



circuit breaker 3VA2 IEC frame 160 breaking capacity class H
 $I_{cu}=85kA @ 415V$ 4-pole, line protection ETU560, LSIG, $I_n=40A$
 overload protection $I_r=16A...40A$ short-circuit protection $I_{sd}=0.6..10x$
 I_n , $I_i=1.5..12x I_n$ N conductor protection adjustable (OFF, up to
 160%) gr.-fault prot., can be sw. off $I_g=0.4...1 x I_n=$ $t_g=0.05-0.8s$ nut
 keeper kit

Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU560
Protective function of the overcurrent release	LSIG
Number of poles	4

General technical data	
Rated insulation voltage U_i	800 V
Max. rated operational voltage U_e with AC 50/60Hz	690 V
Power loss [W] / maximum	1.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	0.53 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
Neutral conductors / upgradeable/retrofitable	No

Ground fault monitoring version	Summation current formation L + N conductor
Product function	
<ul style="list-style-type: none"> • communication function • other measurement function 	Yes No
Net weight	2.94 kg

Current

Max. rated operational current of the frame size	160 A
Rated continuous current I _u	40 A
Operating current	
<ul style="list-style-type: none"> • at 40 °C • at 45 °C • at 50 °C • at 55 °C • at 60 °C • at 65 °C • at 70 °C 	40 A 40 A 40 A 40 A 40 A 40 A 40 A

Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	H
Maximum short-circuit current breaking capacity (I _{cu})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	110 kA 85 kA 85 kA 55 kA 2.5 kA
Operational short-circuit current breaking capacity (I _{cs})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	110 kA 85 kA 85 kA 55 kA 2.5 kA
Short-circuit current making capacity (I _{cm})	
<ul style="list-style-type: none"> • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V 	242 kA 187 kA 187 kA 121 kA 3.8 kA

Adjustable parameters

Adjustable response value current / I _r min.	16 A
Adjustable response value current / I _r max.	40 A
Adjustable response value time / t _r min.	0.5

Adjustable response value time / tr max.	25
Adjustable response value current / Isd min.	24 A
Adjustable response value current / Isd max.	400 A
Short-term delayed / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value time / tsd min.	0.05 s
Adjustable response value time / tsd max.	0.5 s
Adjustable response value time / tsd min.	0.05 s
Adjustable response value time / tsd max.	0.5 s
Adjustable response value current / li min.	60 A
Adjustable response value current / li max.	480 A
Ground fault protection can be switched ON/OFF	Yes
Ground fault protection / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value current / lg min.	16 A
Adjustable response value current / lg max.	40 A
Adjustable response value current / tg min.	0.05 s
Adjustable response value current / tg max.	0.8 s
Adjustable response value current / for G-tripping / with I2t characteristic / min.	0.4 A
Adjustable response value current / for G-tripping / with I2t characteristic / max.	1 A

Mechanical Design

Height [in]	7.1 in
Height	181 mm
Width [in]	5.5 in
Width	140 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
--	---

Accessories




Product extension / optional / motor drive	Yes
--	-----




Environmental conditions



Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> during operation / minimum 	-25 °C
<ul style="list-style-type: none"> during operation / maximum 	70 °C
<ul style="list-style-type: none"> during storage / minimum 	-40 °C
<ul style="list-style-type: none"> during storage / maximum 	80 °C

Certificates

Reference code / acc. to DIN EN 81346-2	Q
---	---

General Product Approval				EMC	
		CB	Miscellaneous	EAC	
CCC	VDE	CB			RCM

Declaration of Conformity	Test Certificates			Shipping Approval	
	Type Test Certificates/Test Report	Miscellaneous	Special Test Certificate		
EG-Konf.				ABS	BUREAU VERITAS

Shipping Approval		other		
		CCS / China Classification Society	Manufacturer Declaration	Miscellaneous
LRS	RMRS			

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=3VA2140-6JQ42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2140-6JQ42-0AA0>

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

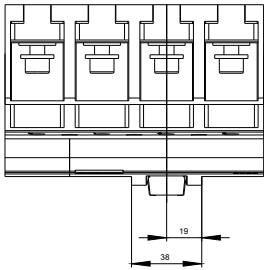
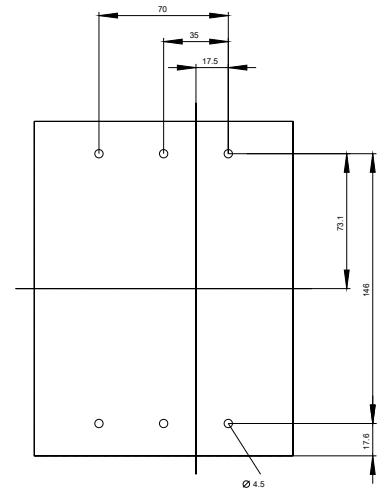
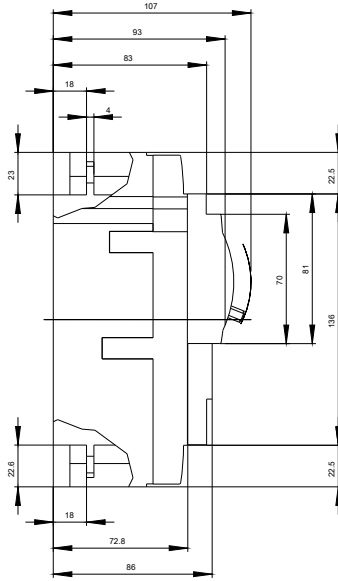
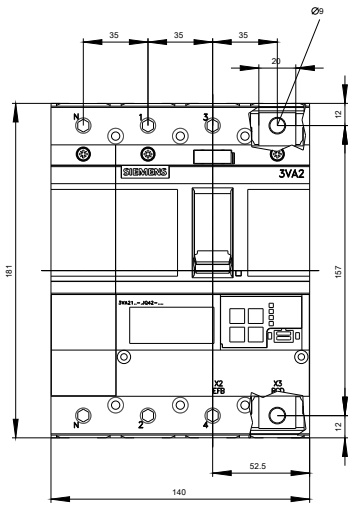
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2140-6JQ42-0AA0

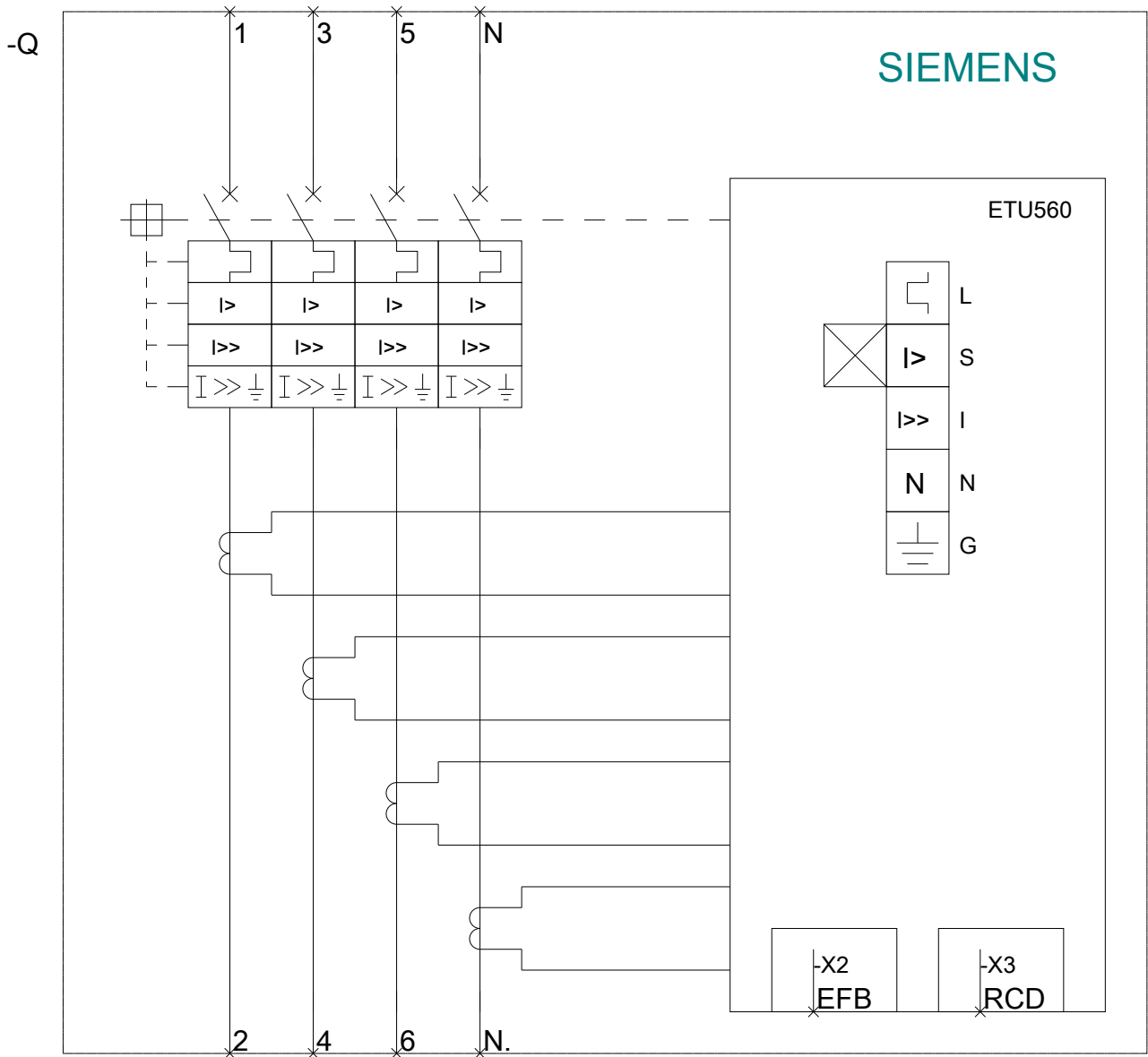
CAX-Online-Generator

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

Tender specifications

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





last modified:

04/15/2020