



circuit breaker 3VA2 IEC Frame 1250 breaking capacity class M Icu=55 kA @ 415 V 4-pole, line protection ETU330, LIG, In=1250 A overload protection Ir=500 A ...1250 A short-circuit protection Ii=1.5...10 x In neutral conductor protection adjustable (OFF, 50%, 100%) ground-fault protection Ig=0.2... 1 x In, tg=0.1/0.3s bus connectors broadened

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	516 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	172 W
mechanical service life (operating cycles) / typical	10 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	4 600
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 200
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	26.6 kg
Current	
operational current	
• at 40 °C	1 250 A
• at 45 °C	1 250 A
• at 50 °C	1 250 A
• at 55 °C	1 187 A
• at 60 °C	1 125 A
• at 65 °C	1 000 A
• at 70 °C	875 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	M
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	25 kA
operating short-circuit current breaking capacity (Ics)	

<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	85 kA 55 kA 55 kA 36 kA 19 kA
short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	187 kA 121 kA 121 kA 75.6 kA 52.5 kA

Adjustable parameters

product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	500 A 1 250 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
<ul style="list-style-type: none"> • minimum • maximum 	0.5 s 17 s
adjustable response value setting current (I _l) / for I-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	1 875 A 12 500 A
adjustable current response value current / for G-tripping / with standard characteristic	
<ul style="list-style-type: none"> • initial value • full-scale value 	250 A 1 250 A
adjustable response value delay time (t _g) / for G-tripping / with I _{0t} characteristic	
<ul style="list-style-type: none"> • maximum 	0.3 s
adjustable setting current (I _{nN}) / for N-tripping	
<ul style="list-style-type: none"> • minimum • maximum 	625 A 1 250 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
product function / grounding protection	Yes

Mechanical Design

product component	
<ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No No No
height [in]	12.6 in
height	320 mm
width [in]	11.02 in
width	280 mm
depth [in]	4.72 in
depth	120 mm

Connections

arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	both sides processed busbar connection piece
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	No
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Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
<ul style="list-style-type: none"> • during operation / minimum 	-25 °C

- during operation / maximum
- during storage / minimum
- during storage / maximum

70 °C
-40 °C
80 °C

reference code / according to IEC 81346-2

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Approvals / Certificates

General Product Approval



[Confirmation](#)



General Product Approval

EMV

Test Certificates

Marine / Shipping

[Miscellaneous](#)



[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other



[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

Dangerous goods

Environment

[Transport Information](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

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=3VA2612-5HM42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2612-5HM42-0AA0>

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

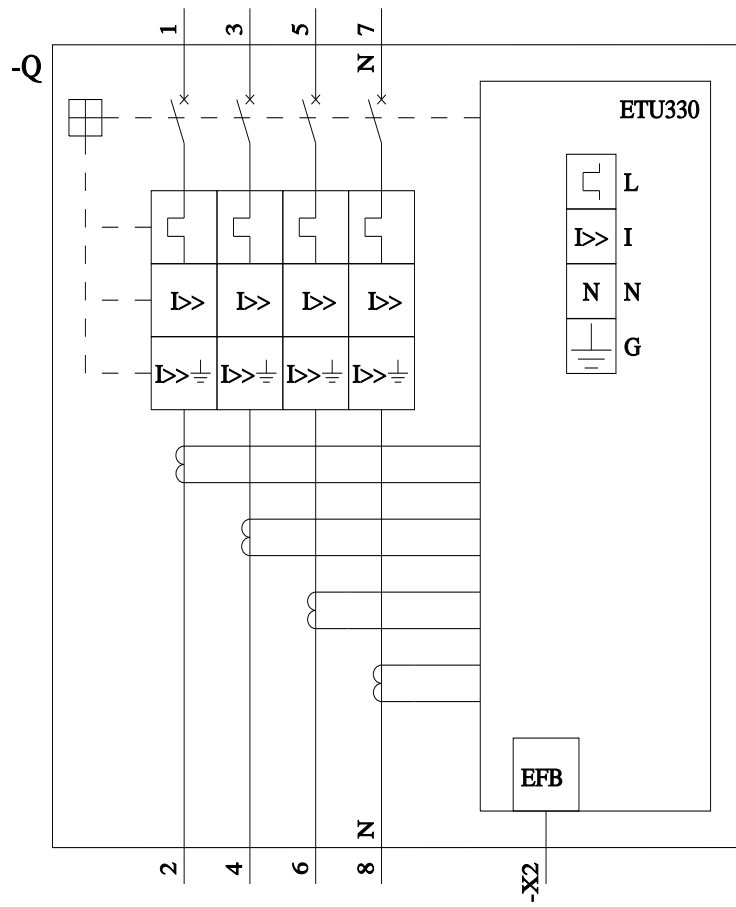
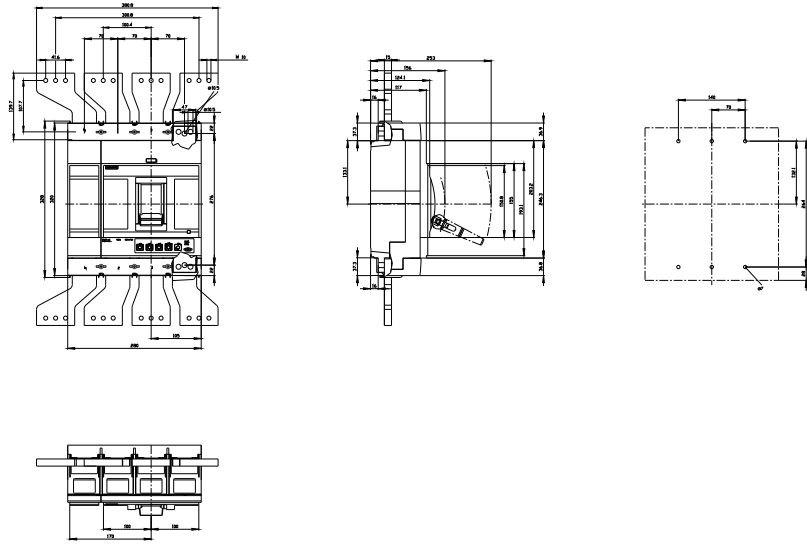
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2612-5HM42-0AA0

CAX-Online-Generator

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

Tender specifications

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



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