



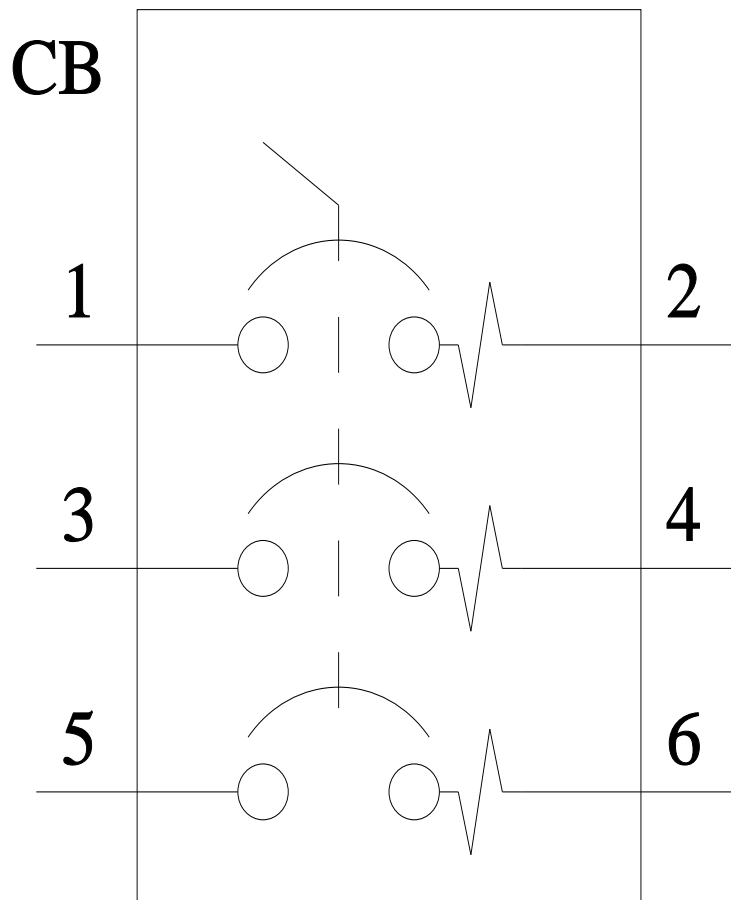
circuit breaker 3VA5 UL frame 125 3-pole, starter protection TM120M, AM, In=125A without overload protection short-circuit protection Ii=5...12 x In without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	HEAP
design of the product	Starter protection
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	TM120M
protection function of the overcurrent release	I
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	30 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	10 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
• phase failure detection	No
• other measurement function	No
Net Weight	947 g
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	125 A
• at 45 °C	122 A
• at 50 °C	119 A
• at 55 °C	117 A
• at 60 °C	114 A

<ul style="list-style-type: none"> <li>at 65 °C</li> <li>at 70 °C</li> </ul>	112 A 109 A
<b>Switching capacity according to IEC 60947</b>	
maximum short-circuit current breaking capacity (I <sub>cu</sub> ) <ul style="list-style-type: none"> <li>at 240 V</li> <li>at 415 V</li> <li>at 690 V</li> </ul>	150 kA 70 kA 10 kA
operating short-circuit current breaking capacity (I <sub>cs</sub> ) <ul style="list-style-type: none"> <li>at 240 V</li> <li>at 415 V</li> <li>at 690 V</li> </ul>	150 kA 70 kA 5 kA
short-circuit current making capacity (I <sub>cm</sub> ) <ul style="list-style-type: none"> <li>at 240 V</li> <li>at 415 V</li> <li>at 690 V</li> </ul>	330 kA 154 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
<b>Adjustable parameters</b>	
adjustable response value setting current (I <sub>i</sub> ) / for I-tripping <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	625 A 1 500 A
adjustable setting current (I <sub>nN</sub> ) / for N-tripping <ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	0 A 0 A
product function / grounding protection	No
<b>Mechanical Design</b>	
product component <ul style="list-style-type: none"> <li>undervoltage release</li> <li>voltage trigger</li> <li>trip indicator</li> </ul>	No No No
height [in]	5.51 in
height	140 mm
width [in]	3 in
width	76.2 mm
depth [in]	3.01 in
depth	76.5 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
<b>Auxiliary circuit</b>	
number of CO contacts / for auxiliary contacts	0
<b>Accessories</b>	
product extension / optional / motor drive	Yes
<b>Environmental conditions</b>	
protection class IP / on the front	IP40
ambient temperature <ul style="list-style-type: none"> <li>during operation / minimum</li> <li>during operation / maximum</li> <li>during storage / minimum</li> <li>during storage / maximum</li> </ul>	-25 °C 70 °C -40 °C 80 °C
reference code / according to IEC 81346-2	Q
<b>Approvals / Certificates</b>	
<b>General Product Approval</b>	







last modified:

4/4/2025

