SIEMENS

Data sheet 3VA2040-8KP32-0AA0



circuit breaker 3VA2 IEC frame 100 breaking capacity class L Icu=150kA @ 415V 3-pole, line protection ETU850, LSI, In=40A overload protection Ir=16A...40A short-circuit protection Isd=0.6..10x In, Ii=1.5..12x In N conductor protection optionally with external current transformer, up to 160% nut keeper kit

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
Product version	Line protection
design of the overcurrent release	ETU850
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	1.2 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	0.4 W
mechanical service life (switching cycles) / typical	25 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	15 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	10 500
Neutral conductors / upgradeable/retrofittable	Yes
ground-fault monitoring version	Without
product function	
● communication function	Yes
● other measurement function	Yes
Net Weight	2.5 kg
Current	
continuous current / rated value / maximum	100 A
Courant permanent assigné Iu	40 A
operational current	
● at 40 °C	40 A
● at 45 °C	40 A
● at 50 °C	40 A
● at 55 °C	40 A
● at 60 °C	40 A
● at 65 °C	40 A
● at 70 °C	40 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	L
breaking capacity maximum short-circuit current (Icu)	
● at 240 V	200 kA
● at 415 V	150 kA
● at 440 V	150 kA
● at 500 V	100 kA

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● at 690 V	25 kA
breaking capacity operating short-circuit current (Ics)	
● at 240 V	200 kA
● at 415 V	150 kA
● at 440 V	150 kA
● at 500 V	100 kA
● at 690 V	18 kA
short-circuit current making capacity (Icm)	
● at 240 V	440 kA
● at 415 V	330 kA
● at 440 V	330 kA
● at 500 V	220 kA
● at 690 V	52.5 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 (Ir) / for L-tripping / with I2t characteristic	St
reference value setting current (Ir) / for L-tripping / with I2t characteristic	x In
set values setting current (Ir) / for L-tripping / with I2t characteristic	0.4-1;0
adjustable response factor setting current (Ir) / for L-tripping / with I2t characteristic / minimum	0.4
adjustable response factor setting current (Ir) / for L-tripping / with I2t characteristic / maximum	1
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / minimum	16 A
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic / maximum	40 A
type of value list delay time (tr) / for L-tripping / with I2t characteristic	Einstelltabelle
reference value delay time (tr) / for L-tripping / with I2t characteristic	s
set values delay time (tr) / for L-tripping / with I2t characteristic	0.5-25;0.1
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / minimum	0.5 s
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic / maximum	25 s
product feature / for S-tripping / independent of direction / can be switched on/off	No
product feature / for S-tripping / independent of direction / selectable characteristic function	Yes
type of value list setting current (Isd) / for S-tripping / with I0t characteristic	St
reference value setting current (Isd) / for S-tripping / with I0t characteristic	x In
set values setting current (Isd) / for S-tripping / with I0t characteristic	0.6-10;0
adjustable response factor setting current (Isd) / for S-tripping / with I0t characteristic / minimum	0.6
adjustable response factor setting current (Isd) / for S-tripping / with I0t characteristic / maximum	10
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic / minimum	24 A
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic / maximum	400 A
type of value list setting current (Isd) / for S-tripping / with I2t characteristic	St
reference value setting current (Isd) / for S-tripping / with I2t characteristic	x In
set values setting current (Isd) / for S-tripping / with I2t characteristic	0.6-10;0
adjustable response factor setting current (Isd) / for S-tripping / with I2t characteristic / minimum	0.6
adjustable response factor setting current (Isd) / for S-	10

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tripping / with I2t characteristic / maximum	
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic / minimum	24 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic / maximum	400 A
type of value list delay time (tsd) / for S-tripping / with I0t characteristic	Einstelltabelle
reference value delay time (tsd) / for S-tripping / with I0t characteristic	s
set values delay time (tsd) / for S-tripping / with I0t characteristic	0.05-0.5;0.01
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic / minimum	0.05 s
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic / maximum	0.5 s
type of value list delay time (tsd) / for S-tripping / with I2t characteristic	Einstelltabelle
reference value delay time (tsd) / for S-tripping / with I2t characteristic	s
set values delay time (tsd) / for S-tripping / with I2t characteristic	0.05-0.5;0.01
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic / minimum	0.05 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic / maximum	0.5 s
product feature / for I-tripping / can be switched on/off	No
design of I-trip / adjustable	Yes
reference value setting current (Ii) / for I-tripping	x In
set values setting current (Ii) / for I-tripping	1.5-12;0
adjustable response factor setting current (Ii) / for I-tripping / minimum	1.5
adjustable response factor setting current (Ii) / for I-tripping / maximum	12
adjustable response value setting current (Ii) / for I-tripping / minimum	60 A
adjustable response value setting current (Ii) / for I-tripping / maximum	480 A
product feature / for G-tripping / selectable characteristic function	No
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 In
setting values setting current (InN) / for N-tripping	0.4-1.6;0
adjustable response factor setting current (InN) / for N-tripping / minimum	0.4
adjustable response factor setting current (InN) / for N-tripping / maximum	1.6
adjustable absolute value setting current (InN) / for N-tripping / minimum	16 A
adjustable absolute value setting current (InN) / for N-tripping / maximum	64 A
tripping characteristic / of the lower tolerance band	AK_3VA2_0u1_40A_ETU5u8_MuHuCuLuE_uT
tripping characteristic / of the upper tolerance band	AK_3VA2_0u1_40A_ETU5u8_MuHuCuLuE_oT
let-through energy characteristic / at 240 V	DE_3VA2_0_40A_ETU_line_3u4p_240V
let-through energy characteristic / at 415 V	DE_3VA2_0_40A_ETU_line_3u4p_415V
let-through energy characteristic / at 440 V	DE_3VA2_0_40A_ETU_line_3u4p_440V
let-through energy characteristic / at 500 V	DE_3VA2_0_40A_ETU_line_3u4p_500V
let-through energy characteristic / at 690 V	DE_3VA2_0_40A_ETU_line_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_3VA2_0_40A_ETU_line_3u4p_240V
tripping characteristic / of the let-through current characteristic / at 415 V	DS_3VA2_0_40A_ETU_line_3u4p_415V
tripping characteristic / of the let-through current characteristic / at 440 V	DS_3VA2_0_40A_ETU_line_3u4p_440V
tripping characteristic / of the let-through current	DS_3VA2_0_40A_ETU_line_3u4p_500V

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characteristic / at 500 V	
tripping characteristic / of the let-through current characteristic / at 690 V	DS_3VA2_0_40A_ETU_line_3u4p_690V
adjustable current response value current / of instantaneous short-circuit trip unit / minimum	60 A
Adjustable response value current / Ii max.	480 A
design of the N-conductor protection	adjustable OFF; 40% to 160%
Ground fault protection / tripping switchable / I2t=ON/OFF	No
Mechanical Design	
product component	
● undervoltage release	No
● voltage trigger	No
● trip indicator	No
height [in]	7.13 in
Height	181 mm
width [in]	4.13 in
Width	105 mm
depth [in]	3.39 in
depth	86 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.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8 mm
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	tin
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin
Auxiliary circuit	
number of CO contacts / for auxiliary contacts	0
Accessories	
product extension / optional / motor drive	Yes
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	Q

General Product Approval

Confirmation | Miscellaneous

EMC	Declaration of Conformity	Test Certificates		
		Type Test Certificates/Test Report	Miscellaneous	Special Test Certificate

Marine / Shipping	other

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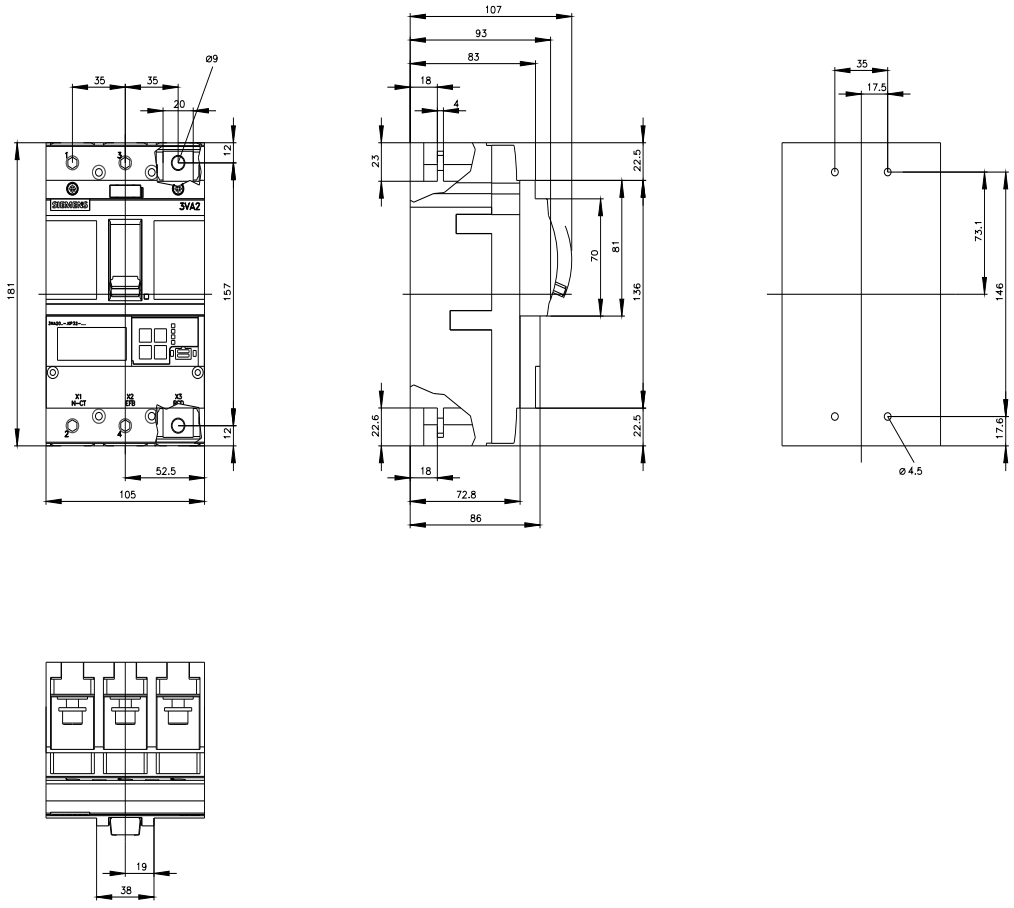
Environmental Confirmations

other

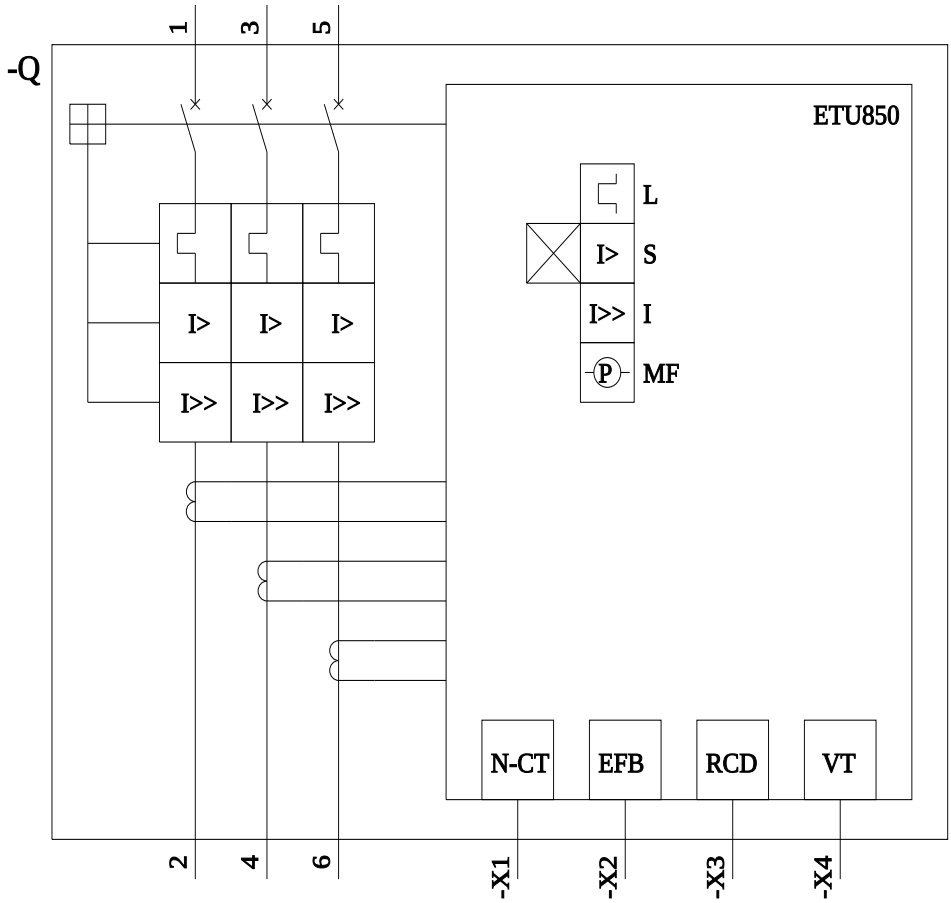
Miscellaneous Miscellaneous

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=3VA2040-8KP32-0AA0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3VA2040-8KP32-0AA0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2040-8KP32-0AA0
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