



circuit breaker 3VA5 UL frame 125 breaking capacity class M 35kA @ 480V 3-pole, line protection TM210, FTFM, $I_n=110A$ overload protection $I_r=110A$ fixed short-circuit protection $I_i=10 \times I_n$ without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MEAS
Product version	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	TM210
protection function of the overcurrent release	LI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
Max. rated operational voltage U_e with DC	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	25.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	8.6 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 AC-1 / at 690 V 50/60 Hz	4 000
electrical endurance (switching cycles) / at 480 V	8 000
electrical endurance (switching cycles) / at 600 V	4 000
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	without
product function	
• communication function	No
• other measurement function	No
Net Weight	0.963 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational current	
• at 40 °C	110 A
• at 45 °C	107 A
• at 50 °C	105 A

• at 55 °C	103 A
• at 60 °C	100 A
• at 65 °C	98 A
• at 70 °C	96 A

Switching capacity according to IEC 60947

switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	7 kA
breaking capacity operating short-circuit current (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	5 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	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

breaking capacity current	
• at 240 V	85 kA
• at 480 V	35 kA
• at 600 Y/347 V	18 kA

Adjustable parameters

adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / minimum	110 A
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum	110 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / minimum	1 s
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / maximum	1 s
adjustable response value setting current (Ii) / for I-tripping / maximum	1 100 A
adjustable response value setting current (Ii) / for I-tripping / minimum	1 100 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 / Ig min.	110 A
Adjustable response value current / Ig min.	110 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No

Mechanical Design

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

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
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
General Product Approval	



[Confirmation](#)

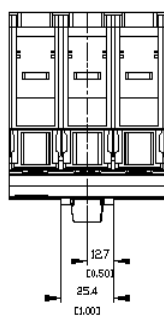
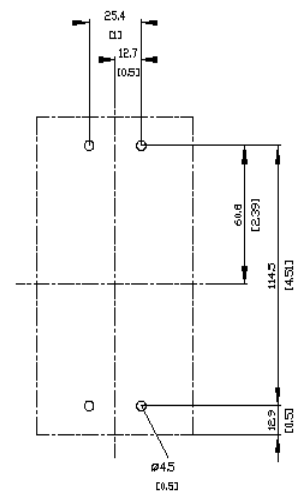
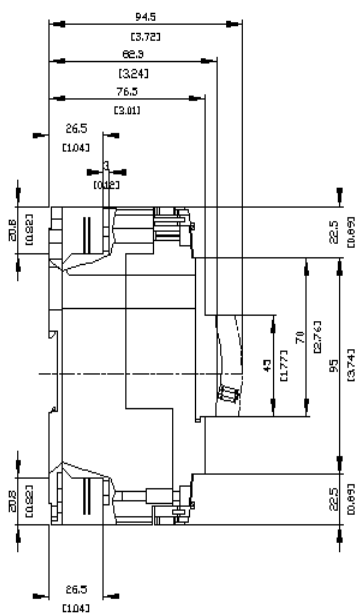
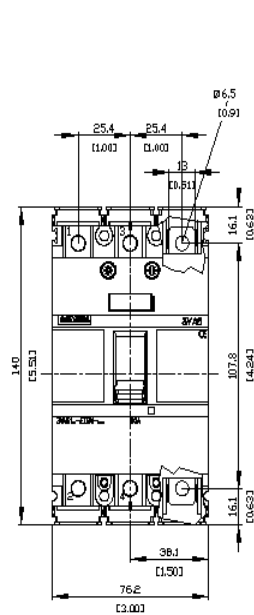


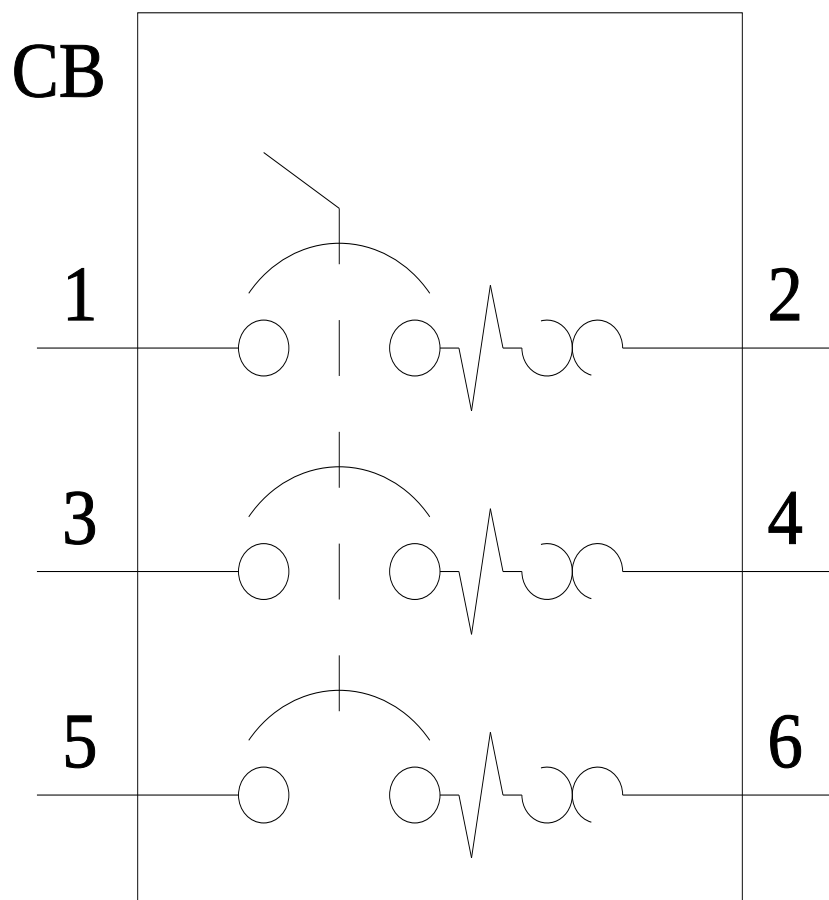
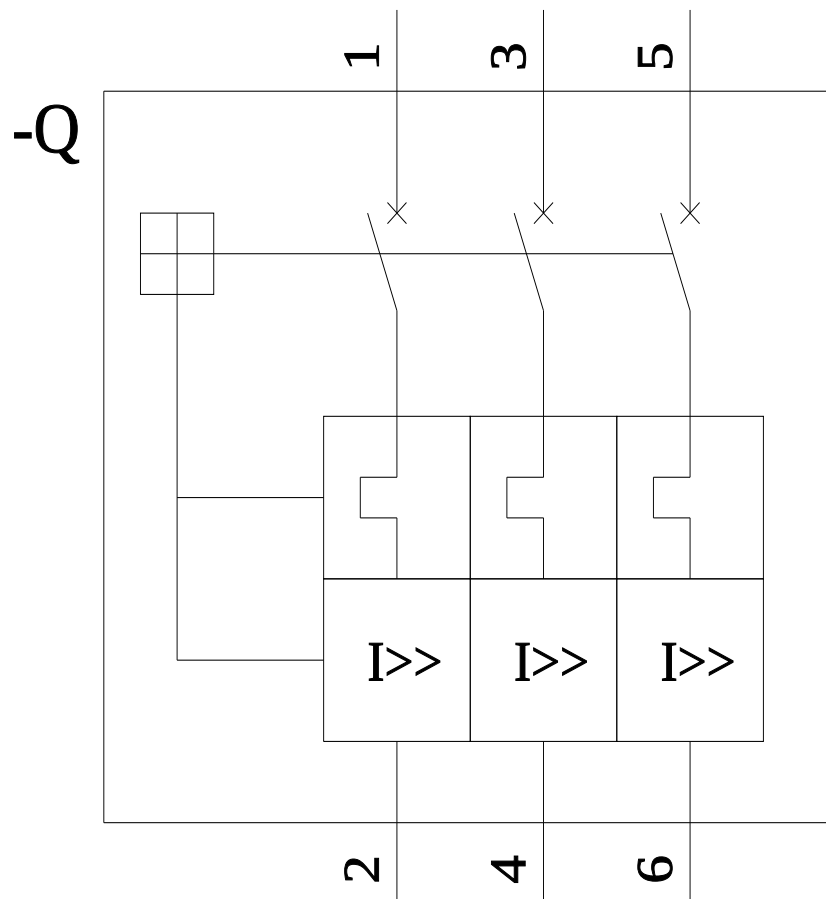
General Product Approval	EMC	Declaration of Conformity	Test Certificates
Miscellaneous			
			Special Test Certificate

Test Certificates	Marine / Shipping
Miscellaneous	

other
Miscellaneous
Miscellaneous

Further information
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/lowvoltage/catalogs Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA5111-5ED31-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA5111-5ED31-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5111-5ED31-0AA0 CAX-Online-Generator http://www.siemens.com/cax Tender specifications http://www.siemens.com/specifications





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