

circuit breaker 3VM1 IEC frame 250 breaking capacity class S
Icu=36kA @ 415V 4-pole, line protection TM220, ATFM, In=200A
overload protection Ir=140A...200A short-circuit protection Ii=10 x In
N conductor unprotected nut keeper kit



Model	
Product brand name	SETRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	TM220
Protective function of the overcurrent release	LI
Number of poles	4
General technical data	
Rated insulation voltage Ui	690 V
Max. rated operational voltage Ue with AC 50/60Hz	500 V
Max. rated operational voltage Ue with DC	500 V
Power loss [W] / maximum	42 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	14 W
Latching - endurance	12 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	6 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without

Product function	
• communication function	No
• other measurement function	No
Net weight	2.3 kg

Current

Max. rated operational current of the frame size	250 A
Rated continuous current I _u	200 A
Operating current	
• at 40 °C	200 A
• at 45 °C	200 A
• at 50 °C	200 A
• at 55 °C	194 A
• at 60 °C	188 A
• at 65 °C	182 A
• at 70 °C	176 A


Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	S
Maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	55 kA
• at 415 V	36 kA
• at 440 V	25 kA
• at 500 V	10 kA
Operational short-circuit current breaking capacity (I _{cs})	
• at 240 V	41 kA
• at 415 V	27 kA
• at 440 V	18 kA
• at 500 V	7 kA
Short-circuit current making capacity (I _{cm})	
• at 240 V	121 kA
• at 415 V	76 kA
• at 440 V	53 kA
• at 500 V	17 kA

Adjustable parameters

Adjustable response value current / I _r min.	140 A
Adjustable response value current / I _r max.	200 A
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _i min.	2 000 A
Adjustable response value current / I _i max.	2 000 A
Design of the N-conductor protection	Without

Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
Height [in]	6.2 in
Height	158 mm
Width [in]	5.5 in
Width	140 mm
Depth [in]	2.8 in
Depth	70 mm
Connections	
Arrangement of electrical connectors / for main current circuit	Front connection
Type of electrical connection / for main current circuit	lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8
Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	0
Accessories	
Product extension / optional / motor drive	No
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 / acc. to DIN EN 81346-2	Q

General Product Approval		Declaration of Conformity	Test Certific- ates
 CCC	 VDE	 EG-Konf.	

[Miscellaneous](#)

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Shipping Approval



LRS

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=3VM1220-4EE42-0AA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3VM1220-4EE42-0AA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

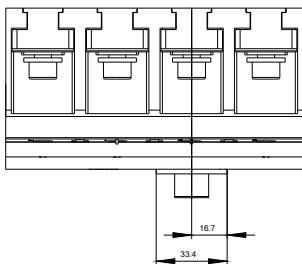
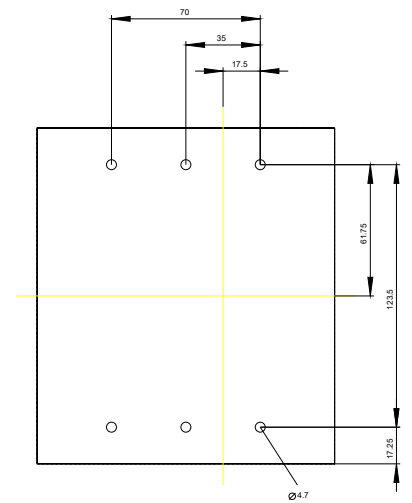
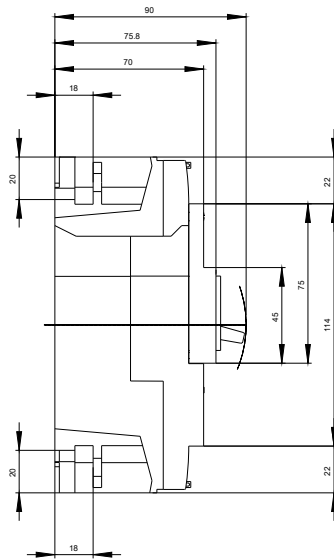
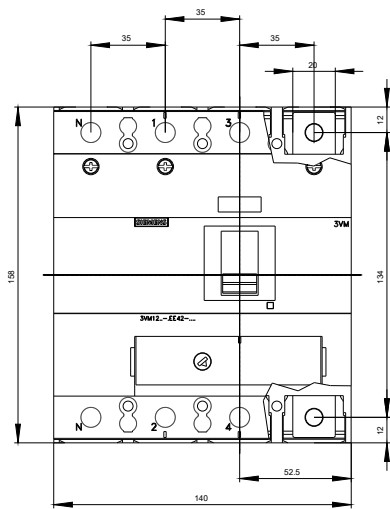
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VM1220-4EE42-0AA0

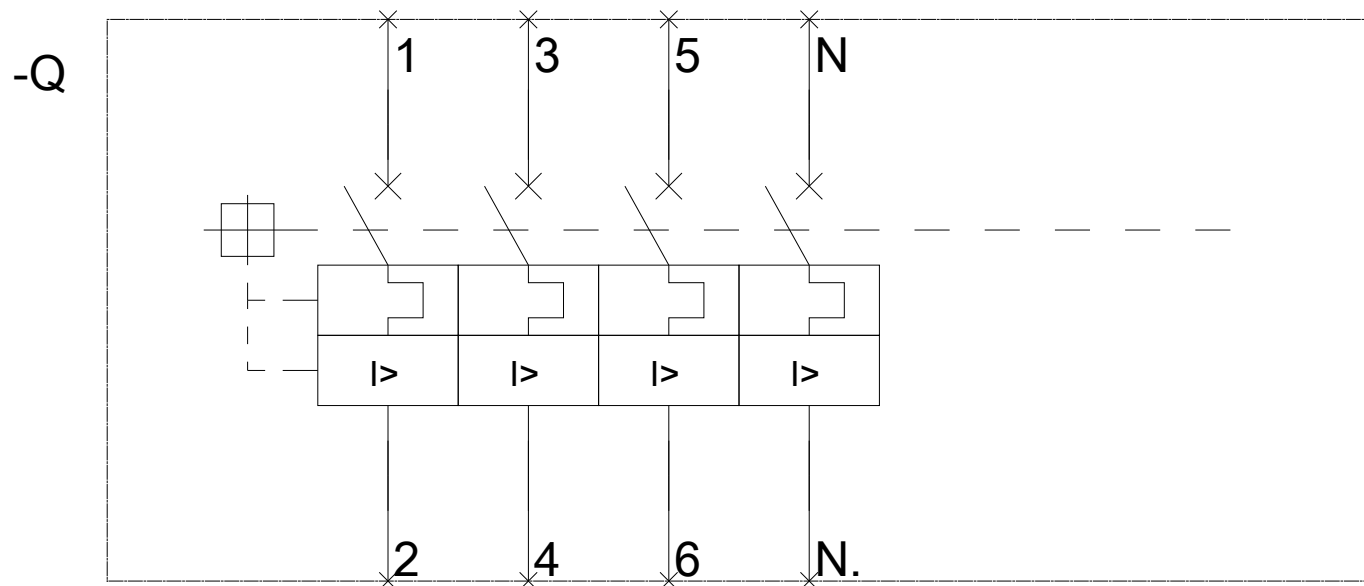
CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>





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