

Siemens
EcoTech



circuit breaker 3VA2 IEC Frame 100 breaking capacity class C Icu=110 kA @ 415 V 3-pole, line protection ETU860, LSIG, In=40 A overload protection Ir=16 A...40 A short-circuit protection I_{sd}=0.6...10x I_n, I_i=1.5...12x I_n neutral conductor protection optionally with external current transformer, up to 160% ground-fault protection, can be switched off I_g=0.4... 1 x I_n, t_g=0.05-0.8s 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	ETU860
protection function of the overcurrent release	LSIG
number of poles	3
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	Yes
ground-fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	2.5 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	C
maximum short-circuit current breaking capacity (I _{cu})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2 kA
operating short-circuit current breaking capacity (I _{cs})	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2 kA
short-circuit current making capacity (I _{cm})	
• at 240 V	330 kA
• at 415 V	242 kA

• at 440 V	242 kA
• at 500 V	187 kA
• at 690 V	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 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 current response value current / for G-tripping / with standard characteristic	
• initial value	16 A
• full-scale value	40 A
adjustable response value delay time (t_g) / for G-tripping / with I0t characteristic	
• minimum	0.05 s
• maximum	0.8 s
adjustable response value setting current (I_g) / for G-tripping / with I2t characteristic	
• minimum	16 A
• maximum	40 A
adjustable response value delay time (t_g) / for G-tripping / with I2t characteristic	
• minimum	0.05 s
• maximum	0.8 s
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	Yes

Mechanical Design

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
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	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

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	EMV



[Confirmation](#)



[Miscellaneous](#)



Test Certificates			Marine / Shipping		
Special Test Certificate	Type Test Certificates/Test Report	Miscellaneous			

Marine / Shipping			other		
		CCS (China Classification Society)	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=3VA2040-7KQ32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-7KQ32-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-7KQ32-0AA0

CAX-Online-Generator

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

Tender specifications

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

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