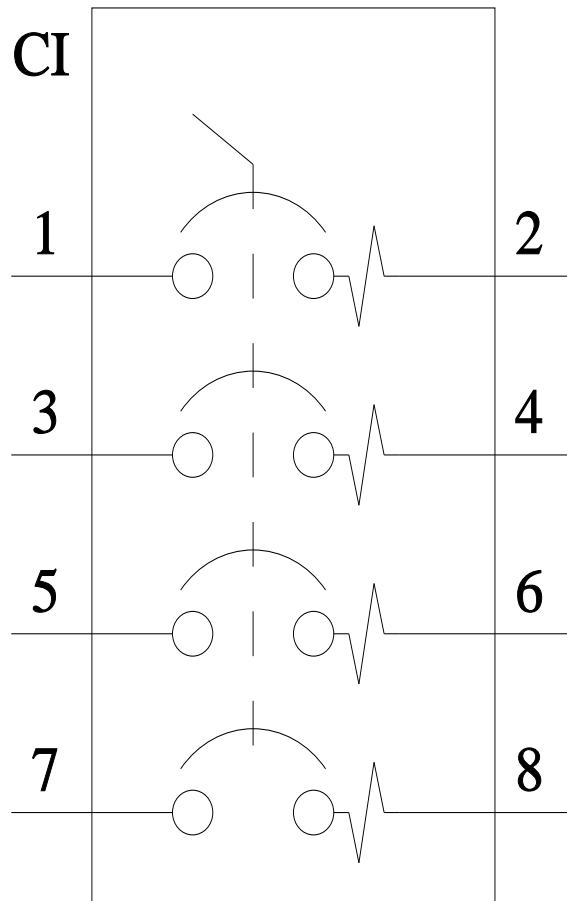
[Miscellaneous](#)



Declaration of Conformity

Marine / Shipping





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