



circuit breaker 3VJ1 IEC framesize 3VJ14 630A line protection FTFM 4-pole  
 $I_{cu}=36\text{kA}@415\text{V}$   $I_{cs}=75\%$   $I_{cu}$   $I_n=500\text{A}$  overload protection  $I_r=500\text{A}$  short-circuit  
 protection  $I_i=10 \times I_n$  Screw connection

Model	
product designation	Molded Case Circuit Breaker
design of the product	Line protection
design of the overcurrent release	FTFM
protection function of the overcurrent release	LI
number of poles	4
General technical data	
insulation voltage / rated value	1 000 V
operating voltage / at AC / rated value	415 V
power loss [W] / maximum	42 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	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 500
ground-fault monitoring version	without
Net Weight	7.03 kg
Current	
operational current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	487 A
• at 60 °C	475 A
Switching capacity according to IEC 60947	
maximum short-circuit current breaking capacity ( $I_{cu}$ )	
• at 415 V	36 kA
operating short-circuit current breaking capacity ( $I_{cs}$ )	
• at 415 V	27 kA
short-circuit current making capacity ( $I_{cm}$ )	
• at 415 V	75.6 kA
Adjustable parameters	
adjustable current response value current / of the current-dependent overload release	400 ... 500 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum	5 000 A
• maximum	5 000 A
design of the N-conductor protection	1
product function / grounding protection	No
Mechanical Design	
height	180 mm

width	198 mm
depth	110 mm
<b>Connections</b>	
arrangement of electrical connectors / for main current circuit	Front connection
type of electrical connection / for main current circuit	Lug connection line and load side
<b>Accessories</b>	
product extension / optional / motor drive	No
<b>Environmental conditions</b>	
protection class IP / on the front	IP42
ambient temperature	
• during operation / minimum	-10 °C
• during operation / maximum	60 °C
• during storage / minimum	-15 °C
• during storage / maximum	75 °C
<b>Approvals / Certificates</b>	
other	

[Confirmation](#)

#### Further information

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=3VJ1450-5EA42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VJ1450-5EA42-0AA0>

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

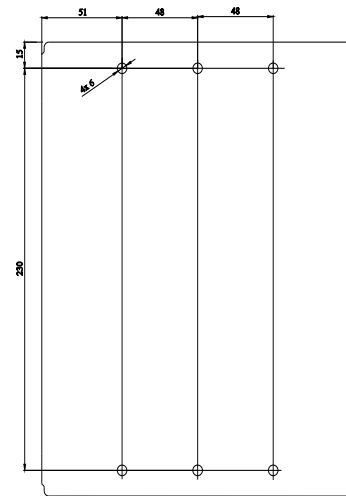
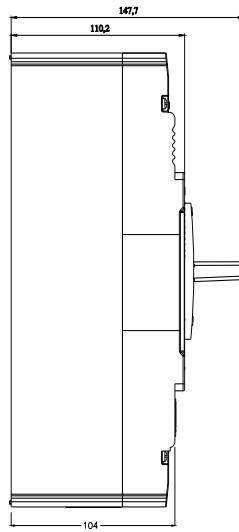
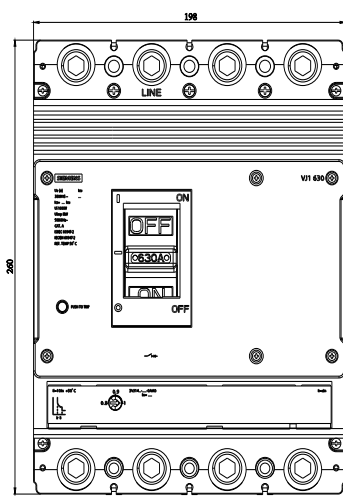
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VJ1450-5EA42-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VJ1450-5EA42-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



last modified:

8/16/2023

