

User interface with PLC as SWD coord.,24 VDC,15.6z PCT widesc. display,1366x768 pixels,2xEthernet,1xRS232,1xRS485,1xCAN, 1xSWD,1xSD,VisualDesig



Part no. XV-303-15-CE0-A00-1E
191079
EL Number 4501329
(Norway)

Product name	Eaton XV-303 Touch panel
Part no.	XV-303-15-CE0-A00-1E
EAN	7640130099180
Product Length/Depth	403.7 millimetre
Product height	76.6 millimetre
Product width	254.9 millimetre
Product weight	3.9 kilogram
Certifications	DNV GL EN 50178 CUL IEC/EN 61131-2 EMC according to 2014/30/EU
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	RS232 Target and web visualization Ethernet interface USB Host RS485 CAN Overload proof Operating System Windows Embedded Compact 7 pro USB device Fanless CPU and system cooling, natural convection-based passive cooling Portrait format Slot for SD card Integrated VisualDesigner Runtime visualization software license
Fitted with:	SW interfaces 1 x USB device (built-in interface) Color display 1 x USB host 2.0 (built-in interface) Message system (incl. buffer and confirmation) 1 x CANopen®/easyNet (built-in interfaces) 1 x SmartWire-DT (built-in interface) Message indication Recipes 1 x RS232 (built-in interface) 1 x RS485 (built-in interface) Printer output 2 x Ethernet 10/100 Mbps (built-in interface)
Functions	Process default value (input) possible SmartWire-DT coordination Additional software components, loadable Process value representation (output) 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)	NEMA 12 IP65
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 - Clearance: Width x Height \geq 50 mm (1.97"), Depth \geq 20 mm (0.79") Flush mounting - Inclination from vertical: $\# \leq \pm 10^\circ$ (if using natural convection) Flush mounting - Mounting plate: min. 1.5 mm (0.06"), max. 4 mm
Potential isolation		Between UPOW and 15 V SmartWire-DT supply voltage: no Power supply: no Supply voltage UAUX: no
Protection against polarity reversal		Yes Yes, for supply voltage (Siemens MPI optional)
Product category		SmartWire-DT coordinators
Repetition rate		1 s
Residual ripple		$\leq 5\%$ (input voltage)
RoHS conformity		Yes
Short-circuit protection		No, external fuse FAZ Z3, Supply voltage UAUX Yes, Short-circuit rating, SmartWire-DT supply voltage
Software		Software (Engineering): visualization = Visual Designer VISUAL DESIGNER XSOF-TCODESYS-3, PLC-Programming software, Engineering XSOF-TCODESYS-2, PLC-Programming software, Engineering XSOF-TCODESYS, Visualisation software, Engineering
Terminal capacity		0.25 - 1.5 mm ² , flexible with ferrule 24 - 16 AWG, solid or stranded 0.2 - 1.5 mm ² , solid
Type		Control panel with PLC as a SmartWire-DT coordinator and 2nd Ethernet port
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		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, Bridging voltage dips 5 ms from undervoltage (19.2 V DC) ≤ 10 ms from rated voltage (24 V DC)
Inrush current		12.5 A (for 6 ms)
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. 21.6 W 16 W typ.
Rated control supply voltage		24 V DC (UAUX, -15 %/+20 %) 24 V DC (UPOW, -15 %/+20 %)
Rated operational current (Ie)		0.7 A
Rated operational voltage		24 V DC (power-supply - safety extra low voltage) 14.5 V ($\pm 3\%$ - SmartWire-DT) Typically UAUX -0.2 V (for 24 V DC slaves)
Supply current		3 A, I _{max} , Supply voltage UAUX 0.7 A, I _{max} , SmartWire-DT supply

		If contactors with a total power consumption > 3 A are connected, a power feeder module EU5C-SWD-PF1/2 has to be used, Supply voltage UAux If SmartWire-DT modules with a total power consumption > 0.7 A are connected, a power feeder module EU5C-SWD-PF2 has to be used; SmartWire-DT supply
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
Addressing		Address set automatically
Communication interface		SmartWire-DT master
Connection		SmartWire-DT blade terminal SWD4-8MF2
Connection to SmartWire-DT		Yes
Connection type		Push in terminals, Supply voltage SWD: Plug, 8-pole
Data transfer rate		250 kBit/s, SmartWire-DT 125 kBit/s, SmartWire-DT
Interfaces		USB 2.0 device (not galvanically isolated) RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC) 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)
LED indicator		Status indication of Supply voltage: LED Status indication of SmartWire-DT network: Configurable green or red LED Status indication of SmartWire-DT master: Green and red LEDs
Number of slots		1 (for SD-Card)
Number of SmartWire-DT slaves		99
Protocol		EtherNet/IP CAN TCP/IP MODBUS
Station		SmartWire-DT master, SmartWire-DT network
Display contrast ratio		500:1
Display lighting		Dimmable via software LED
Display size		16:9 344.23 x 193.54 mm
Display type		TFT Color display, TFT, anti-glare Non-reflective tempered glass in aluminum frame
Display viewing angle		85°/85°/80°/80° (left/right/up/down)
Luminance intensity		300 cd/m ²
Number of colors of the display		16777216
Resolution		1366 x 768 px WXGA
Screen size (diagonal)		15.6 in
Touch technology		Capacitive multitouch Projected Capacitive Touch (PCT) Multi-touch touch panel touch sensor
Backup time		10 years, typ. (time at zero voltage)
Memory		SD card, Type: SDSC, SDHC (external memory) NVRAM: 128kByte Retain 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		0 W
Heat dissipation capacity Pdis		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		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	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