3VA5330-7EC31-2AA0

## **Data sheet**



circuit breaker 3VA5 UL frame 400 breaking capacity class C 100kA @ 480 V 3-pole, line protection TM230, FTAM, In=300A overload protection Ir=300A fixed short circuit protection li=5...10 x In w/o connection

Model	
product designation / according to UL file	CJAS
design of the load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
design of the load switch / according to UL 489 / High-Intensity- Discharge circuit breaker (HID Type)	No
design of the load switch / according to UL 489 / Switching Duty circuit breaker (SWD Type)	No
design of the overcurrent release	TM230
protection function of the overcurrent release	LI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at DC / rated value	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	70 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	23.4 W
mechanical service life (operating cycles) / typical	20 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	6 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	3 000
electrical endurance (operating cycles) / at 480 V	6 000
electrical endurance (operating cycles) / at 600 V	3 000
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
product function	
<ul> <li>communication function</li> </ul>	No
<ul> <li>other measurement function</li> </ul>	No
Net Weight	4 820 g
Current	
marking / according to UL 489 / 100%-rated breaker	Yes
operational current	
• at 40 °C	300 A
• at 45 °C	294 A
• at 50 °C	288 A
• at 55 °C	282 A
• at 60 °C	276 A
• at 65 °C	270 A
• at 70 °C	264 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	С
maximum short-circuit current breaking capacity (Icu)	

a at 240 V	200 kA
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	10 kA
operating short-circuit current breaking capacity (lcs)	
• at 240 V	200 kA
• at 415 V	110 kA
• at 690 V	6 kA
short-circuit current making capacity (Icm)	
● at 240 V	440 kA
● at 415 V	242 kA
● at 690 V	17 kA
design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter
Switching capacity according to UL 489	
current breaking capacity	
• at 240 V	200 kA
• at 480 V	100 kA
• at 600 V	35 kA
Adjustable parameters	
adjustable response value setting current (Ir) / of the L-trip / with l2t characteristic	
• minimum	300 A
maximum	300 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	1 s
maximum	1 s
adjustable response value setting current (li) / for I-tripping	
• minimum	1 500 A
• maximum	3 000 A
adjustable setting current (InN) / for N-tripping	
• minimum	0 A
• maximum	0 A
product function / grounding protection	No
Mechanical Design	
product component	
undervoltage release	No
voltage trigger	No
• trip indicator	No
height [in]	9.76 in
height	248 mm
width [in]	5.43 in
width	138 mm
depth [in]	4.33 in
depth	110 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	
	Yes
product extension / optional / motor drive	160
manufacturer's article number	3VA53307EC312AA0
of the supplied basic switch  Environmental conditions	3VA53307EC312AA0
Environmental conditions	ID40
protection class IP / on the front	IP40
ambient temperature	05.00
during operation / minimum	-25 °C
during storage / minimum	-40 °C
<ul> <li>during storage / maximum</li> </ul>	80 °C

Certificates

reference code / according to IEC 81346-2

Q

**General Product Approval** 

Declaration of Conformity

Marine / Shipping

other

Confirmation

**Miscellaneous** 

EAC

UK CA



Confirmation

other

**Miscellaneous** 

## Further information

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=3VA5330-7EC31-2AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA5330-7EC31-2AA0

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

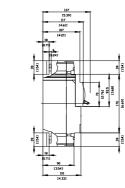
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA5330-7EC31-2AA0

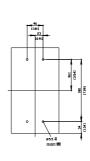
**CAx-Online-Generator** 

http://www.siemens.com/cax

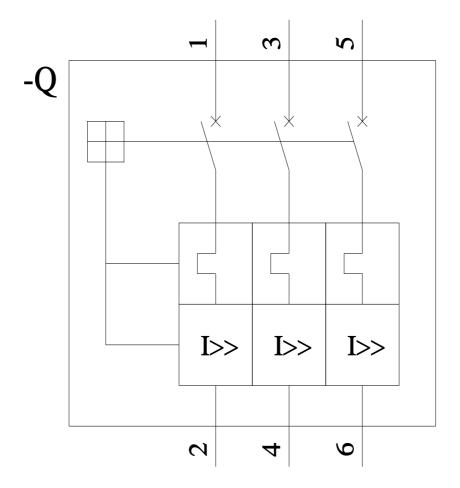
Tender specifications

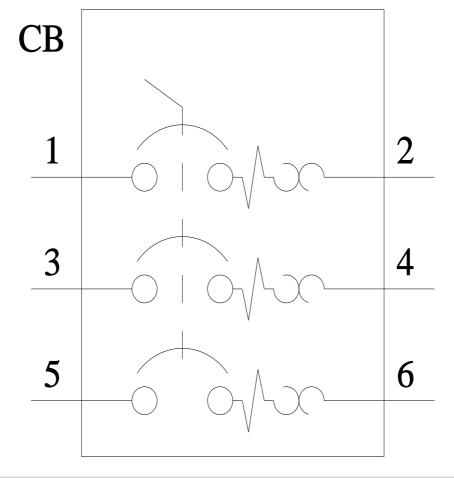
http://www.siemens.com/specifications











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