



circuit breaker 3VA5 UL frame 250 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM210, FTFM, In=50A overload protection Ir=50A fixed short circuit protection Ii=10 x In nut keeper kit on both sides

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	TM210
protection function of the overcurrent release	LI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	750 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	22 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	5.8 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	8 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	4 000
electrical endurance (operating cycles) / at 480 V	8 000
electrical endurance (operating cycles) / at 600 V	4 000
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
product function	
• communication function	No
• other measurement function	No
Net Weight	2170 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	50 A
• at 45 °C	48.7 A
• at 50 °C	47.3 A
• at 55 °C	46 A
• at 60 °C	44.7 A
• at 65 °C	43.3 A
• at 70 °C	42 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	C
maximum short-circuit current breaking capacity (Icu)	

<ul style="list-style-type: none"> • at 240 V • at 415 V • at 690 V 	200 kA 110 kA 10 kA
operating short-circuit current breaking capacity (Ics) <ul style="list-style-type: none"> • at 240 V • at 415 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
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

Switching capacity according to UL 489

current breaking capacity <ul style="list-style-type: none"> • at 240 V • at 480 V • at 600 V 	200 kA 100 kA 35 kA
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Adjustable parameters

adjustable response value setting current (I _r) / of the L-trip / with I ² t characteristic <ul style="list-style-type: none"> • minimum • maximum 	50 A 50 A
adjustable response value delay time (t _r) / for L-tripping / with I ² t characteristic <ul style="list-style-type: none"> • minimum • maximum 	1 s 1 s
adjustable response value setting current (I _i) / for I-tripping <ul style="list-style-type: none"> • minimum • maximum 	500 A 500 A
adjustable absolute value setting current (I _N) / for N-tripping <ul style="list-style-type: none"> • minimum • maximum 	0 A 0 A
product function / grounding protection	No

Mechanical Design

product component <ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No No No
height [in]	7.28 in
height	185 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.27 in
depth	83 mm

Connections

arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	nut keeper kit on both ends
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 mm
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	Yes
manufacturer's article number <ul style="list-style-type: none"> • of the supplied basic switch 	3VA52507ED322AA0

Environmental conditions



