## **Product data sheet**



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3POLE, LINE PROTECTION ETU860, LSIG, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT,UPTO 160% GROUNDFAULT, SWITCHABLE IG=0,2... 1 X IN, TG=0,050,8MS BUSBAR CONNECTION

Similar to image

General technical data:		
product brand name		SENTRON
Product designation		Molded Case Circuit Breakers
Acceptability for application		system protection
Design of the product		Line Protection
Product function		
communication function		Yes
other measurement function		Yes
Product component / display		Yes
Design of the overcurrent release		ETU860
Protective function of the overcurrent release		LSIG
Product property / for zero conductors / up/downgradable / short-circuit and overload protection		Yes
Continuous current / rated value	Α	40
Operating voltage		
at 50/60 Hz / for AC / rated value	V	690
Insulation voltage / rated value	V	800
Number of poles		3
Active power loss / maximum	W	25.5

Protection class   P / on the front	Switching capacity class of the circuit breaker		M
Product function / phase disturbance recognition  Schaltvermögen:  Breaking capacity limit short-circuit current (Icu)  • at 240 V / rated value • at 415 V / rated value • at 469 V / rated value • at 415 V / rated value • at 420 V / rated value • at 420 V / rated value • at 420 V / rated value • at 415 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • of the non-delayed short-circuit release • of the non-delayed short-circuit release / initial value • of the non-delayed short-circuit release / initial value • of the short-time delayed short-circuit release A			IP40
Product function / phase disturbance recognition  Schaltvermögen:  Breaking capacity limit short-circuit current (Icu)  * at 240 V / rated value  * at 415 V / rated value  * at 469 V / rated value  * at 4415 V / rated value  * Uttimate short-circuit current making capacity (Icm)  * at 240 V / rated value  * at 4415 V / rated value  * at 690 V / rated value  * of the non-delayed short-circuit release  * of the non-delayed short-circuit release / initial value  * of the non-delayed short-circuit release / initial value  * of the non-delayed short-circuit release / initial value  * of the short-time delayed short-circuit release  * A			
Schaltvermögen:  Breaking capacity limit short-circuit current (lcu)  - at 240 V/ rated value - at 415 V/ rated value - at 240 V/ rated value - at 690 V/ rated value - at 240 V/ rated value - at 240 V/ rated value - at 240 V/ rated value - at 375 V/ rated value - at 415 V/ rated value - at 690	Motor rating data:		
Breaking capacity limit short-circuit current (Icu)  • at 240 V / rated value  • at 415 V / rated value  • at 690 V / rated value  • at 240 V / rated value  • at 415 V / rated value  • at 415 V / rated value  • at 690 V / rated value  • at 690 V / rated value  • at 690 V / rated value  • of the current-dependent overload release  • of the non-delayed short-circuit release / initial value  Settable current response value  • of S-trip  • with standard characteristic  A 0.6 10  Adjustable response current  • of the short-time delayed short-circuit release  • A 0.6 10  Settable delay / of the S-trip  • with standard characteristic  • with 12 characteristic	Product function / phase disturbance recognition		No
- at 240 V / rated value	Schaltvermögen:		
- at 415 V / rated value	Breaking capacity limit short-circuit current (Icu)		
* at 690 V / rated value	• at 240 V / rated value	kA	85
Breaking capacity operating short-circuit current (Ics)  • at 240 V / rated value	• at 415 V / rated value	kA	55
	• at 690 V / rated value	kA	2.5
• at 415 V / rated value       kA       55         • at 690 V / rated value       kA       2.5         Uitimate short-circuit current making capacity (icm)         • at 240 V / rated value       kA       187         • at 415 V / rated value       kA       121         • at 690 V / rated value       kA       3.75         Covercurrent Release:         Adjustable response current         • of the current-dependent overload release       A       0.4 1         • of the non-delayed short-circuit release / initial value       A       1.5         Settable current response value         • of S-trip       A       0.6 10         • with standard characteristic       A       0.6 10         Settable delay / of the S-trip         • with standard characteristic       s       0.05 0.5         • with l2t characteristic       s       0.05 0.5         • with part of characteristic       s       0.05 0.8         • with l2t characteristic       s       0.05 0.8         • with l2t characteristic       s       0.05 0.8         • with l2t characteristic       s       0.05 0.8         Connections: </td <td>Breaking capacity operating short-circuit current (lcs)</td> <td></td> <td></td>	Breaking capacity operating short-circuit current (lcs)		
• at 690 V / rated value  Ultimate short-circuit current making capacity (icm)  • at 240 V / rated value • at 415 V / rated value • at 690 V / rated value • at 690 V / rated value • A 3.75   Overcurrent Release:  Adjustable response current • of the current-dependent overload release • of the non-delayed short-circuit release / initial value • of S-trip • with standard characteristic • of the short-time delayed short-circuit release • of the short-time delayed short-circuit release  A 0.6 10  Adjustable response current • of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip • with standard characteristic • with [21 characteristic • with [21 characteristic • with standard characteristic • with standard characteristic • with standard characteristic • with standard characteristic • with [21 characteristic • x 0.05 0.5  Settable current response value / of I-trip / end value • with standard characteristic • x 0.05 0.5  Settable current response value / of I-trip / end value • with standard characteristic • x 0.05 0.8  • with [21 characteristic • x 0.05 0.8  • with [21 characteristic • x 0.05 0.8  Connections:  Design of the electrical connection	• at 240 V / rated value	kA	85
Ultimate short-circuit current making capacity (Icm)  • at 240 V / rated value • at 415 V / rated value • at 690 V / rated value • at 690 V / rated value  * A 3.75   Overcurrent Release:  Adjustable response current • of the current-dependent overload release • of the non-delayed short-circuit release / initial value  * of Settable current response value • of S-trip • with standard characteristic  Adjustable response current • of the short-time delayed short-circuit release  * A 0.6 10  Adjustable response current • of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip • with standard characteristic  * with [21 characteristic  * with 22 characteristic  * with standard characteristic  * with 23 characteristic  * with 24 characteristic  * a 0.4 1  * with standard characteristic  * a 0.4 1  * with 25 characteristic  * a 0.4 1  * with 27 characteristic  * a 0.4 1  * with 28 characteristic  * a 0.4 1  * with 28 characteristic  * a 0.4 1  * with 28 characteristic  * a 0.5 0.8  * with 124 characteristic  * a 0.4 1  * with 124 characteristic  * a 0.5 0.8  * with 125 characteristic  * a 0.05 0.8  * with 126 characteristic  * a 0.05 0.8  * with 127 characteristic  * a 0.05 0.8  * with 128 characteristic  * a 0.05 0.8  * with 128 characteristic  * a 0.05 0.8  * With 128 characteristic  * a 0.05 0.8  * Ons 0.8  * Ons 0.8	• at 415 V / rated value	kA	55
at 240 V / rated value at 415 V / rated value at 690 V / rated value at 690 V / rated value  kA 121  kA 3.75    Overcurrent Release:  Adjustable response current of the current-dependent overload release of the non-delayed short-circuit release / initial value  A 1.5  Settable current response value of S-trip with standard characteristic A 0.6 10  Adjustable response current of the short-time delayed short-circuit release A 0.6 10  Settable delay / of the S-trip with standard characteristic s 0.05 0.5  Settable delay / of the S-trip  with standard characteristic s 0.05 0.5  Settable current response value / of I-trip / end value  with standard characteristic s 0.05 0.5  Settable current response value / of I-trip / end value with standard characteristic s 0.05 0.5  Settable current response value / of I-trip / end value with standard characteristic s 0.05 0.8  with 12t characteristic s 0.05 0.8  with 12t characteristic s 0.05 0.8  Connections:  Design of the electrical connection	• at 690 V / rated value	kA	2.5
at 415 V / rated value     at 690 V / rated value     kA 3.75   Overcurrent Release:  Adjustable response current     of the current-dependent overload release     of the non-delayed short-circuit release / initial value     of S-trip     with standard characteristic     A 0.6 10  Adjustable response current     of the short-time delayed short-circuit release     A 0.6 10  Adjustable response current     of the short-time delayed short-circuit release     A 0.6 10  Settable delay / of the S-trip     with standard characteristic     s 0.05 0.5  with 12t characteristic     s 0.05 0.5  Settable current response value / of I-trip / end value     with standard characteristic     s 0.05 0.5  Settable current response value / of I-trip / end value     with standard characteristic     s 0.05 0.8  with 12t characteristic     s 0.05 0.8  with 12t characteristic     s 0.05 0.8  with 12t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection	Ultimate short-circuit current making capacity (lcm)		
• at 690 V / rated value	• at 240 V / rated value	kA	187
Overcurrent Release:  Adjustable response current  of the current-dependent overload release of the non-delayed short-circuit release / initial value  A 1.5  Settable current response value of S-trip with standard characteristic A 0.6 10  Adjustable response current of the short-time delayed short-circuit release A 0.6 10  Settable delay / of the S-trip with standard characteristic s 0.05 0.5  with 12t characteristic with standard characteristic with 12t characteristic s 0.05 0.8  with 12t characteristic s 0.05 0.8  Connections:  Design of the electrical connection	• at 415 V / rated value	kA	121
Adjustable response current  of the current-dependent overload release of the non-delayed short-circuit release / initial value  A 1.5  Settable current response value of S-trip with standard characteristic A 0.6 10  Adjustable response current of the short-time delayed short-circuit release A 0.6 10  Settable delay / of the S-trip with standard characteristic s 0.05 0.5 with 12t characteristic with standard characteristic s 0.05 0.5  Settable current response value / of I-trip / end value with standard characteristic s 0.05 0.5  Settable current response value / of I-trip / end value with standard characteristic s 0.05 0.8  with 12t characteristic s 0.05 0.8  with 12t characteristic s 0.05 0.8  Connections:  Design of the electrical connection	• at 690 V / rated value	kA	3.75
of the current-dependent overload release     of the non-delayed short-circuit release / initial value  Settable current response value     of S-trip     with standard characteristic  A 0.6 10  Adjustable response current     of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip     with standard characteristic     s 0.05 0.5  with l2t characteristic  with standard characteristic  with l2t characteristic  with l2t characteristic  with l2t characteristic  s 0.05 0.8  Connections:  Design of the electrical connection	Overcurrent Release:		
of the non-delayed short-circuit release / initial value  Settable current response value  of S-trip  with standard characteristic  A 0.6 10  Adjustable response current  of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip  with standard characteristic  with 12t characteristic  with standard characteristic  with 12t characteristic  s 0.05 0.8  Connections:  Design of the electrical connection	Adjustable response current		
Settable current response value  • of S-trip  • with standard characteristic  A 0.6 10  Adjustable response current  • of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip  • with standard characteristic  • with 12t characteristic  • with standard characteristic  • with 12t characteristic	of the current-dependent overload release	Α	0.4 1
• of S-trip     • with standard characteristic  A	of the non-delayed short-circuit release / initial value	Α	1.5
with standard characteristic     A 0.6 10  Adjustable response current     of the short-time delayed short-circuit release     A 0.6 10  Settable delay / of the S-trip     with standard characteristic     s 0.05 0.5  with 12t characteristic     s 0.05 0.5  Settable current response value / of I-trip / end value     with standard characteristic     A 0.4 1  with standard characteristic     s 0.05 0.8  with 12t characteristic     A 0.4 1  with 12t characteristic     S 0.05 0.8  Connections:  Design of the electrical connection	Settable current response value		
Adjustable response current  • of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip  • with standard characteristic  s 0.05 0.5  • with 12t characteristic  s 0.05 0.5  Settable current response value / of I-trip / end value  • with standard characteristic  A 0.4 1  • with standard characteristic  s 0.05 0.8  • with 12t characteristic  A 0.4 1  • with 12t characteristic  S 0.05 0.8  Connections:  Design of the electrical connection	• of S-trip		
of the short-time delayed short-circuit release  A 0.6 10  Settable delay / of the S-trip      with standard characteristic     s 0.05 0.5      with   2t characteristic     s 0.05 0.5  Settable current response value / of I-trip / end value      with standard characteristic     A 0.4 1      with standard characteristic     s 0.05 0.8      with   2t characteristic     A 0.4 1      with   2t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection	with standard characteristic	Α	0.6 10
Settable delay / of the S-trip  • with standard characteristic  • with l2t characteristic  Settable current response value / of l-trip / end value  • with standard characteristic  • with standard characteristic  • with standard characteristic  • with l2t characteristic	Adjustable response current		
with standard characteristic     with I2t characteristic     s 0.05 0.5  Settable current response value / of I-trip / end value     with standard characteristic     with standard characteristic     with standard characteristic     with I2t characteristic     with I2t characteristic     with I2t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection	of the short-time delayed short-circuit release	Α	0.6 10
with l2t characteristic     s    0.05 0.5  Settable current response value / of l-trip / end value     with standard characteristic     with standard characteristic     with standard characteristic     with l2t characteristic     with l2t characteristic     with l2t characteristic     s    0.05 0.8  Connections:  Design of the electrical connection			
Settable current response value / of I-trip / end value  • with standard characteristic  • with standard characteristic  • with l2t characteristic	Settable delay / of the S-trip		
with standard characteristic     with standard characteristic     with I2t characteristic     with I2t characteristic     with I2t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection		S	0.05 0.5
with standard characteristic     with I2t characteristic     with I2t characteristic     with I2t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection	with standard characteristic		
with I2t characteristic     with I2t characteristic     s 0.05 0.8  Connections:  Design of the electrical connection	with standard characteristic     with I2t characteristic	S	0.05 0.5
with I2t characteristic     s	with standard characteristic     with I2t characteristic  Settable current response value / of I-trip / end value	s A	0.05 0.5 12
Connections:  Design of the electrical connection	with standard characteristic     with I2t characteristic  Settable current response value / of I-trip / end value     with standard characteristic	s A A	0.05 0.5 12 0.4 1
Design of the electrical connection	with standard characteristic     with I2t characteristic  Settable current response value / of I-trip / end value     with standard characteristic     with standard characteristic	s A A s	0.05 0.5 12 0.4 1 0.05 0.8
	with standard characteristic     with I2t characteristic  Settable current response value / of I-trip / end value     with standard characteristic     with standard characteristic     with I2t characteristic	s A A s	0.05 0.5 12 0.4 1 0.05 0.8 0.4 1
• for main current circuit	with standard characteristic     with l2t characteristic  Settable current response value / of l-trip / end value     with standard characteristic     with standard characteristic     with l2t characteristic     with l2t characteristic	s A A s	0.05 0.5 12 0.4 1 0.05 0.8 0.4 1
Lug Terriman	with standard characteristic     with I2t characteristic  Settable current response value / of I-trip / end value     with standard characteristic     with standard characteristic     with I2t characteristic     with I2t characteristic  Connections:	s A A s	0.05 0.5 12 0.4 1 0.05 0.8 0.4 1

Control circuit:		
Number of changeover contacts		
for auxiliary contacts	0	
Product component		
undervoltage release mechanism	No	)
Voltage trigger	No	)
• undervoltage release with leading contact	No	)
• trip indicator	No	)
Manufacturer article number		
• 3 of the integrated auxiliary switch /alarm switch		
of integrated auxiliary trip		

Ambient conditions:		
Ambient temperature		
during operating	°C	-25 +70
during storage	°C	-40 +80

Dimensions and weights:		
Width	mm	105
Height	mm	181
Depth	mm	107
Net weight	g	2,300

Lebensdauer:	
Mechanical operating cycles as operating time / typical	20,000
Reference code / according to DIN EN 61346-2	Q

## **Certificates/approvals:**

## **Declaration of Conformity**

## 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/3VA2140-5KQ32-0AA0

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

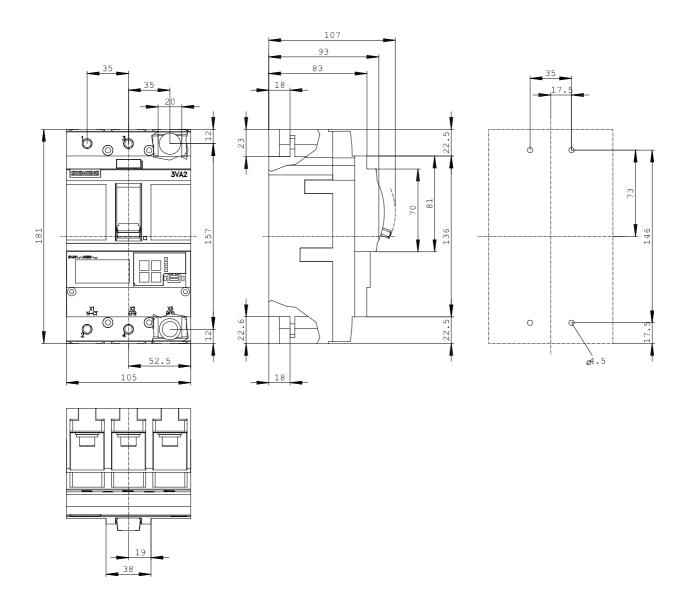
 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3VA2140-5KQ32-0AA0/all}}$ 

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VA2140-5KQ32-0AA0

**CAx-Online-Generator** 

http://www.siemens.com/cax



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