



circuit breaker 3VA1 IEC frame 400 breaking capacity class M Icu=55kA @ 415V 3-pole, line protection TM240, ATAM, In=400A overload protection Ir=280A...400A short-circuit protection Ii=5...10 x In nut keeper kit circuit breaker 3VA1 IEC frame 400 breaking capacity class M Icu=55kA @ 415V 3-pole, line protection TM240, ATAM, In=400A overload protection Ir=280A...400A short-circuit protection Ii=5...10 x In nut UNDERVOLTAGE RELEASE 208-230 V AC 50/60 HZ ACCESSORY FOR 3VA1 2 AUXILIARY SWITCH CHANGEOVER H 1 TRIP ALARM SWITCH CHANGEOVER

Model

product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	TM240
protection function of the overcurrent release	LI
number of poles	3
design of the auxiliary release	undervoltage release (UVR)
Auxiliary contact version	2 auxiliary switches + 1 trip alarm switch HP

General technical data

insulation voltage / rated value	800 V
Max. rated operational voltage Ue with DC	500 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	94.6 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	31.53 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	Without
product function	
• communication function	No
• other measurement function	No
Net Weight	5.114 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	392 A
• at 60 °C	384 A
• at 65 °C	376 A
• at 70 °C	367 A

Switching capacity according to IEC 60947

switching capacity class of the circuit breaker	M
breaking capacity maximum short-circuit current (Icu)	
• at 240 V	85 kA

• at 415 V • at 440 V • at 500 V • at 690 V	55 kA
breaking capacity operating short-circuit current (Ics)	55 kA
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	36 kA
short-circuit current making capacity (Icm)	7 kA
• at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	85 kA
design of short-circuit protection	55 kA
	55 kA
	36 kA
	5 kA
	187 kA
	121 kA
	121 kA
	75.6 kA
	11.9 kA
	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

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	0.7;0.8;0.9;1
adjustable response factor setting current (I _r) / for L-tripping / with I _{2t} characteristic / minimum	0.7
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	280 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	Fest
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	1
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic / minimum	1 s
adjustable response value delay time (t _r) / for L-tripping / with I _{2t} characteristic / maximum	1 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	5;6;7;8;9;10
adjustable response factor setting current (I _i) / for I-tripping / minimum	5
adjustable response factor setting current (I _i) / for I-tripping / maximum	10
adjustable response value setting current (I _i) / for I-tripping / minimum	2 000 A
adjustable response value setting current (I _i) / for I-tripping / maximum	4 000 A
product feature / for G-tripping / selectable characteristic function	No
product feature / with neutral conductor protection / can be switched on/off	No
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 In
adjustable response factor setting current (InN) / for N-tripping / minimum	0
adjustable response factor setting current (InN) / for N-tripping / maximum	0
adjustable absolute value setting current (InN) / for N-tripping / minimum	0 A
adjustable absolute value setting current (InN) / for N-tripping / maximum	0 A
tripping characteristic / of the lower tolerance band	AK_3VA1_3_400A_TM2_SuMuHuC_uT
tripping characteristic / of the upper tolerance band	AK_3VA1_3_400A_TM2_SuMuHuC_oT
let-through energy characteristic / at 240 V	DE_3VA1_3u4_400A_TM_line u starter_3u4p_240V
let-through energy characteristic / at 415 V	DE_3VA1_3u4_400A_TM_line u starter_3u4p_415V
let-through energy characteristic / at 440 V	DE_3VA1_3u4_400A_TM_line u starter_3u4p_440V
let-through energy characteristic / at 500 V	DE_3VA1_3u4_400A_TM_line u starter_3u4p_500V
let-through energy characteristic / at 690 V	DE_3VA1_3u4_400A_TM_line u starter_3u4p_690V
type of value list setting current (Ii) / for I-tripping	St
tripping characteristic / of the let-through current characteristic / at 240 V	DS_3VA1_3u4_400A_TM_line u starter_3u4p_240V
tripping characteristic / of the let-through current characteristic / at 415 V	DS_3VA1_3u4_400A_TM_line u starter_3u4p_415V
tripping characteristic / of the let-through current characteristic / at 440 V	DS_3VA1_3u4_400A_TM_line u starter_3u4p_440V
tripping characteristic / of the let-through current characteristic / at 500 V	DS_3VA1_3u4_400A_TM_line u starter_3u4p_500V
tripping characteristic / of the let-through current characteristic / at 690 V	DS_3VA1_3u4_400A_TM_line u starter_3u4p_690V
adjustable current response value current / of instantaneous short-circuit trip unit / minimum	2 000 A
Adjustable response value current / Ii max.	4 000 A
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
product component	
• undervoltage release	Yes
• voltage trigger	No
• trip indicator	Yes
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	Front terminal
type of electrical connection / for main current circuit	nut keeper kit on both ends
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	3
Accessories	
product extension / optional / motor drive	Yes
manufacturer's article number	
• of the supplied basic switch	3VA13405EF320AA0
• of the integrated auxiliary switch/alarm switch	3VA9988-0AA11
• of the integrated auxiliary switch/alarm switch	3VA9988-0AB11
• of the integrated auxiliary trip unit	3VA9608-0BB25
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



[Confirmation](#)



[Miscellaneous](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



Marine / Shipping

other



[Miscellaneous](#)

[Environmental Confirmations](#)

[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=3VA1340-5EF32-0DJ0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1340-5EF32-0DJ0>

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

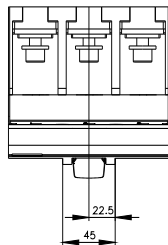
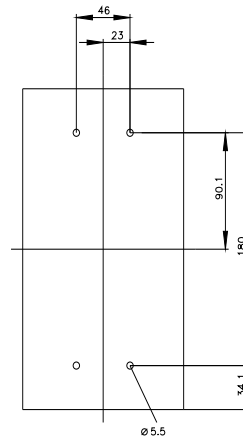
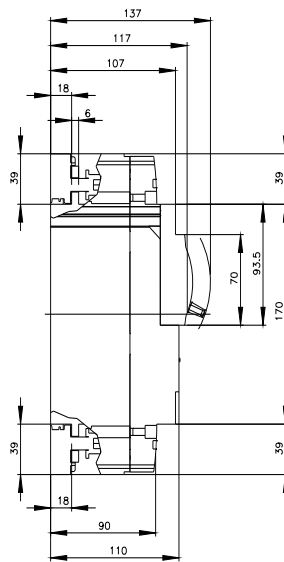
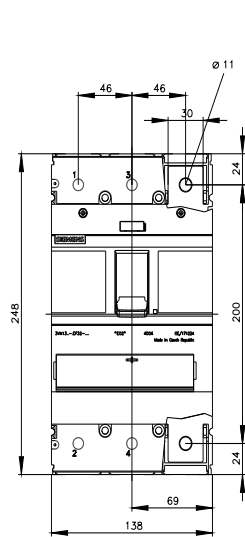
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1340-5EF32-0DJ0

CAX-Online-Generator

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

Tender specifications

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



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