DATASHEET - XV-303-10-B00-A00-1C

Control panel with PLC, 24 V DC, 10 Inches PCT-Display, 1024x600 pixels, 1xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xSD card slot

Part no.	**XV-303-10-B00-A00-1C**
	179661
EL Number (Norway)	**4501321**

Product name	Eaton XV-303 Touch panel
Part no.	XV-303-10-B00-A00-1C
EAN	7640130098732
Product Length/Depth	269 millimetre
Product height	58 millimetre
Product width	174 millimetre
Product weight	1.165 kilogram
Certifications	IEC/EN 61131-2 UL File No.: E205091 EMC according to 2014/30/EU CUL CE UL DNV GL UL 61010-2-201 EN 50178 Certified by UL for use in Canada
Product Tradename	XV-303
Product Type	Touch panel
Product Sub Type	None
Catalog Notes	12 W for basic device + 2.5 W for USB module Heat dissipation with power consumption for 24 V License certificates for onboard interfaces not required Optionally with SD card -> article no. 181638 PLC license inclusive
Enclosure material	Insulated material
Features	USB Host USB device RS232 Target and web visualization RS485 Ethernet interface CAN Fanless CPU and system cooling, natural convection-based passive cooling Portrait format Slot for SD card Operating System Windows Embedded Compact 7 pro Integrated Runtime visualization software license
Fitted with:	1 x USB host 2.0 (built-in interface) 1 x RS485 (built-in interface) 1 x RS232 (built-in interface) Printer output Color display Message system (incl. buffer and confirmation) Recipes 1 x CANopen®/easyNet (built-in interfaces) Message indication 1 x USB device (built-in interface) SW interfaces 1 x Ethernet 10/100 Mbps (built-in interfaces)
Functions	Additional software components, loadable Process value representation (output) possible Process default value (input) possible
Battery runtime	Back-up of real-time clock: BR 2330, non-replaceable (soldered)
Degree of protection	IP20, rear (according to EN 60529-1) NEMA 12 NEMA 4X
Degree of protection (front side)	IP65 NEMA 12
Fuse type	Built-in fuse (not accessible)
Lifespan	50,000 h (Service life of back-lighting)

Model		Plastic enclosure and glass panel in plastic frame
Mounting method		Flush mounting Flush mounting - Inclination from vertical: ±45° (if using natural convection) Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18")
Potential isolation		Power supply: no
Protection against polarity reversal		Yes, for supply voltage (Siemens MPI optional)
Product category		HMI-PLC (integrated SPS function)
RoHs conformity		Yes
Software		GALILEO, Visualisation software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS, Visualisation software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering
Type		Control panel with PLC
Voltage type		DC
Shock resistance		15 g, 11 ms, Mechanical
Vibration resistance		5 - 9 Hz, ± 3.5 mm 9 - 60 Hz, ± 0.15 mm 60 - 150 Hz, ± 2 g
Air pressure		795 - 1080 hPa (operation)
Ambient operating temperature - min		0 °C
Ambient operating temperature - max		50 °C
Ambient storage temperature - min		-20 °C
Ambient storage temperature - max		60 °C
Climatic proofing		Damp heat, constant, to IEC 60068-2-3 Dry heat to IEC 60068-2-2 Cold to EN 60068-2-1
Environmental conditions		Condensation: Non-condensing
Operating temperature - min		0 °C
Operating temperature - max		50 °C
Relative humidity		10 - 95 % (non-condensing)
Emitted interference		According to IEC/EN 61000-6-4
Interference immunity		According to EN 61000-6-2
Voltage dips		≤ 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 V DC)
Permissible voltage		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 %) 35 V DC (for a duration of < 100 ms)
Power consumption		Max. 18 W 18 W typ.
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		19.2 V DC
Supply voltage at DC - max		30 V DC
Interfaces		USB 2.0 host (not galvanically isolated) CAN (not galvanically isolated, 9-pin SUB-D plug, UNC) 10/100 Mbps Ethernet connection RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC) USB 2.0 device (not galvanically isolated)
Number of slots		1 (for SD-Card)
Protocol		TCP/IP EtherNet/IP MODBUS CAN
Display contrast ratio		500:1
Display lighting		LED Dimmable via software

Display size		16:9 222.72 x 125.28 mm
Display type		Color display, TFT, anti-glare TFT Anti-glare tempered glass in plastic bezel
Luminance intensity		400 cd/m²
Number of colors of the display		16777216
Resolution		1024 x 600 px WSVGA
Screen size (diagonal)		10.1 in
Touch technology		Capacitive multitouch Multi-touch touch panel touch sensor Projected Capacitive Touch (PCT)
Backup time		10 years, typ. (time at zero voltage)
Memory		NVRAM: 128kByte Retain SD card, Type: SDSC, SDHC (external memory) Flash: 1 GByte SLC DRAM: 512 MByte RAM
Memory capacity		512,000 kByte
Operating system		Windows Embedded Compact 7 Pro
Processor		ARM Cortex-A9 800 MHz
Equipment heat dissipation, current-dependent Pvid		18 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		0 W
Rated operational current for specified heat dissipation (In)		0 A
Static heat dissipation, non-current-dependent Pvs		18 W
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Please enquire
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of assemblies		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.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility.
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 8.0

Programmable logic controllers PLC (EG000024) / Graphic panel (EC001412)		
Electric engineering, automation, process control engineering / Display and control component / Panel (HMI) / Graphic panel (HMI) (ecl@ss10.0.1-27-33-02-01 [AFX016003])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	19.2 - 30
Voltage type of supply voltage		DC
Number of HW-interfaces industrial Ethernet		1

Number of interfaces PROFINET		0
Number of HW-interfaces RS-232		1
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		1
Number of HW-interfaces serial TTY		0
Number of HW-interfaces USB		2
Number of HW-interfaces parallel		0
Number of HW-interfaces Wireless		0
Number of HW-interfaces other		1
With SW interfaces		Yes
Supporting protocol for TCP/IP		Yes
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		Yes
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for Modbus		Yes
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		Yes
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 Wi-Fi 802.11		No
Radio standard GPRS		No
Radio standard GSM		No
Radio standard UMTS		No
IO link master		No
Type of display		TFT
With colour display		Yes
Number of colours of the display		16,777,216
Number of grey-scales/blue-scales of display		0
Screen diagonal	inch	10.1
Number of pixels, horizontal		1,024
Number of pixels, vertical		600
Useful project memory/user memory	kByte	512,000
With numeric keyboard		No
With alpha numeric keyboard		No
Number of function buttons, programmable		0
Number of buttons with LED		0
Number of system buttons		1
Touch technology		Capacitive multitouch
With message indication		Yes
With message system (incl. buffer and confirmation)		Yes
Process value representation (output) possible		Yes

Process default value (input) possible			Yes
With recipes			Yes
Number of password levels			200
With printer output			Yes
Number of online languages			100
Additional software components, loadable			Yes
Degree of protection (IP), front side			IP65
Degree of protection (NEMA), front side			12
Operating temperature		°C	0 - 50
Rail mounting possible			No
Wall mounting/direct mounting			No
Suitable for safety functions			No
Width of the front		mm	269
Height of the front		mm	174
Built-in depth		mm	50.1