

circuit breaker 3VA2 IEC frame 160 breaking capacity class M
Icu=55kA @ 415V 3-pole, motor protection ETU860M, LSIG, In=40A
overload protection Ir=16A...40A short-circuit protection Isd=1.2..15x
In, li=3..15x In gr.-fault prot., can be sw. off Ig=0.4... 1 x In, tg=0.05-
0.8s nut keeper kit

Model	
product brand name	SETRON
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 Ui	800 V
Max. rated operational voltage Ue 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	2.3 kg

Current	
Max. rated operational current of the frame size	160 A
Courant permanent assigné Iu	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	M
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	76 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	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
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Accessories

product extension / optional / motor drive	Yes
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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
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General Product Approval	EMC
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CCC



VDE

CB

CB

[Miscellaneous](#)

EAC



RCM

Declaration of Conformity	Test Certificates	Shipping Approval	other
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EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)



LRS

[CCS / China Classification Society](#)

[Confirmation](#)

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=3VA2140-5MQ32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-5MQ32-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-5MQ32-0AA0

CAX-Online-Generator

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

Tender specifications

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

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