



circuit breaker 3VA2 IEC Frame 100 breaking capacity class L Icu=150 kA @ 415 V 4-pole, line protection ETU850, LSI, In=40 A overload protection Ir=16 A...40 A short-circuit protection Isd=0.6..10x In, li=1.5..12x In neutral conductor protection adjustable (OFF, up to 160%) nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU850
protection function of the overcurrent release	LSI
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	1.2 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.4 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	Yes
• other measurement function	Yes
Net Weight	3.2 kg
Current	
operational current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	40 A
• at 60 °C	40 A
• at 65 °C	40 A
• at 70 °C	40 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	L
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	200 kA
• at 415 V	150 kA
• at 440 V	150 kA
• at 500 V	100 kA
• at 690 V	25 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	200 kA
• at 415 V	150 kA
• at 440 V	150 kA
• at 500 V	100 kA
• at 690 V	18 kA
short-circuit current making capacity (Icm)	
• at 240 V	440 kA

- at 415 V
- at 440 V
- at 500 V
- at 690 V

330 kA
330 kA
220 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 I2t characteristic	
• minimum	16 A
• maximum	40 A
adjustable response value delay time (t_r) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
• maximum	25 s
adjustable response value setting current (I_{sd}) / of S-trip / with I0t characteristic	
• minimum	24 A
• maximum	400 A
adjustable response value setting current (I_{sd}) / of S-trip / with I2t characteristic	
• minimum	24 A
• maximum	400 A
adjustable response value delay time (t_{sd}) / for S-tripping / with I0t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value delay time (t_{sd}) / for S-tripping / with I2t characteristic	
• minimum	0.05 s
• maximum	0.5 s
adjustable response value setting current (I_l) / for I-tripping	
• minimum	60 A
• maximum	480 A
adjustable setting current (I_{nN}) / for N-tripping	
• minimum	16 A
• maximum	64 A
design of the N-conductor protection	adjustable OFF; 40% to 160%
product function / grounding protection	No

Mechanical Design

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	7.13 in
height	181 mm
width [in]	5.51 in
width	140 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	0
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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

Environmental footprint

global warming potential [CO2 eq] / total 61.814 kg

global warming potential [CO2 eq] / during manufacturing 14.6 kg

global warming potential [CO2 eq] / during operation 48.9 kg

global warming potential [CO2 eq] / after end of life -2.2 kg

Siemens Eco Profile (SEP) Siemens EcoTech

reference code / according to IEC 81346-2 Q

Approvals / Certificates

General Product Approval



[Miscellaneous](#)



[Confirmation](#)

General Product Approval EMV Test Certificates



EG-Konf.



RCM

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Maritime application



ABS



BUREAU VERITAS



DNV



LRS



RMRS

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

other Dangerous goods Environment

[Miscellaneous](#)

[Miscellaneous](#)

[Confirmation](#)



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[Environmental Confirmations](#)

Environment

Siemens EcoTech



[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?mfb=3VA2040-8KP42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-8KP42-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-8KP42-0AA0

CAX-Online-Generator

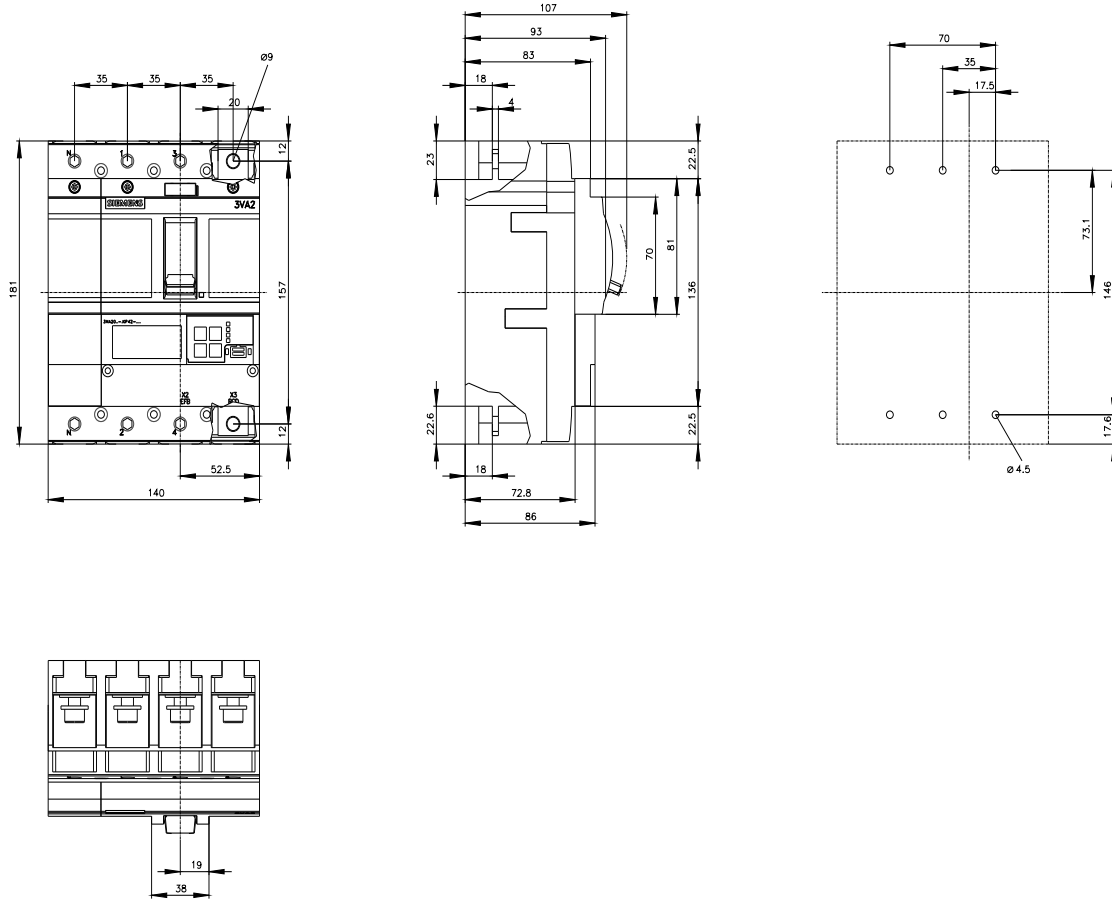
<https://www.siemens.com/cax>

Tender specifications

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

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>





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