DATASHEET - XV-303-15-C02-A00-1C

User interface with PLC, 24VDC, 15.6-inch PCT widescreen display, 1366x768 pixels, 2xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xProfibus, 1xSD card slot

Powering Business Worldwide

Part no.	**XV-303-15-C02-A00-1C**
	191074
EL Number (Norway)	**4501332**

Product name	Eaton XV-303 Touch panel
Part no.	XV-303-15-C02-A00-1C
EAN	7640130099135
Product Length/Depth	403.7 millimetre
Product height	76.6 millimetre
Product width	254.9 millimetre
Product weight	3.9 kilogram
Certifications	EN 50178 CUL DNV GL EMC according to 2014/30/EU IEC/EN 61131-2
Product Tradename	XV-303
Product Type	Touch panel
Product Sub Type	None
Catalog Notes	19.1 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	Aluminum (die-cast, glass panel) Insulated material
Features	Ethernet interface CAN RS485 Portrait format USB device RS232 USB Host Operating System Windows Embedded Compact 7 pro Target and web visualization Fanless CPU and system cooling, natural convection-based passive cooling Slot for SD card Integrated Runtime visualization software license
Fitted with:	1 x CANopen®/easyNet (built-in interfaces) 1 x RS485 (built-in interface) Message indication Printer output Color display 1 x USB host 2.0 (built-in interface) 2 x Ethernet 10/100 Mbps (built-in interface) Recipes 1 x PROFIBUS/MPI (built-in interface) MPI interface 1 x RS232 (built-in interface) SW interfaces 1 x USB device (built-in interface) Message system (incl. buffer and confirmation)
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 4X NEMA 12
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 - Clearance: Width x Height ≥ 50 mm (1.97"), Depth ≥ 20 mm (0.79") Flush mounting - Inclination from vertical: # ≤ ± 10 ° (if using natural convection) Flush mounting - Mounting plate: min. 1.5 mm (0.06"), max. 4 mm Flush mounting
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, Visualisation software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering
Type	Control panel with PLC, PROFIBUS, and 2nd Ethernet port
Voltage type	DC
Shock resistance	15 g, 11 ms, Mechanical
Vibration resistance	9 - 60 Hz, ± 0.15 mm 5 - 9 Hz, ± 3.5 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	Dry heat to IEC 60068-2-2 Damp heat, constant, to IEC 60068-2-3 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	18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %) 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
Power consumption	16 W typ. Max. 21.6 W
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
Communication interface	PROFIBUS-DP, not galvanically isolated, 9 pole SUB-D socket, UNC
Interfaces	CAN (not galvanically isolated, 9-pin SUB-D plug, UNC) RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC) 10/100 Mbps Ethernet connection RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) USB 2.0 device (not galvanically isolated) USB 2.0 host (not galvanically isolated)
Number of slots	1 (for SD-Card)
Protocol	TCP/IP MODBUS CAN PROFIBUS EtherNet/IP

Display contrast ratio		500:1
Display lighting		Dimmable via software LED
Display size		344.23 x 193.54 mm 16:9
Display type		Color display, TFT, anti-glare TFT Non-reflective tempered glass in aluminum frame
Display viewing angle		85°/85°/80°/80° (left/right/up/down)
Luminance intensity		300 cd/m²
Number of colors of the display		16777216
Resolution		1366 x 768 px WXGA
Screen size (diagonal)		15.6 in
Touch technology		Projected Capacitive Touch (PCT) Capacitive multitouch Multi-touch touch panel touch sensor
Backup time		10 years, typ. (time at zero voltage)
Memory		DRAM: 512 MByte RAM Flash: 1 GByte SLC NVRAM: 128kByte Retain SD card, Type: SDSC, SDHC (external memory)
Memory capacity		512,000 kByte
Operating system		Windows Embedded Compact 7 Pro
Processor		ARM Cortex-A9 800 MHz
Equipment heat dissipation, current-dependent Pvid		0 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		21.6 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		2
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		Yes
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	15.6
Number of pixels, horizontal		1,366
Number of pixels, vertical		768
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	404
Height of the front		mm	255
Built-in depth		mm	75.5

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