SIEMENS

Data sheet 3VA2450-5KQ42-0AA0

CIRCUIT BREAKER 3VA2 IEC FRAME 630 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 4-POLE, LINE PROTECTION ETU860, LSIG, IN=500A OVERLOAD PROTECTION IR=200A ...500A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..14X IN NEUTRAL PROTECTION ADJUSTABLE (OFF, UPTO 100%) GROUND-FAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,05-0,8S BUSBAR CONNECTION

Model	
product brandname	SENTRON
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	99 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	33 W
Mechanical service life (switching cycles) / typical	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 000
Neutral conductors / upgradeable/retrofittable	No
Ground fault monitoring version	Summation current formation L + N conductor

Product function	
• communication function	Yes
• other measurement function	Yes
Net weight	5.7 kg

Electricity	
Max. rated operational voltage of the size of the circuit-breaker	630 A
Courant permanent assigné Iu	500 A
Operating current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	477 A
• at 60 °C	455 A
• at 65 °C	432 A
• at 70 °C	410 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	6 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	6 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	9 kA

Adjustable parameters	
Adjustable response value current / Ig min.	200 A
Adjustable response value current / Ig min.	500 A
Adjustable response value current / Ig min.	0.5
Adjustable response value current / Ig min.	20
Adjustable response value current / Ig min.	300 A

Adjustable response value current / Ig min.	5 000 A
Short-term delayed / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value current / Ig min.	0.05 s
Adjustable response value current / Ig min.	0.5 s
Adjustable response value current / Ig min.	0.05 s
Adjustable response value current / Ig min.	0.5 s
Adjustable response value current / Ii min.	750 A
Adjustable response value current / Ii max.	7 000 A
Design of the N-conductor protection	adjustable OFF; 20% bis100%
Ground fault protection can be switched ON/OFF	Yes
Ground fault protection / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value current / Ig min.	100 A
Adjustable response value current / Ig max.	500 A
Adjustable response value current / tg min.	0.05 s
Adjustable response value current / Ig min.	0.8 s
Adjustable response value current / for G-tripping / with I2t characteristic / min.	0.2 A
Adjustable response value current / for G-tripping / with I2t characteristic / max.	1 A

Mechanical Design

Height [in]	9.8 in
Height	248 mm
Width [in]	7.2 in
Width	184 mm
Depth [in]	5.4 in
Depth	137 mm

Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	Lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10

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

Equipment marking / acc. to DIN EN 81346-2: Q

General Product Approval			EMC	Declaration of Conformity	Test Certificates
CCC	VDE		RCM	EG-Konf.	Typprüfbescheinigung/Werkszeugnis

Test Certificates		Shipping Approval			
Sonstige	spezielle Prüfbescheinigungen	ABS	BUREAU VERITAS	GL	LRS

Shipping Approval	other
RMRS	Sonstige

Further information

Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/lowvoltage/catalogs

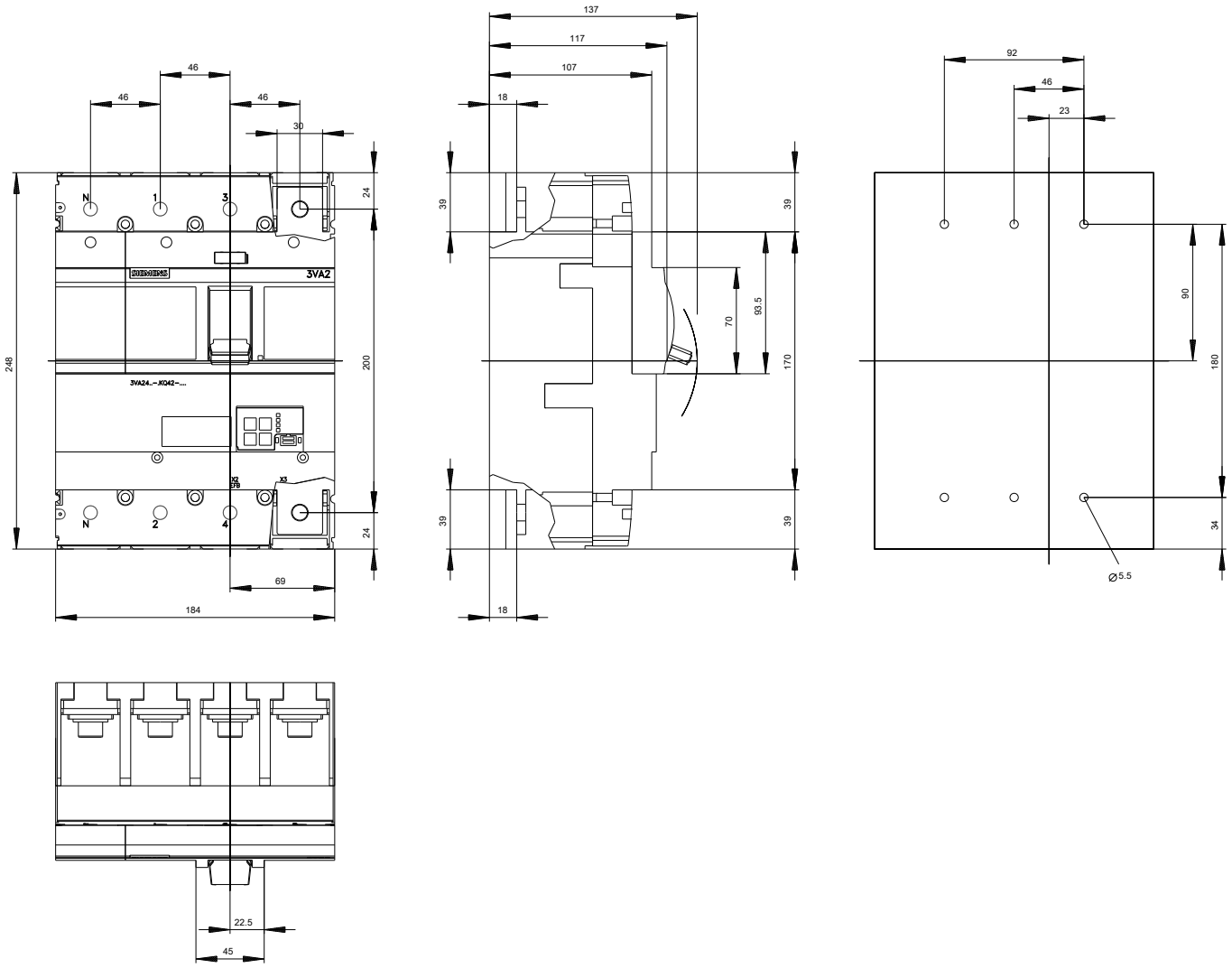
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2450-5KQ42-0AA0

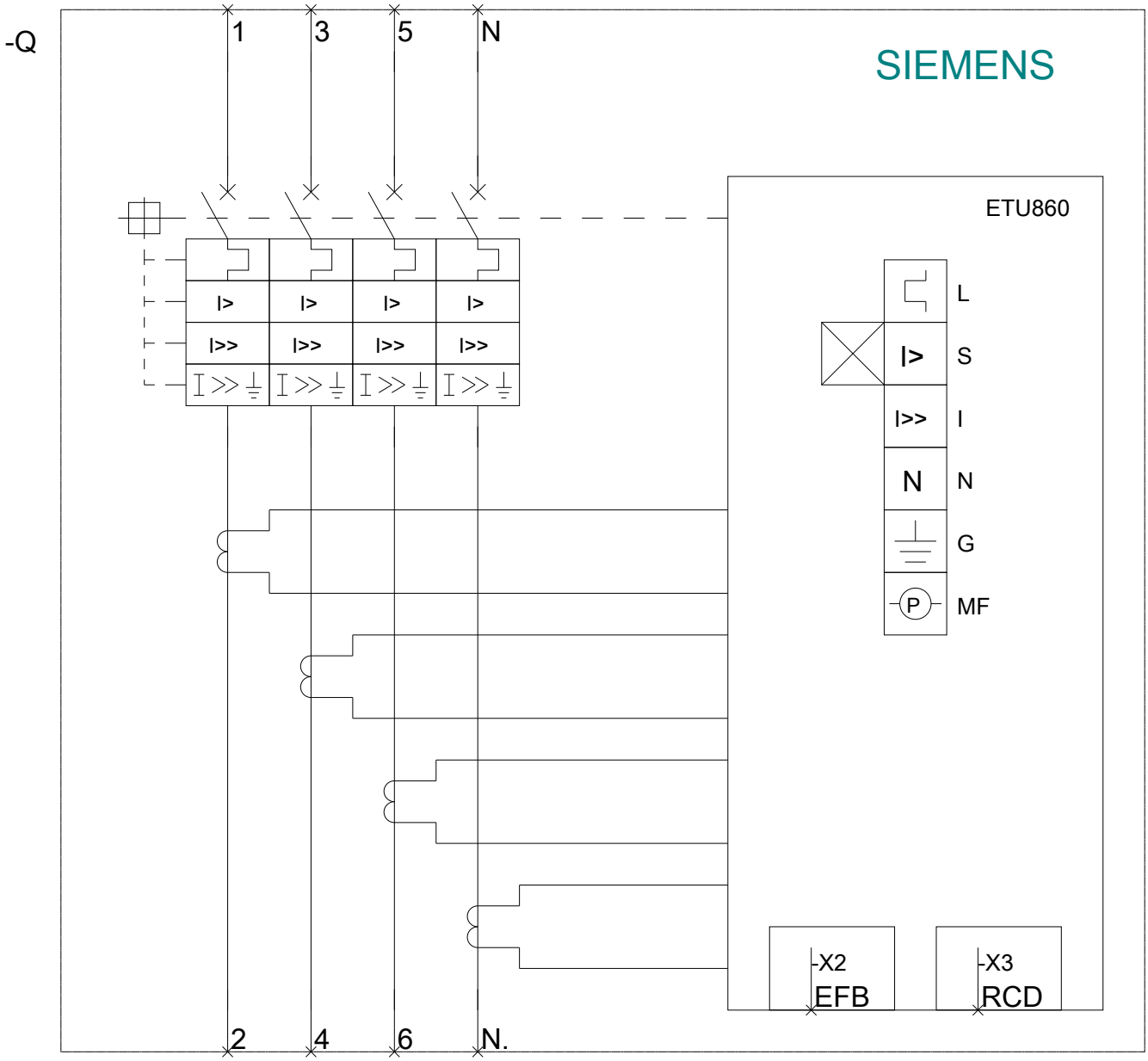
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3VA2450-5KQ42-0AA0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2450-5KQ42-0AA0

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

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





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