



external function box EFB300 incl. connecting cable 1.5 m 3VA - EFB300
accessory for: 3VA6

Model	
product brand name	SENTRON
product designation	External function box EFB300
accessories	Digital input and output module
General technical data	
suitability for operation	Installation in fixed switchboard inside enclosed rooms
mounting position	any
degree of pollution	3
protection class IP	IP20 according to IEC60529
Voltage	
Rated control supply voltage U_s with DC / maximal	24 V
Current	
product function	
• electronic tripping unit power supply	Yes
• digital input and output module	Yes
number of interfaces / of the circuit breaker communication system	1
number of higher-level circuit breakers / of the ZSI module	
• at input / maximum connectable	20
• at output / maximum connectable	8
design of the connecting cable / of the ZSI module	Flexible, shielded (at least 85% overlap), twisted cable, max. capacity: 200 nF/km (conductor/shield), 160 nF/km (conductor/conductor), inductivity 0.65 H/km, total line resistance: max. 28 ohms
number of digital inputs	1
input voltage / at digital input / at DC / rated value	24 V
operating range of digital input	IEC: SELV/ PELV
input voltage / at digital input	
• initial value for signal<1>-recognition	15 V
• full-scale value for signal<0> recognition	5 V
number of relay outputs	2
voltage / of the output relay	
• at AC / maximum	250 V
• at DC / maximum	250 V
operational current / of the output relay	
• at AC / at 250 V / rated value	6 A
• at DC / at 30 V / rated value	5 A
switching capacity current / of the output relay	
• at AC-12 / at 250 V	6 A
• at AC-15 / at 250 V	3 A
• at DC-12 / at 250 V	0.2 A

<ul style="list-style-type: none"> • at DC-13 / at 250 V 	0.1 A
output current / of the output relay	
<ul style="list-style-type: none"> • for signal <1> / initial value • for signal <1> / full-scale value • for signal <0> / maximum 	10 mA 27 mA 0.2 mA
design of DIAZED fuse link / for short-circuit protection of auxiliary contacts of output relay	D0 6 A 500 V gL/gG
overvoltage category / of the output relay	III (relay) I (other)
number of static semiconductor outputs	2
voltage / of the static semiconductor outputs / at DC / rated value	24 V
voltage / of the static semiconductor outputs / at DC / rated value / note	IEC: SELV/ PELV
operational current / of the static semiconductor outputs / at DC / rated value	100 mA
power loss [V·A] / rated value	4 VA
control supply voltage / at DC / rated value / maximum	24 V
relative symmetrical tolerance / of the operating range of the control feed voltage	20 %
consumed current / maximum	0.16 A

Mechanical Design

height	116 mm
width	70 mm
depth	36 mm
Net Weight	243 g

Connections

type of electrical connection	removable/pluggable
type of electrical connection / at the inputs for supply voltage	screw-type terminals
connectable conductor cross-section / solid	
<ul style="list-style-type: none"> • minimum • maximum 	0.5 mm ² 2.5 mm ²
connectable conductor cross-section / finely stranded / with core end processing	
<ul style="list-style-type: none"> • minimum • maximum 	0.5 mm ² 2.5 mm ²
type of connectable conductor cross-sections / at the digital inputs / for AWG cables / solid	1x 20 to 14; 2x 20 to 16
tightening torque / with screw-type terminals / minimum	0.4 N·m
tightening torque / with screw-type terminals / maximum	0.5 N·m

Environmental conditions

ambient temperature / during operation	
<ul style="list-style-type: none"> • minimum • maximum 	-25 °C 60 °C
ambient temperature / during transport	
<ul style="list-style-type: none"> • minimum • maximum 	-25 °C 80 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> • minimum • maximum 	-25 °C 70 °C

Certificates

General Product Approval



[Confirmation](#)



[Miscellaneous](#)



EMV	Test Certificates	Maritime application	other	Environment
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Environment

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA9977-0UA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA9977-0UA10>

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

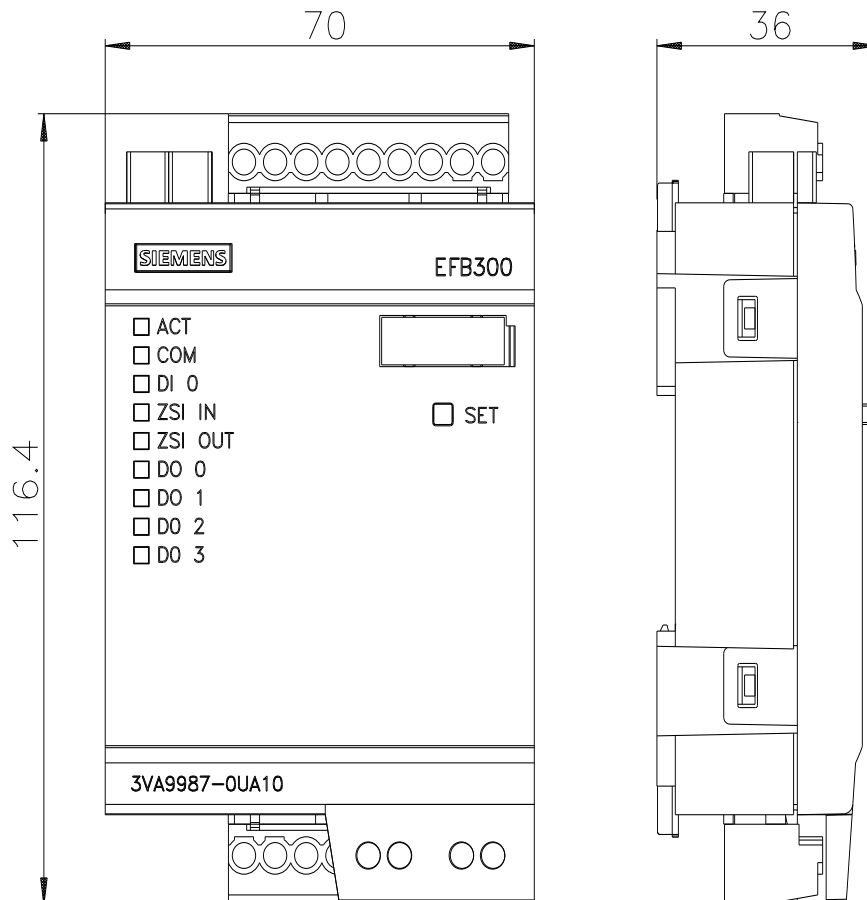
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA9977-0UA10

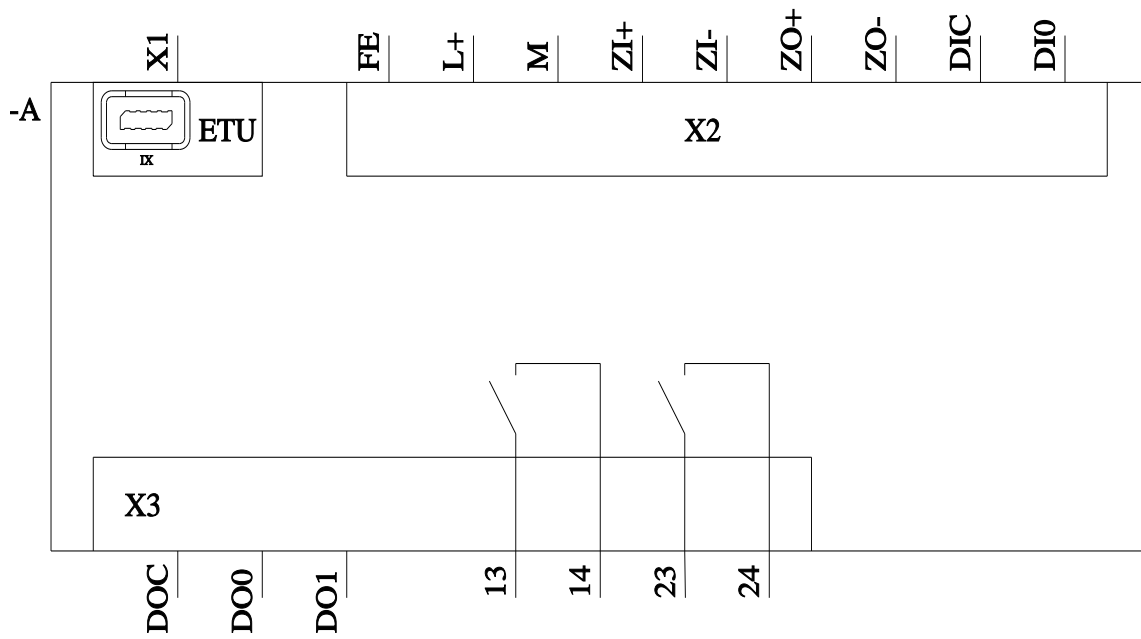
CAX-Online-Generator

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

Tender specifications

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





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