



circuit breaker 3VA2 IEC Frame 100 breaking capacity class M Icu=55 kA @ 415 V
3-pole, line protection ETU320, LI, In=100 A overload protection Ir=40 A...100 A
short-circuit protection Ii=1.5...12 x In nut keeper kit 2 auxiliary switches HQ 1 trip
alarm switch HQ

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU320
protection function of the overcurrent release	LI
number of poles	3
design of the auxiliary switch	2 auxiliary switches + 1 trip alarm switch HQ
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	13.5 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	4.5 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	15 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	10 500
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	2.38 kg
Current	
operational current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	100 A
• at 60 °C	100 A
• at 65 °C	100 A
• at 70 °C	100 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

<ul style="list-style-type: none"> • at 500 V • at 690 V 	36 kA 2 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 2 kA
short-circuit current making capacity (Icm) <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 75.5 kA 3 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 	40 A 100 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 _i) / for I-tripping <ul style="list-style-type: none"> • minimum • maximum 	150 A 1 200 A
product function / grounding protection	No
Mechanical Design	
product component <ul style="list-style-type: none"> • undervoltage release • voltage trigger • trip indicator 	No No Yes
height [in]	7.13 in
height	181 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.39 in
depth	86 mm
Connections	
arrangement of electrical connectors / for main current circuit	Front terminal
type of electrical connection / for main current circuit	on both sides nut keeper kit
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	13 x 1 mm
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	tin
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	3
Accessories	
product extension / optional / motor drive	Yes
manufacturer's article number <ul style="list-style-type: none"> • of the supplied basic switch • of the integrated auxiliary switch/alarm switch • of the integrated auxiliary switch/alarm switch 	3VA20105HL320AA0 3VA9988-0AA12 3VA9988-0AB12
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
reference code / according to IEC 81346-2	Q

Approvals / Certificates

General Product Approval



[Miscellaneous](#)



[Confirmation](#)

General Product Approval EMV Test Certificates



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Maritime application



[CCS \(China Classification Society\)](#)

other Dangerous goods Environment

[Miscellaneous](#)

[Miscellaneous](#)

[Confirmation](#)



[Transport Information](#)

[Environmental Confirmations](#)

Environment

[Environmental Confirmations](#)

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2010-5HL32-0AH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2010-5HL32-0AH0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2010-5HL32-0AH0

CAx-Online-Generator

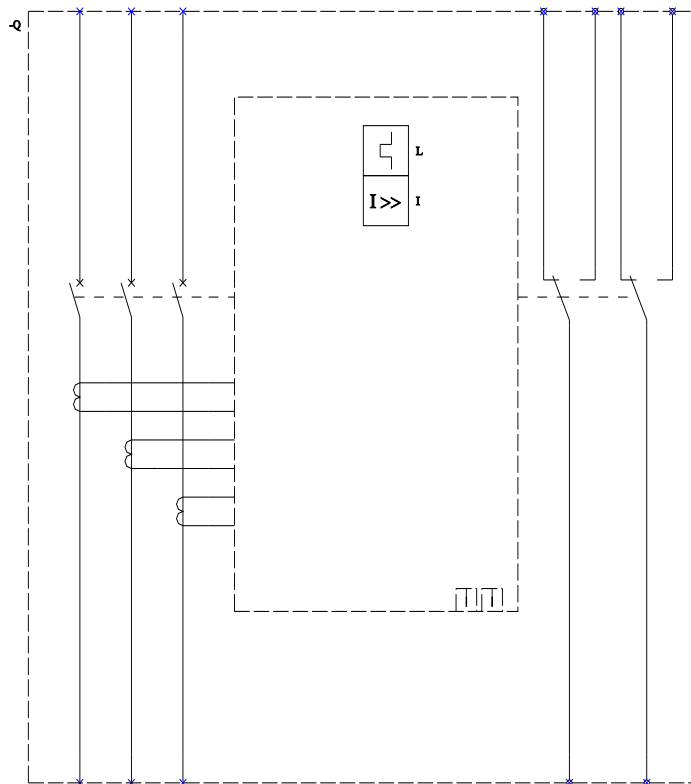
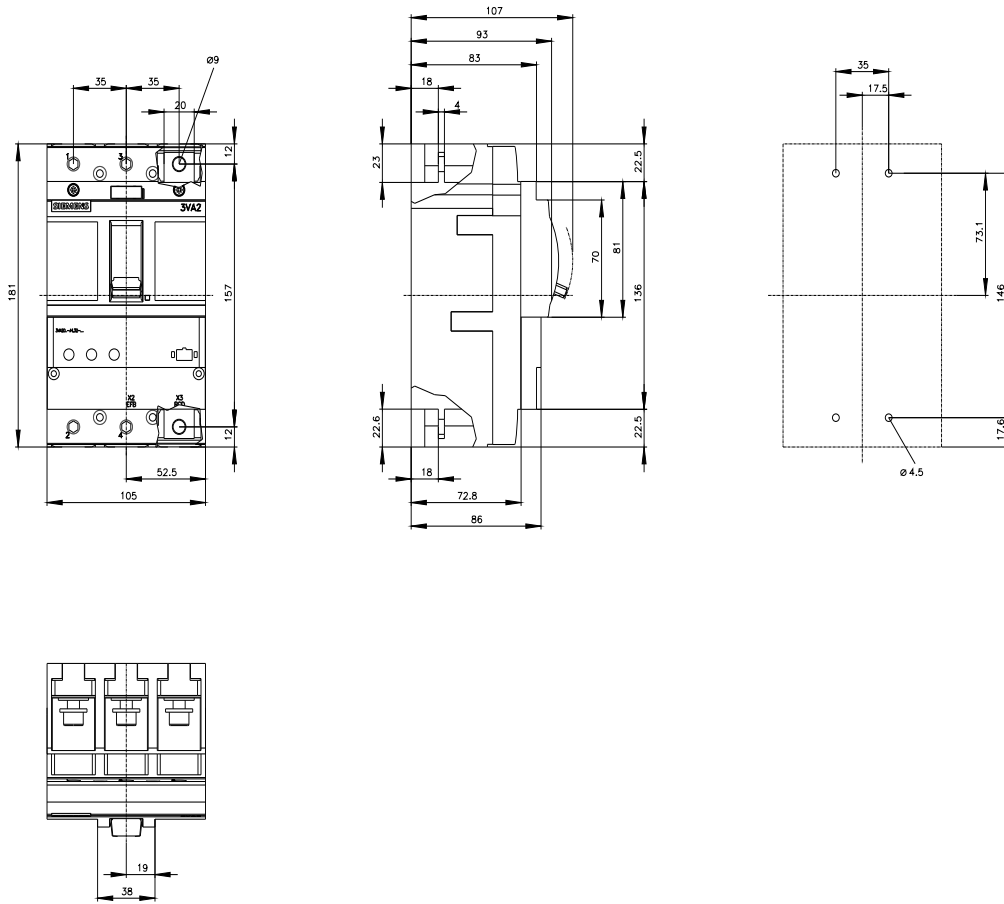
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)



L (Long Time Delay / Überlastschutz); I (Instantaneous / Kurzschlusschutz, unverzögert);

