

circuit breaker 3VA2 IEC frame 160 breaking capacity class C
Icu=110kA @ 415V 3-pole, motor protection ETU860M, LSIG,
In=40A overload protection Ir=16A...40A short-circuit protection
I_{sd}=1.2..15x I_n, I_i=3..15x I_n gr.-fault prot., can be sw. off I_g=0.4... 1 x
I_n, t_g=0.05-0.8s clamp connection

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Motor protection
design of the overcurrent release	ETU860M
protection function of the overcurrent release	LSIG
number of poles	3

General technical data	
Tension assignée d'isolement U _i	800 V
Max. rated operational voltage U _e with AC 50/60Hz	690 V
operating power / at AC-3 / at 400 V	18 500 W
operating power / at AC-3 / at 230 V	11 000 W
power loss [W] / maximum	10 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	3.33 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
Electrical endurance (switching cycles) / at AC-3 / at 380/415 V 50/60 Hz	10 000
Neutral conductors / upgradeable/retrofitable	No
ground fault monitoring version	Summation current formation L-conductor
product function	
• communication function	Yes
• phase failure detection	Yes
• other measurement function	Yes
net weight	2.4 kg

Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné I _u	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.	48 A
Adjustable response value current / I _g min.	600 A
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	No
Adjustable response value current / I _g min.	0.03 s
Adjustable response value current / I _g min.	0.03 s
Adjustable response value current / I _i min.	120 A
Adjustable response value current / I _i max.	600 A
Ground fault protection can be switched ON/OFF	Yes
Ground fault protection / tripping switchable / I _{2t} =ON/OFF	Yes

Adjustable response value current / I _g min.	8 A
Adjustable response value current / I _g max.	40 A
Adjustable response value current / t _g min.	0.05 s
Adjustable response value current / I _g min.	0.8 s
Adjustable response value current / for G-tripping / with I _{2t} characteristic / min.	0.2 A
Adjustable response value current / for G-tripping / with I _{2t} characteristic / max.	1 A

Mechanical Design

height [in]	7.1 in
Height	181 mm
width [in]	4.1 in
Width	105 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	double-sided box terminal
Type of connectable conductor cross-section, round conductor terminal, stranded	1 x (6-120 mm ²)

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				EMC	
 CCC	 VDE	CB CB	Miscellaneous	 EAC	 RCM

Declaration of Conformity	Test Certificates	Shipping Approval	other
 EG-Konf.	Miscellaneous	Special Test Certificate	Confirmation
		 LRS	CCS / China Classification Society

other
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=3VA2140-7MQ36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-7MQ36-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-7MQ36-0AA0

CAX-Online-Generator

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

Tender specifications

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

last modified:

10/30/2020