DATASHEET - XV-303-15-CE0-A00-1C

User interface with PLC as an SWD coordinator, 24VDC, 15.6-inch PCT widescreen display,1366x768,2xEthernet,1xRS232,1xRS485,1xCAN,1xSWD,1xSD card slot

Part no.	**XV-303-15-CE0-A00-1C**
	191075
EL Number (Norway)	**4501326**

Product name	Eaton XV-303 Touch panel
Part no.	XV-303-15-CE0-A00-1C
EAN	7640130099142
Product Length/Depth	403.7 millimetre
Product height	76.6 millimetre
Product width	254.9 millimetre
Product weight	3.9 kilogram
Certifications	DNV GL CUL EMC according to 2014/30/EU EN 50178 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	Target and web visualization Operating System Windows Embedded Compact 7 pro Portrait format RS232 Slot for SD card CAN Fanless CPU and system cooling, natural convection-based passive cooling RS485 Integrated Runtime visualization software license Ethernet interface USB device USB Host Overload proof
Fitted with:	1 x RS232 (built-in interface) 1 x USB device (built-in interface) Color display 1 x USB host 2.0 (built-in interface) Message system (incl. buffer and confirmation) Message indication Printer output SW interfaces 1 x CANopen®/easyNet (built-in interfaces) 1 x SmartWire-DT (built-in interface) 1 x RS485 (built-in interface) Recipes 2 x Ethernet 10/100 Mbps (built-in interface)
Functions	Process value representation (output) possible Process default value (input) possible Additional software components, loadable SmartWire-DT coordination
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 - Mounting plate: min. 1.5 mm (0.06"), max. 4 mm Flush mounting - Clearance: Width x Height ≥ 50 mm (1.97"), Depth ≥ 20 mm (0.79") Flush mounting Flush mounting - Inclination from vertical: # ≤ ± 10 ° (if using natural convection)
Potential isolation	Power supply: no Between UPow and 15 V SmartWire-DT supply voltage: no Supply voltage UAUX: no
Protection against polarity reversal	Yes Yes, for supply voltage (Siemens MPI optional)
Product category	HMI-PLC (integrated SPS function)
Repetition rate	1 s
Residual ripple	≤ 5 % (input voltage)
RoHs conformity	Yes
Short-circuit protection	Yes, Short-circuit rating, SmartWire-DT supply voltage No, external fuse FAZ Z3, Supply voltage UAux
Software	XSOFT-CODESYS, Visualisation software, Engineering GALILEO, Visualisation software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering
Terminal capacity	0.2 - 1.5 mm^2, solid 24 - 16 AWG, solid or stranded 0.25 - 1.5 mm^2, flexible with ferrule
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 60 - 150 Hz, ± 2 g 9 - 60 Hz, ± 0.15 mm
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) ≤ 10 ms, Bridging voltage dips 5 ms from undervoltage (19.2 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 (UPOW, -15 %/+20 %) 24 V DC (UAUX, -15 %/+20 %)
Rated operational current (Ie)	0.7 A
Rated operational voltage	24 V DC (power-supply - safety extra low voltage) 14.5 V (± 3 % - SmartWire-DT) Typically UAUX -0.2 V (for 24 V DC slaves)
Supply current	3 A, Imax, 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

	0.7 A, Imax, 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
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	SWD: Plug, 8-pole Push in terminals, Supply voltage
Data transfer rate	125 kBit/s, SmartWire-DT 250 kBit/s, SmartWire-DT
Interfaces	USB 2.0 device (not galvanically isolated) CAN (not galvanically isolated, 9-pin SUB-D plug, UNC) RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) USB 2.0 host (not galvanically isolated) 10/100 Mbps Ethernet connection RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC)
LED indicator	Status indication of SmartWire-DT master: Green and red LEDs Status indication of Supply voltage: LED Status indication of SmartWire-DT network: Configurable green or red LED
Number of slots	1 (for SD-Card)
Number of SmartWire-DT slaves	99
Protocol	CAN MODBUS TCP/IP EtherNet/IP
Station	SmartWire-DT master, SmartWire-DT network
Display contrast ratio	500:1
Display lighting	LED Dimmable via software
Display size	16:9 344.23 x 193.54 mm
Display type	Color display, TFT, anti-glare Non-reflective tempered glass in aluminum frame TFT
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	Multi-touch touch panel touch sensor Projected Capacitive Touch (PCT) Capacitive multitouch
Backup time	10 years, typ. (time at zero voltage)
Memory	SD card, Type: SDSC, SDHC (external memory) NVRAM: 128kByte Retain DRAM: 512 MByte RAM Flash: 1 GByte SLC
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			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

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