SIEMENS

Data sheet 3VA2040-6KQ46-0AA0

circuit breaker 3VA2 IEC frame 100 breaking capacity class H Icu=85kA @ 415V 4-pole, line protection ETU860, LSIG, In=40A overload protection Ir=16A...40A short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In N conductor protection adjustable (OFF, up to 160%) gr.-fault prot., can be sw. off Ig=0.4...1 x In= tg=0.05-0.8s clamp connection

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	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	Summation current formation L + N conductor
product function	
● communication function	Yes
● other measurement function	Yes
Net Weight	2.965 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)	

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● 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	187 kA
● at 440 V	187 kA
● at 500 V	121 kA
● at 690 V	3 kA
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
● minimum	16 A
● maximum	40 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
● minimum	0.5 s
● maximum	25 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic	
● minimum	24 A
● maximum	400 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic	
● minimum	24 A
● maximum	400 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic	
● minimum	0.05 s
● maximum	0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic	
● minimum	0.05 s
● maximum	0.5 s
adjustable response value setting current (Ii) / 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 (tg) / for G-tripping / with I0t characteristic	
● minimum	0.05 s
● maximum	0.8 s
adjustable response value setting current (Ig) / for G-tripping / with I2t characteristic	
● minimum	16 A
● maximum	40 A
adjustable response value delay time (tg) / for G-tripping / with I2t characteristic	
● minimum	0.05 s
● maximum	0.8 s
adjustable setting current (InN) / 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

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● voltage trigger	No
● trip indicator	No
height [in]	7.13 in
height	181 mm
width [in]	5.51 in
type of connectable conductor cross-sections / of the round conductor terminal / stranded	1 x (6 - 120 mm²)
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	double-sided box terminal
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
Certificates	
reference code / according to IEC 81346-2	Q

General Product Approval | **EMC**

Confirmation | Miscellaneous

Declaration of Conformity | **Test Certificates** | **Marine / Shipping**

Special Test Certificate | Miscellaneous | Type Test Certificates/Test Report

Marine / Shipping | **other**

CCS / China Classification Society | Miscellaneous

other | **Dangerous Good** | **Environment**

Confirmation | Miscellaneous | Transport Information | Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

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Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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

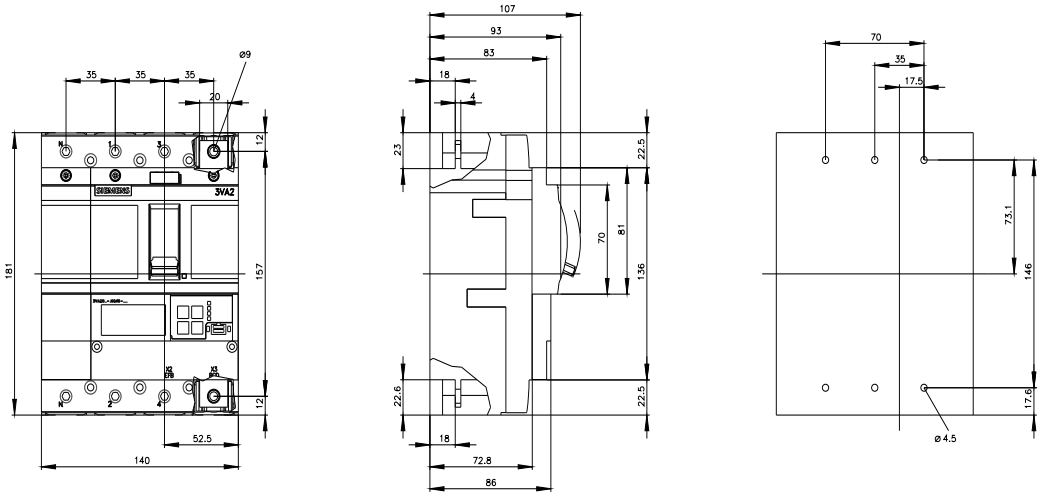
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2040-6KQ46-0AA0

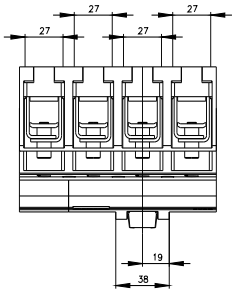
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-6KQ46-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-6KQ46-0AA0

CAx-Online-Generator
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications





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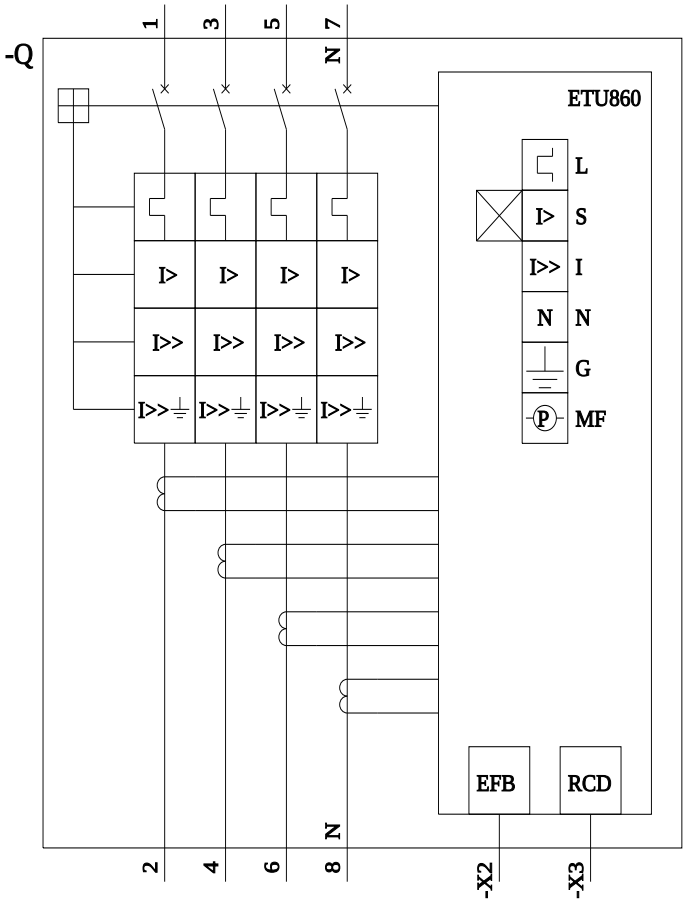

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