



circuit breaker 3VA5 UL Frame 400 breaking capacity class C 100 kA @ 480 V 4-pole, line protection TM230, FTAM, In=350 A overload protection, 100%-rated Ir=350 A permanently set short-circuit protection Ii=5...10 x In N conductor unprotected without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	CJAS
design of the product	System 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	TM230
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	600 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	71 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.53 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	6 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 000
electrical endurance (operating cycles) / at 480 V	6 000
electrical endurance (operating cycles) / at 600 V	3 000
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
product function	
• communication function	No
• other measurement function	No
Net Weight	6 820 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	350 A
• at 45 °C	342 A
• at 50 °C	334 A
• at 55 °C	327 A
• at 60 °C	319 A

<ul style="list-style-type: none"> <li>• at 65 °C</li> <li>• at 70 °C</li> </ul>	311 A 303 A
<b>Switching capacity according to IEC 60947</b>	
switching capacity class of the circuit breaker	C
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>	200 kA 110 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>	200 kA 110 kA 6 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>	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
<b>Switching capacity according to UL 489</b>	
current breaking capacity <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 480 V</li> <li>• at 600 V</li> </ul>	200 kA 100 kA 35 kA
<b>Adjustable parameters</b>	
adjustable response value setting current (I <sub>r</sub> ) / of the L-trip / with I <sup>2</sup> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	350 A 350 A
adjustable response value delay time (t <sub>r</sub> ) / for L-tripping / with I <sup>2</sup> t characteristic <ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	1 s 1 s
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>	1 750 A 3 500 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
design of the N-conductor protection	Without
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]	9.76 in
height	248 mm
width [in]	7.24 in
width	184 mm
depth [in]	4.33 in
depth	110 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
manufacturer's article number	





