

Siemens
EcoTech



circuit breaker 3VA2 IEC Frame 100 breaking capacity class H Icu=85 kA @ 415 V
4-pole, line protection ETU320, LI, In=40 A overload protection Ir=16 A...40 A
short-circuit protection Ii=1.5...12 x In neutral conductor protection adjustable (OFF,
100%) 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	ETU320
protection function of the overcurrent release	LI
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	2.2 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.73 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/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	2.714 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	H
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 440 V	85 kA
• at 500 V	55 kA
• at 690 V	2 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	110 kA
• at 415 V	85 kA
• at 440 V	85 kA
• at 500 V	55 kA
• at 690 V	2 kA
short-circuit current making capacity (Icm)	
• at 240 V	242 kA

• at 415 V • at 440 V • at 500 V • at 690 V	187 kA 187 kA 121 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	
• minimum • maximum	16 A 40 A
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic	
• minimum • maximum	0.5 s 17 s
adjustable response value setting current (I _i) / for I-tripping	
• minimum • maximum	60 A 480 A
adjustable setting current (I _n N) / for N-tripping	
• minimum • maximum	16 A 40 A
design of the N-conductor protection	adjustable OFF; 100%
product function / grounding protection	No
Mechanical Design	
product component	
• undervoltage release • voltage trigger • trip indicator	No No 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
Accessories	
product extension / optional / motor drive	Yes
Environmental conditions	
protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum • during operation / maximum • during storage / minimum • during storage / maximum	-25 °C 70 °C -40 °C 80 °C
Environmental footprint	
global warming potential [CO ₂ eq] / total	61.814 kg
global warming potential [CO ₂ eq] / during manufacturing	14.6 kg
global warming potential [CO ₂ eq] / during operation	48.9 kg
global warming potential [CO ₂ 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			
 CCC	 VDE	Miscellaneous	  Confirmation
General Product Approval	EMV	Test Certificates	
 EG-Konf.	 RCM	Miscellaneous	Special Test Certificate Type Test Certificates/Test Report  ABS
Maritime application			other
 BUREAU VERITAS	 DNV	 LRS	 RMRS
other		Dangerous goods	Environment
Miscellaneous	Confirmation	 产品合格 QC PASS	Transport Information Environmental Confirmations 
Environment			
Environmental Confirmations		 EPD	
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=3VA2040-6HL42-0AA0 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-6HL42-0AA0 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-6HL42-0AA0 CAX-Online-Generator https://www.siemens.com/cax Tender specifications https://www.siemens.com/specifications Characteristic curves <a href="https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>">https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>			

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