# SIEMENS

#### Data sheet

### 3VA6140-5HM31-0AA0



circuit breaker 3VA6 UL frame 150 breaking capacity class M 35kA @ 480V 3-pole, line protection ETU330, LIG, In=40A overload protection Ir=16A...40A short-circuit protection Ii=1.5...12 x In ground-fault protection Ig=0.375...1 x In, tg=0.1/0.3s without connection

Model	
product brand name	SENTRON
product designation	Molded-case circuit breaker
product designation / according to UL file	MDAE
design of the product	System protection
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	2.4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	0.8 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
electrical endurance (operating cycles) / at 480 V	14 000
electrical endurance (operating cycles) / at 600 V	9 800
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L-conductor
product function	
<ul> <li>communication function</li> </ul>	No
<ul> <li>other measurement function</li> </ul>	No
Net Weight	2.5 kg
Current	
marking / according to UL 489 / 100%-rated breaker	No
operational 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 690 V	2.5 kA
operating short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 690 V	3.8 kA
Switching capacity according to UL 489	
current breaking capacity	100 //4
• at 240 V	100 kA
• at 480 V	35 kA
• at 600 V	18 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic	
• minimum	15 A
• maximum	40 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (li) / for I-tripping	
minimum	60 A
• maximum	480 A
adjustable current response value current / for G-tripping / with standard characteristic	
initial value	15 A
full-scale value	40 A
adjustable response value delay time (tg) / for G-tripping / with l0t characteristic	40 A
• minimum	0.1 s
• maximum	0.3 s
adjustable setting current (InN) / for N-tripping	0.0 8
	0.4
• minimum	
maximum	0 A
adjustable current response value current / of instantaneous short-circuit trip unit	
• minimum	60 A
● maximum	480 A
product function / grounding protection	Yes
total break time / for G-tripping / with standard characteristic	
• initial value	0.1 s
• full-scale value	0.3 s
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
trip indicator	No
height [in]	7.8 in
height	198 mm
width [in]	4.13 in
width	4.13 m 105 mm
depth [in]	3.39 in
depth	86 mm
Connections	
arrangement of electrical connectors / for main current circuit	Without connection
type of electrical connection / for main current circuit	Without
Auxiliary circuit	

number of CO contacts / for auxiliary contacts		0				
Accessories						
product extension / optional / motor drive		Yes				
Environmental condition	ns					
protection class IP / on the front		IP40				
ambient temperature						
<ul> <li>during operation / minimum</li> </ul>		-25 °C				
<ul> <li>during operation / maximum</li> </ul>		70 °C				
<ul> <li>during storage / r</li> </ul>	during storage / minimum		-40 °C			
<ul> <li>during storage / r</li> </ul>	<ul> <li>during storage / maximum</li> </ul>		80 °C			
Certificates						
reference code / accord	ing to IEC 81346-2		Q			
certificate of suitability / vessels) / supplement S	as approval for NAVAL (i BB	no combat	Yes			
General Product Appr	oval					
	Confirmation	Ŵ		(U) u	VDE	Miscellaneous
General Product Approval	EMC	Declaration of	Conformity		Marine / Shipping	
EHC	RCM	UK CA		CE EG-Konf.	ABS	B U R E A U VERITAS
Marine / Shipping		other				Dangerous Good
	KMRS	<u>Miscellaneo</u>	<u>us</u>	<u>Confirmation</u>	<u>Miscellaneous</u>	Transport Information

#### Further informatior

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3VA6140-5HM31-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA6140-5HM31-0AA0

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

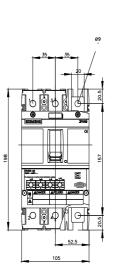
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA6140-5HM31-0AA0

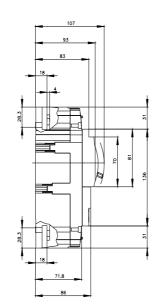
CAx-Online-Generator

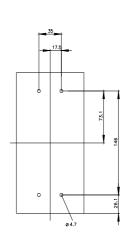
http://www.siemens.com/cax

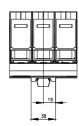
Tender specifications

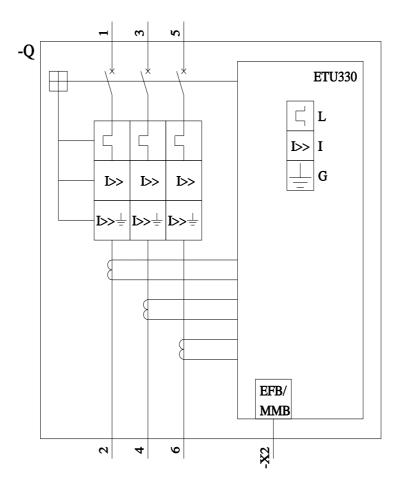
http://www.siemens.com/specifications

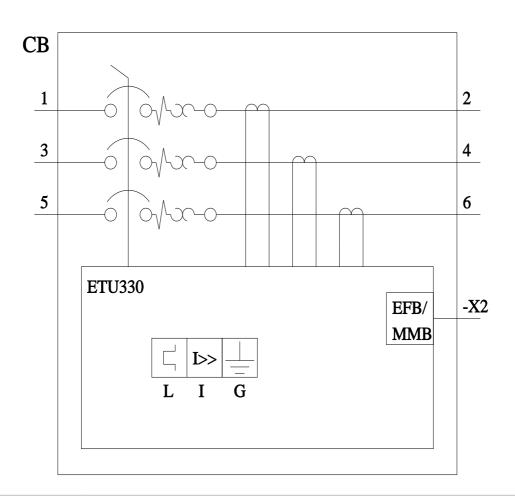












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