

circuit breaker 3VA2 IEC frame 160 breaking capacity class C
Icu=110kA @ 415V 4-pole, line protection ETU320, LI, In=40A
overload protection Ir=16A...40A short-circuit protection li=1.5...12 x
In N conductor protection adjustable (OFF, 100%) nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU320
protection function of the overcurrent release	LI
number of poles	4

General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
power loss [W] / maximum	1.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	0.53 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	8 000
Neutral conductors / upgradeable/retrofitable	No
ground fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
net weight	2.93 kg

Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné lu	40 A
operating 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	C
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
operational short-circuit current breaking capacity (Ics)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V	330 kA
• at 415 V	242 kA
• at 440 V	242 kA
• at 500 V	187 kA
• at 690 V	3.8 kA

Adjustable parameters

Adjustable response value current / I _g min.	16 A
Adjustable response value current / I _g min.	40 A
Adjustable response value current / I _g min.	0.5
Adjustable response value current / I _g min.	17
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _i min.	60 A
Adjustable response value current / I _i max.	480 A
design of the N-conductor protection	adjustable OFF; 100%
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	No

Mechanical Design

height [in]	7.1 in
Height	181 mm
width [in]	5.5 in
Width	140 mm
depth [in]	3.4 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-section, connection screw, width x thickness , min.	13 x 1 mm	
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8.5 mm	
Auxiliary circuit		
number of CO contacts / for auxiliary contacts	0	
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	
Certificates		
reference code / acc. to DIN EN 81346-2	Q	
General Product Approval		
 CCC  VDE  CB Miscellaneous  EAC  RCM		
EMC		
Declaration of Conformity	Test Certificates	Shipping Approval
 EG-Konf.	Type Test Certificates/Test Report Miscellaneous Special Test Certificate	 ABS  BUREAU VERITAS
Shipping Approval		other
 LRS  RMRS		CCS / China Classification Society Manufacturer Declaration Miscellaneous
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=3VA2140-7HL42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-7HL42-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-7HL42-0AA0

CAX-Online-Generator

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

Tender specifications

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

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