



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4POLE, LINE PROTECTION ETU860, LSIG, IN=160A OVERLOAD PROTECTION IR=63A ...160A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..10X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8S CABLE CONNECTION

Model	
product brandname	SETRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	ETU860
Protective function of the overcurrent release	LSIG
Number of poles	4

General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	25.5 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	8.5 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
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Summation current formation L + N conductor

Product function	
• communication function	Yes
• other measurement function	Yes
Net weight	3.15 kg

Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	160 A
Operating current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	160 A
• at 60 °C	160 A
• at 65 °C	160 A
• at 70 °C	160 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.	63 A
Adjustable response value current / I _g min.	160 A
Adjustable response value current / I _g min.	0.5

Adjustable response value current / I _g min.	20
Adjustable response value current / I _g min.	96 A
Adjustable response value current / I _g min.	1 600 A
Short-term delayed / tripping switchable / I _{2t} =ON/OFF	Yes
Adjustable response value current / I _g min.	0.05 s
Adjustable response value current / I _g min.	0.5 s
Adjustable response value current / I _g min.	0.05 s
Adjustable response value current / I _g min.	0.5 s
Adjustable response value current / I _i min.	240 A
Adjustable response value current / I _i max.	1 600 A
Design of the N-conductor protection	adjustable OFF; 20% bis 100%
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.	32 A
Adjustable response value current / I _g max.	160 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]	5.5 in
Width	140 mm
Depth [in]	4.2 in
Depth	107 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	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
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Accessories

Product extension / optional / motor drive	Yes
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Environmental conditions

Protection class IP / on the front	IP40
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Ambient temperature

- | | |
|------------------------------|--------|
| • during operation / minimum | -25 °C |
| • during operation / maximum | 70 °C |
| • during storage / minimum | -40 °C |
| • during storage / maximum | 80 °C |

Certificates

Equipment marking / acc. to DIN EN 81346-2

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General Product Approval

EMC

Declaration of Conformity



CCC



VDE

[Sonstige](#)



RCM



EG-Konf.

Test Certificates

Shipping Approval

[Typprüfbescheinigung/Werkszeugnis](#)

[Sonstige](#)

[spezielle
Prüfbescheinigungen](#)



ABS



BUREAU
VERITAS



GL

Shipping Approval

other



LRS



RMRS

[Sonstige](#)

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=3VA2116-5KQ46-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2116-5KQ46-0AA0/all>

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

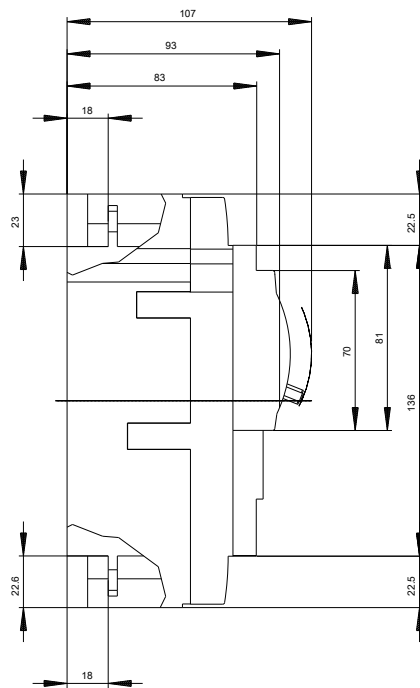
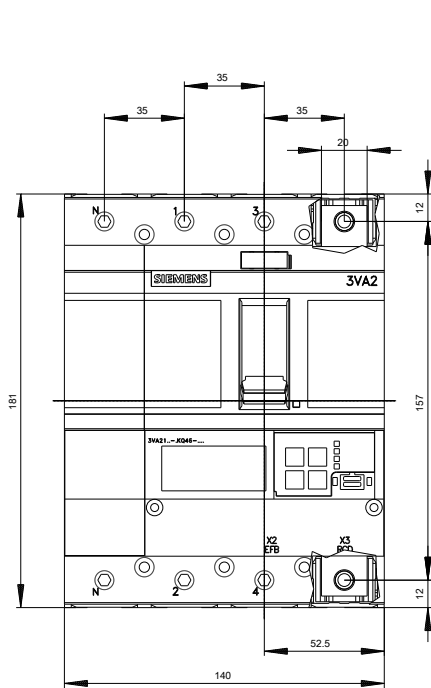
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-5KQ46-0AA0

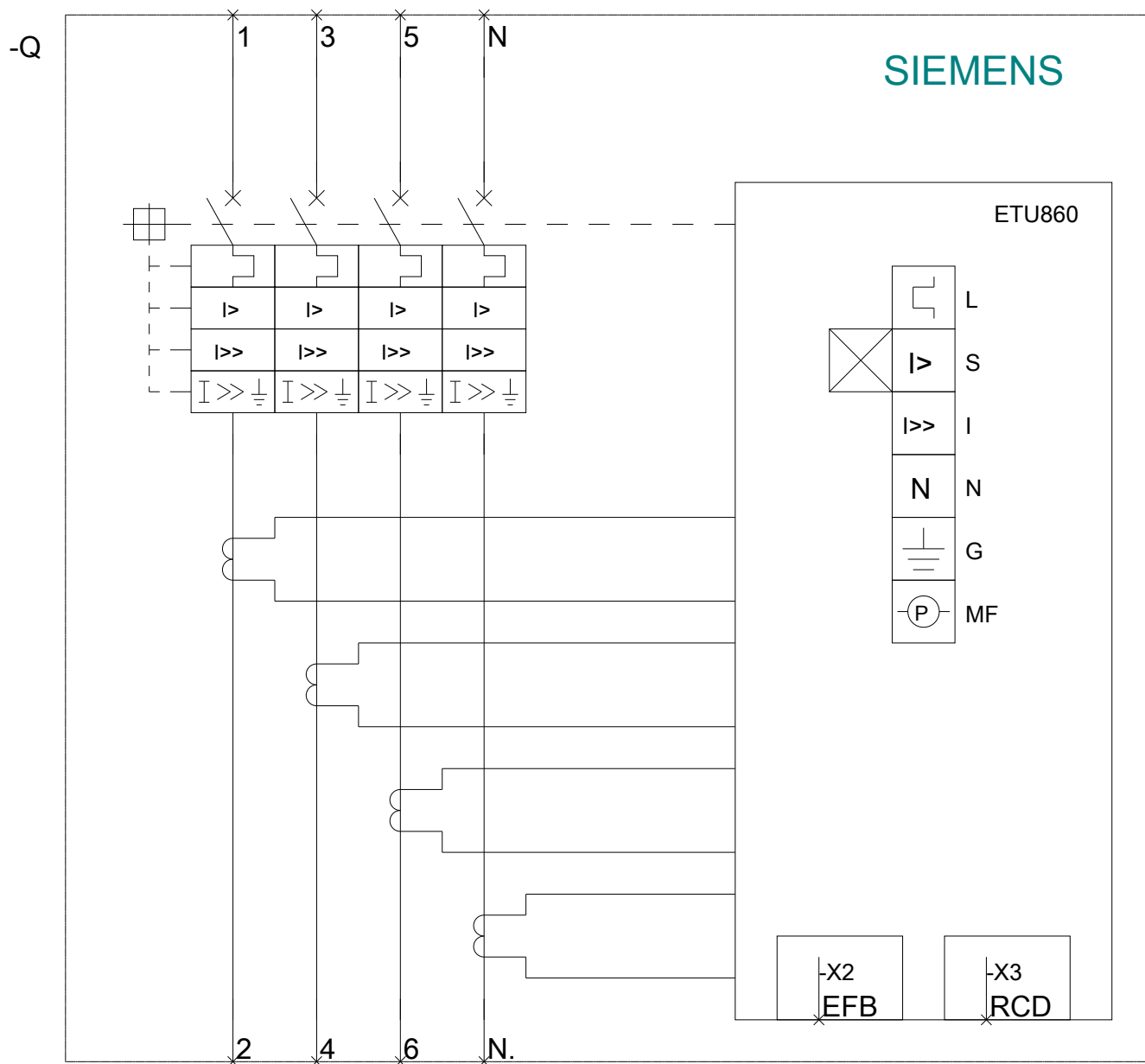
CAX-Online-Generator

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

Tender specifications

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





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