



circuit breaker 3VA5 UL frame 250 breaking capacity class M 35kA @ 480 V 3-pole, line protection TM240, ATAM, In=100A without overload protection Ir=80A ...100A short circuit protection Ii=5...10 x In nut keeper kit on both sides

Model	
product designation / according to UL file	MFAS
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	TM240
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	32 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	10.5 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	100 A
• at 45 °C	97 A
• at 50 °C	95 A
• at 55 °C	92 A
• at 60 °C	89 A
• at 65 °C	87 A
• at 70 °C	84 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (Icu)	

• at 240 V • at 415 V • at 690 V	85 kA 55 kA 7 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 690 V	85 kA 55 kA 7 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 690 V	187 kA 121 kA 11.9 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 • at 240 V • at 480 V • at 600 V	85 kA 35 kA 18 kA
Adjustable parameters	
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic • minimum • maximum	80 A 100 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic • minimum • maximum	1 s 1 s
adjustable response value setting current (I _i) / for I-tripping • minimum • maximum	500 A 1 000 A
adjustable absolute value setting current (I _{nN}) / for N-tripping • minimum • maximum	0 A 0 A
product function / grounding protection	No
Mechanical Design	
product component • 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
Accessories	
product extension / optional / motor drive	Yes
manufacturer's article number • of the supplied basic switch	3VA52105EF322AA0
Environmental conditions	



