

CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS L ICU=150KA @ 415 V 3POLE, LINE PROTECTION ETU330, LIG, IN=63A OVERLOAD PROTECTION IR=25A ...63A SHORT CIRCUIT PROTECTION II=1,5...12 X IN GROUNDFAULTPROTECTION IG=0,2... 1 X IN, TG=0,1/0,3MS CABLE CONNECTION

Model		
product brand name	SENTRON	
Product designation	Molded case circuit breaker	
Design of the product	Line protection	
Product variations	Selective Applications	
Ground fault monitoring version	Summation current formation L-conductor	
Design of the auxiliary release	without auxiliaryrelease	
Design of the auxiliary switch	Without	
Design of the operating mechanism	toggle handle	
Type of the driving mechanism / motor drive	No	
Design of the overcurrent release	ETU330	

General technical data		
Number of poles		3
Trip class / of the L-trip / with I2t characteristic / initial value		0.5
Trip class / of the L-trip / with I2t characteristic / Full-scale value		17
Electrical endurance (switching cycles)		
• at AC-1 / at 380/415 V / at 50/60 Hz		12 000
Total disconnection time / for G-tripping / with standard characteristic / initial value	S	0.1
Total disconnection time / for G-tripping / with standard characteristic / Full-scale value	S	0.3
circuit-breaker / Design		3VA
Mechanical service life (switching cycles) / typical		20 000

Voltage		
Insulation voltage / Rated value	V	800
Protection class		
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LIG
. 10100110 1111010110 11110 0101011111111		
Switching capacity		
Switching capacity class of the circuit breaker		L
Dissipation		
Active power loss		
• maximum	W	3.1
Floatricity		
Electricity  Continuous current / Rated value / maximum	A	160
Continuous current / Rated value	A	63
Adjustable response value current / of the	A	1.5
instantaneous short-circuit release / initial value		
Main circuit Operating voltage		
with AC / at 50/60 Hz / Rated value	V	690
Operating current		030
• at 40 °C / Rated value	Α	63
• at 50 °C / Rated value	A	63
● at 60 °C / Rated value	A	63
● at 65 °C / Rated value	Α	63
● at 70 °C / Rated value	Α	63
Auxiliary circuit		
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Suitability		
Suitability for use		system protection
•		, , ,
Adjustable parameters		
Adjustable response value current	<b>A</b>	0.05
<ul> <li>for G-tripping / with standard characteristic / initial value</li> </ul>	Α	0.25
<ul> <li>for G-tripping / with standard characteristic / Full-scale value</li> </ul>	Α	1
• of I-trip / Full-scale value	Α	12
Adjustable response value current / of the current-dependent overload release / initial value	A	0.397
dependent overload release / lilitial value		

Product component  Trip indicator  display undervoltage release No  Product property of the circuit breaker with tripping unit / Tripping characteristic adjustable of or neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof Product expansion / optional / motor drive  Product function Product function Intrinsic device protection Intrinsic device protection Other measurement function other measurement function  Accessories  Manufacturer article number / of the supplied basic switch  No	Trip indicator		
display     undervoltage release     No  Product property     of the circuit breaker with tripping unit / Tripping characteristic adjustable     for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  Intrinsic device protection     ocommunication function     Phase failure detection     other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  No  No  No  No  No  No  No  No  N	·		
undervoltage release  Product property     of the circuit breaker with tripping unit / Tripping characteristic adjustable     of or neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  One intrinsic device protection One communication function One other measurement function One other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  No  No  No  No  No  No  No  No  N	• display		No
Product property  • of the circuit breaker with tripping unit / Tripping characteristic adjustable  • for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  • Intrinsic device protection • communication function • Phase failure detection • other measurement function  • other measurement function  Accessories  Manufacturer article number / of the supplied basic  3VA2163-8HM36-0AA0	■ uispiay		No
of the circuit breaker with tripping unit / Tripping characteristic adjustable     of or neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  Intrinsic device protection     ocommunication function Phase failure detection     other measurement function  Accessories  Manufacturer article number / of the supplied basic  Yes  No  No  No  No  No  No  No  No  No  N	undervoltage release		No
characteristic adjustable  • for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  • Intrinsic device protection • communication function • Phase failure detection • other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  No  No  No  No  No  No  No  No  N	Product property		
for neutral conductors / upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  Intrinsic device protection Communication function Phase failure detection Other measurement function  Accessories  Manufacturer article number / of the supplied basic  No	• of the circuit breaker with tripping unit / Tripping		Yes
upgradeable/retrofittable / Short-circuit and overload proof  Product expansion / optional / motor drive  Product function  Product function  Intrinsic device protection Communication function Phase failure detection Other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  3VA2163-8HM36-0AA0	characteristic adjustable		
overload proof Product expansion / optional / motor drive  Product function  Product function  Intrinsic device protection Communication function Phase failure detection Other measurement function  Accessories  Manufacturer article number / of the supplied basic  Yes  No No No No No  No  No  No  No  No  N			No
Product function  Product function  Product function  Intrinsic device protection Communication function Phase failure detection Other measurement function  Mo  Accessories  Manufacturer article number / of the supplied basic  Yes  No  No  No  No  No  No  No  No  No  N			
Product function  Product function  Intrinsic device protection  Communication function  Phase failure detection  Other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  3VA2163-8HM36-0AA0	·		Voc
Product function  Intrinsic device protection  communication function  Phase failure detection  other measurement function  Accessories  Manufacturer article number / of the supplied basic  Yes  No  No  No  No  No  No  3VA2163-8HM36-0AA0	Product expansion / optional / motor drive		tes
Intrinsic device protection     Communication function     Phase failure detection     other measurement function  Accessories  Manufacturer article number / of the supplied basic  Yes  No  No  No  No  No  3VA2163-8HM36-0AA0			
communication function     Phase failure detection     other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  3VA2163-8HM36-0AA0	Product function		
Phase failure detection     other measurement function  Accessories  Manufacturer article number / of the supplied basic  No  No  No  No  No  No  No  No  No  N	• Intrinsic device protection		Yes
other measurement function  Accessories  Manufacturer article number / of the supplied basic  3VA2163-8HM36-0AA0	• communication function		No
Accessories  Manufacturer article number / of the supplied basic  3VA2163-8HM36-0AA0	Phase failure detection		No
Manufacturer article number / of the supplied basic 3VA2163-8HM36-0AA0	<ul> <li>other measurement function</li> </ul>		No
Manufacturer article number / of the supplied basic 3VA2163-8HM36-0AA0	Accessories		
switch			3VA2163-8HM36-0AA0
	switch		
Short circuit	Short circuit		
Operational short-circuit current breaking capacity	Operational short-circuit current breaking capacity		
(Ics)	(Ics)		
• at 240 V / Rated value kA 200		kA	200
• at 415 V / Rated value kA 150	at 240 V / Rated value		200
at 440 V / Rated value     kA 150		kA	
at 500 V / Rated value	• at 415 V / Rated value		150
at 690 V / Rated value	<ul><li>at 415 V / Rated value</li><li>at 440 V / Rated value</li></ul>	kA	150 150
Maximum short-circuit current breaking capacity (Icu)	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> </ul>	kA kA	150 150 100
at 240 V / Rated value     kA     200	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul>	kA kA	150 150 100
at 415 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu)	kA kA kA	150 150 100 18
at 440 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> </ul>	kA kA kA	150 150 100 18
at 500 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul>	kA kA kA kA	150 150 100 18 200 150
at 690 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> </ul>	kA kA kA kA kA	150 150 100 18 200 150
Short-circuit current making capacity (lcm)	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> </ul>	kA kA kA kA kA kA	150 150 100 18 200 150 150
at 240 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul>	kA kA kA kA kA kA	150 150 100 18 200 150 150
at 415 V / Rated value	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Short-circuit current making capacity (Icm)	kA kA kA kA kA kA	150 150 100 18 200 150 150 100 24
• at 440 V / Rated value kA 330	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Short-circuit current making capacity (Icm) <ul> <li>at 240 V / Rated value</li> </ul>	kA kA kA kA kA kA	150 150 100 18 200 150 150 100 24
• at 500 V / Rated value kA 220	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Short-circuit current making capacity (Icm) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul> Short-circuit current making capacity (Icm) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> </ul>	kA kA kA kA kA kA kA	150 150 100 18 200 150 150 100 24 440 330
• at 690 V / Rated value kA 48	<ul> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Maximum short-circuit current breaking capacity (Icu) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 440 V / Rated value</li> <li>at 500 V / Rated value</li> <li>at 690 V / Rated value</li> </ul> Short-circuit current making capacity (Icm) <ul> <li>at 240 V / Rated value</li> <li>at 415 V / Rated value</li> <li>at 445 V / Rated value</li> <li>at 445 V / Rated value</li> </ul>	kA kA kA kA kA kA kA	150 150 100 18 200 150 150 100 24 440 330 330

Connections		
Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		
<ul> <li>of the round conductor terminal / stranded</li> </ul>		1 x (6-120 mm²)
Type of electrical connection / for main current circuit		Box terminal
Mechanical Design		
Height	mm	181

Mechanical Design		
Height	mm	181
Width	mm	105
Depth	mm	107
Mounting type		fixed mounting

Environmental conditions		
Ambient temperature		
<ul><li>during operation / minimum</li></ul>	°C	-25
<ul><li>during operation / maximum</li></ul>	°C	70
<ul><li>during storage / minimum</li></ul>	°C	-40
<ul><li>during storage / maximum</li></ul>	°C	80

Certificates				
Equipment marking				
• acc. to DIN EN 61346-2	Q			
• acc. to DIN EN 81346-2	Q			
General Product Approval	EMC	Declaration of	other	







other

Conformity

other

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21638HM360AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3VA21638HM360AA0/all

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

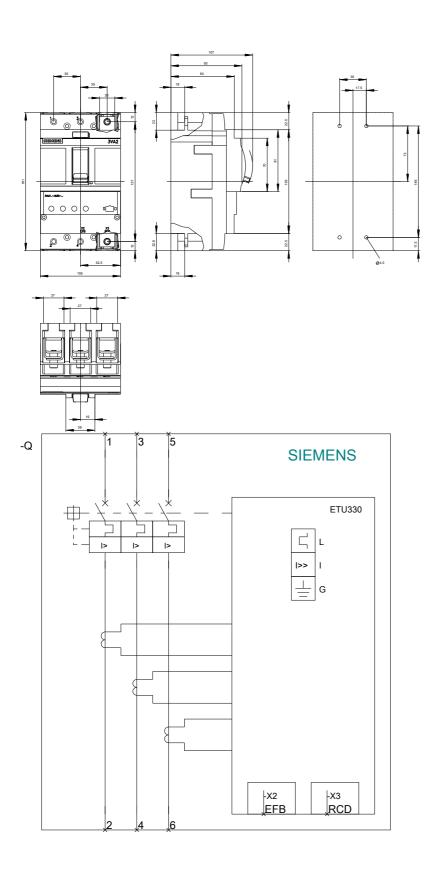
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA21638HM360AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv



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