



circuit breaker 3VA2 IEC frame 400 breaking capacity class E Icu=200 kA @ 415 V 4-pole, line protection ETU330, LIG, In=400A overload protection Ir=160A ... 400A short circuit protection li=1,5...12 x In neutral protection adjustable(OFF 50% 100%) ground fault protection Ig=0,2... 1 x In, tg=0,1/0,3s

Model

product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
number of poles	4

General technical data

insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	96 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	32 W
mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	6 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 200
Neutral conductors / upgradeable/retrofitable	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
• communication function	No
• other measurement function	No
Net Weight	6.35 kg

Current

continuous current / rated value / maximum	400 A
Courant permanent assigné Iu	400 A
operational current	
• at 40 °C	400 A
• at 45 °C	400 A
• at 50 °C	400 A
• at 55 °C	385 A
• at 60 °C	370 A
• at 65 °C	355 A
• at 70 °C	340 A

Switching capacity according to IEC 60947

switching capacity class of the circuit breaker	E
breaking capacity maximum short-circuit current (Icu)	
• at 415 V	200 kA
• at 690 V	85 kA
breaking capacity operating short-circuit current (Ics)	
• at 415 V	200 kA

- at 690 V
- short-circuit current making capacity (I_{cm})
- at 415 V
 - at 690 V

65 kA

440 kA

187 kA

Adjustable parameters

product feature / for L-tripping / can be switched on/off	No
product feature / for L-tripping / adjustable	Yes
product feature / for L-tripping / selectable characteristic function	No
type of value list setting current (I _r) / for L-tripping / with I _{2t} characteristic	St
reference value setting current (I _r) / for L-tripping / with I _{2t} characteristic	x I _n
set values setting current (I _r) / for L-tripping / with I _{2t} characteristic	0.4;0.5;0.6;0.7;0.75;0.8;0.85;0.9;0.95;1
adjustable response factor setting current (I _r) / for L-tripping / with I _{2t} characteristic / minimum	0.4
adjustable response factor setting current (I _r) / for L-tripping / with I _{2t} characteristic / maximum	1
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic / minimum	160 A
adjustable response value setting current (I _r) / of the L-trip / with I _{2t} characteristic / maximum	400 A
type of value list delay time (t _r) / for L-tripping / with I _{2t} characteristic	St
reference value delay time (t _r) / for L-tripping / with I _{2t} characteristic	s
set values delay time (t _r) / for L-tripping / with I _{2t} characteristic	0.5;0.75;1;2;3;5;8;10;14;17
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic / minimum	0.5 s
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic / maximum	17 s
product feature / for S-tripping / independent of direction / selectable characteristic function	No
product feature / for I-tripping / can be switched on/off	No
design of I-trip / adjustable	Yes
reference value setting current (I _i) / for I-tripping	x I _n
set values setting current (I _i) / for I-tripping	1.5;2;2.5;3;4;5;6;8;10;12
adjustable response factor setting current (I _i) / for I-tripping / minimum	1.5
adjustable response factor setting current (I _i) / for I-tripping / maximum	12
adjustable response value setting current (I _i) / for I-tripping / minimum	600 A
adjustable response value setting current (I _i) / for I-tripping / maximum	4 800 A
product feature / for G-tripping / can be switched on/off	No
product feature / for G-tripping / adjustable	Yes
product feature / for G-tripping / selectable characteristic function	No
type of value list setting current (I _g) / for G-tripping / with I _{0t} characteristic	St
reference value setting current (I _g) / for G-tripping / with I _{0t} characteristic	x I _n
set values setting current (I _g) / for G-tripping / with I _{0t} characteristic	0.2;0.4;0.6;0.8;1
adjustable response factor setting current (I _g) / for G-tripping / with I _{0t} characteristic / minimum	0.2
adjustable response factor setting current (I _g) / for G-tripping / with I _{0t} characteristic / maximum	1
Adjustable response value current / I _g min.	80 A
Adjustable response value current / I _g max.	400 A
type of value list delay time (t _g) / for G-tripping / with I _{0t} characteristic	St
reference value delay time (t _g) / for G-tripping / with I _{0t} characteristic	s
set values delay time (t _g) / for G-tripping / with I _{0t} characteristic	0.1;0.3

adjustable response value delay time (tg) / for G-tripping / with I0t characteristic / maximum	0.3 s
product feature / with neutral conductor protection / can be switched on/off	Yes
product feature / with neutral conductor protection / adjustable	Yes
type of value list setting current (InN) / for N-tripping	St
reference value setting current (InN) / for N-tripping	x Ir
setting values setting current (InN) / for N-tripping	0.5;1
adjustable response factor setting current (InN) / for N-tripping / minimum	0.5
adjustable response factor setting current (InN) / for N-tripping / maximum	1
adjustable absolute value setting current (InN) / for N-tripping / minimum	200 A
adjustable absolute value setting current (InN) / for N-tripping / maximum	400 A
tripping characteristic / of the lower tolerance band	AK_3VA2_3_400A_ETU320u330_E_uT
tripping characteristic / of the upper tolerance band	AK_3VA2_3_400A_ETU320u330_E_oT
let-through energy characteristic / at 415 V	DE_3VA2_3u4_400A_ETU_line u starter u motor_3u4p_415V
let-through energy characteristic / at 690 V	DE_3VA2_3u4_400A_ETU_line u starter u motor_3u4p_690V
type of value list setting current (Ii) / for I-tripping	St
tripping characteristic / of the let-through current characteristic / at 415 V	DS_3VA2_3u4_400A_ETU_line u starter u motor_3u4p_415V
tripping characteristic / of the let-through current characteristic / at 690 V	DS_3VA2_3u4_400A_ETU_line u starter u motor_3u4p_690V
adjustable current response value current / of instantaneous short-circuit trip unit / minimum	600 A
Adjustable response value current / Ii max.	4 800 A
design of the N-conductor protection	adjustable OFF; 50%; 100%
Ground fault protection / tripping switchable / I2t=ON/OFF	Yes

Mechanical Design

product component	
• undervoltage release	No
• voltage trigger	No
• trip indicator	No
height [in]	9.76 in
Height	248 mm
width [in]	7.24 in
Width	184 mm
depth [in]	4.33 in
depth	110 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.	20 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	silver

Auxiliary circuit

number of CO contacts / for auxiliary contacts	0
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Accessories

product extension / optional / motor drive	Yes
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Environmental conditions

protection class IP / on the front	IP40
ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

Certificates

reference code / according to IEC 81346-2

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General Product Approval

EMC

Declaration of
Conformity

[Confirmation](#)



[Miscellaneous](#)



Declaration of
Conformity

Test Certificates

Marine / Shipping

other



[Special Test Certificate](#)

[Miscellaneous](#)

[CCS / China Classification Society](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

other

[Miscellaneous](#)

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=3VA2340-0HM42-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2340-0HM42-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2340-0HM42-0AA0

CAX-Online-Generator

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

Tender specifications

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



