



Touch panel, 24 V DC, 5.7z, TFTcolor, ethernet, RS232, (PLC)

Part no. **XV-102-A3-57TVRB-1E4**  
**199734**

<b>General specifications</b>		
Product name		Eaton XV-102 Touch panel
Part no.		XV-102-A3-57TVRB-1E4
EAN		7640130099746
Product Length/Depth		170 millimetre
Product height		39 millimetre
Product width		130 millimetre
Product weight		0.52 kilogram
Certifications		UL File No.: E208621 CSA Class No.: NWWG08 DNV GL UL Category Control No.: NWWG02
Product Tradename		XV-102
Product Type		Touch panel
Product Sub Type		None
Catalog Notes		4-wire Technology 7 W for basic device + 2.5 W for USB module Heat dissipation with power consumption for 24 V
<b>Features &amp; Functions</b>		
Enclosure material		Plastic
Features		USB Host Ethernet interface Slot for SD card UL508, cUL approvals Fanless CPU and system cooling, natural convection-based passive cooling USB device
Fitted with:		1 x USB device (built-in interface) 1 x Ethernet 100base-TX/10base-T (built-in interface) Alpha numeric keyboard Color display Message indication Message system (incl. buffer and confirmation) Numeric keyboard Printer output Recipes SW interfaces
<b>General information</b>		
Degree of protection		IP65
Degree of protection (front side)		IP65 NEMA 4X
Fuse type		Built-in fuse (not accessible)
Lifespan		40,000 h (Service life of back-lighting)
Model		Insulating enclosure and front plate
Mounting method		Flush mounting
Product category		XV100
Residual ripple		≤ 5 % (input voltage)
RoHs conformity		Yes
Software		GALILEO, Visualization software, Engineering
Type		Touch display for easyE4
Voltage type		DC
<b>Ambient conditions, mechanical</b>		
Shock resistance		Mechanical, According to IEC/EN 60068-2-27
Vibration resistance		According to IEC/EN 60068-2-6
<b>Climatic environmental conditions</b>		
Air pressure		795 - 1080 hPa (operation)
Ambient operating temperature - min		0 °C

Ambient operating temperature - max		50 °C
Operating temperature - min		0 °C
Operating temperature - max		50 °C
Relative humidity		10 - 90 % (non-condensing)
<b>Electro magnetic compatibility</b>		
Voltage dips		≤ 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 V DC)
<b>Electrical rating</b>		
Permissible voltage		35 V DC (for a duration of < 100 ms) 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %) 18.0 - 31.2 V DC, absolute with ripple 18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %)
Power consumption		Max. 10 W 2.5 W (USB Slave to USB Host) 9.5 W total 7 W
Rated control supply voltage		24 V DC (UAUX, -20 %/+25 %) 24 V DC (UPOW, -20 %/+25 %)
Rated operational voltage		24 V DC (power-supply - safety extra low voltage)
Supply voltage at AC, 50 Hz - min		0 V AC
Supply voltage at AC, 50 Hz - max		0 V AC
Supply voltage at DC - min		20.4 V DC
Supply voltage at DC - max		28.8 V DC
<b>Communication</b>		
Interfaces		USB 2.0 host (1.5 - 12 Mbit/s, not galvanically isolated) Ethernet (100Base-TX/10Base-T) RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC)
Number of slots		1 (for SD-Card)
<b>Display</b>		
Display contrast ratio		300:1
Display lighting		Dimmable via software LED
Display size		115 x 86 mm
Display type		Standard front with standard membrane (fully enclosed) TFT
Luminance intensity		250 cd/m <sup>2</sup>
Number of colors of the display		64000
Screen size (diagonal)		5.7 in
Touch technology		Glass with film touch sensor Resistive touch Touch sensor (glass with foil), Resistive touch protective screen
<b>Input/Output</b>		
Resolution		640 x 480 px VGA
<b>Safety</b>		
Protection against polarity reversal		Yes
<b>System</b>		
Backup time		10 years, typ. (time at zero voltage)
Memory		32 kByte internal NVRAM (retained data) SD Memory Card Slot: SDA Specification 1.00 (External) 128 MByte internal NAND-Flash (can be used for data backup) 64 MByte internal DRAM (OS, Program and data memory)
Memory capacity		64,000 kByte
Operating system		Windows CE 5.0 (license included)
Processor		RISC CPU, 32 Bit, 400 MHz
<b>Design verification</b>		
Equipment heat dissipation, current-dependent Pvid		9.5 W
Static heat dissipation, non-current-dependent Pvs		9.5 W
10.2.5 Lifting		Does not apply to enclosures without lifting aids.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.4 Clearances and creepage distances		Meets the product standard's requirements.

10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Technical data ETIM 9.0

Programmable logic controllers PLC (EG000024) / Graphic panel (EC001412)		
Electric engineering, automation, process control engineering / Display and control component / Panel (HMI) / Graphic panel (HMI) (ecl@ss13-27-33-02-01 [AFX016008])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	20.4 - 28.8
Voltage type (supply voltage)		DC
Power consumption	W	10
Number of HW-interfaces industrial Ethernet		1
Number of interfaces PROFINET		0
Number of HW-interfaces RS-232		0
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		0
Number of HW-interfaces serial TTY		0
Number of HW-interfaces USB		1
Number of HW-interfaces parallel		0
Number of HW-interfaces wireless		0
Number of HW-interfaces other		0
With SW interfaces		Yes
Supporting protocol for EtherCAT		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for Modbus		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No
Radio standard GSM		No

Radio standard UMTS		No
IO link master		No
Type of display		TFT
Colour display		Yes
Number of colours of the display		64000
Number of grey-scales/blue-scales of display		0
Screen diagonal	inch	5.7
Number of pixels, horizontal		320
Number of pixels, vertical		240
Useful project memory/user memory	kByte	64000
With numeric keyboard		Yes
With alpha numeric keyboard		Yes
Number of function buttons, programmable		0
Number of buttons with LED		0
Number of system buttons		1
Touch technology		Resistive touch
With message indication		Yes
With message system (incl. buffer and confirmation)		Yes
Process value representation (output) possible		No
Process default value (input) possible		No
With recipes		Yes
Number of password levels		200
With printer output		Yes
Number of online languages		100
Additional software components, loadable		No
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		4X
Certified for UL hazardous location class I		No
Certified for UL hazardous location class II		No
Certified for UL hazardous location class III		No
Certified for UL hazardous location division 1		No
Certified for UL hazardous location division 2		No
Certified for UL hazardous location group A (acetylene)		No
Certified for UL hazardous location group B (hydrogen)		No
Certified for UL hazardous location group C (ethylene)		No
Certified for UL hazardous location group D (propane)		No
Certified for UL hazardous location group E (metal dusts)		No
Certified for UL hazardous location group F (carbonaceous dusts)		No
Certified for UL hazardous location group G (non-conductive dusts)		No
Operating temperature	°C	0 - 50
Rail mounting possible		No
Wall mounting/direct mounting		No
Suitable for safety functions		No
Width of the front	mm	170
Height of the front	mm	130
Built-in depth	mm	34