

Eaton 179656

Eaton XV-303 Control panel with PLC as SWD coordinator, 24 VDC, 7 Inches PCT-Display, 1024x600 pixels, 1xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xSWD,1xSD card slot

PRODUCT NAME	Eaton XV-303 Touch panel
CATALOG NUMBER	179656
PRODUCT LENGTH/DEPTH	196 mm
PRODUCT HEIGHT	51 mm
PRODUCT WIDTH	135 mm
PRODUCT WEIGHT	0.84 kg
CERTIFICATIONS	EN 50178 UL 61010-2-201 CE DNV GL IEC/EN 61131-2 CUL EMC according to 2014/30/EU UL UL File No.: E205091 Certified by UL for use in Canada

TYPE	Control panel with PLC as a SmartWire-DT coordinator and 2nd Ethernet port
FEATURES	USB device RS232 Slot for SD card Target and web visualization Integrated Runtime visualization software license Fanless CPU and system cooling, natural convection-based passive cooling USB Host Overload proof RS485 Operating System Windows Embedded Compact 7 pro Portrait format Ethernet interface CAN
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.
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	Meets the product standard's requirements.

eaton-modular-plc-xv-touch-panel-dimensions-005.eps
eaton-electronics-dimensions-xv-touch-panel-dimensions-002.eps
eaton-electronics-dimensions-xv-touch-panel-dimensions.eps
eaton-operator-panels-xv-touch-panel-dimensions-004.eps
eaton-operator-panels-hmi-plc-xv-touch-panel-3d-drawing-002.eps
eaton-general-xv-touch-panel-symbol.eps

ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	
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.
FITTED WITH:	1 x USB device (built-in interface) 1 x CANopen®/easyNet (built-in interfaces) 1 x USB host 2.0 (built-in interface) 2 x Ethernet 10/100 Mbps (built-in interface) 1 x RS485 (built-in interface) 1 x SmartWire-DT (built-in interface) SW interfaces

	Message indication Message system (incl. buffer and confirmation) Recipes Printer output 1 x RS232 (built-in interface) Color display
FUSE TYPE	Built-in fuse (not accessible)
ADDRESSING	Address set automatically
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-3 Dry heat to IEC 60068-2-2 Cold to EN 60068-2-1
CONNECTION TO SMARTWIRE-DT	Yes
ENCLOSURE MATERIAL	Insulated material
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	0 VAC
SUPPLY VOLTAGE AT AC, 50 HZ - MIN	0 VAC
SUPPLY VOLTAGE AT AC, 60 HZ - MAX	0 VAC
SUPPLY VOLTAGE AT AC, 60 HZ - MIN	0 VAC
SUPPLY VOLTAGE AT DC - MAX	30 VDC
SUPPLY VOLTAGE AT DC - MIN	19.2 VDC
WIDTH OF THE FRONT	196 mm
PRODUCT CATEGORY	SmartWire-DT coordinators
RESOLUTION	<ul style="list-style-type: none"> • 1024 x 600 px • WSVGA
AIR PRESSURE	795 - 1080 hPa (operation)
DISPLAY SIZE	153.6 x 90.0 mm 16:9
ENVIRONMENTAL CONDITIONS	Condensation: Non- condensing
BACKUP TIME	10 years, typ. (time at zero voltage)
MEMORY CAPACITY	512,000 kByte
AMBIENT OPERATING TEMPERATURE - MAX	50 °C
AMBIENT OPERATING TEMPERATURE - MIN	0 °C

AMBIENT STORAGE TEMPERATURE - MAX	60 °C
AMBIENT STORAGE TEMPERATURE - MIN	-20 °C
BUILT-IN DEPTH	43.1 mm
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	14.4 W
FRONT HEIGHT	135 mm
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0 W
NUMBER OF BUTTONS (PROGRAMMABLE FUNCTION)	0
NUMBER OF BUTTONS WITH LED	0
NUMBER OF GREY-SCALES/BLUE-SCALES OF DISPLAY	0
NUMBER OF HW-INTERFACES (INDUSTRIAL ETHERNET)	2
NUMBER OF HW-INTERFACES (OTHER)	2
BATTERY RUNTIME	Back-up of real-time clock: BR 2330, non-replaceable (soldered)
VOLTAGE TYPE	DC
CONNECTION	SmartWire-DT blade terminal SWD4-8MF2
OPERATING SYSTEM	Windows Embedded Compact 7 Pro
COMMUNICATION INTERFACE	SmartWire-DT master
SOFTWARE	XSOFT-CODESYS, Visualization software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering GALILEO, Visualization software, Engineering
EMITTED INTERFERENCE	According to IEC/EN

	61000-6-4
MOUNTING METHOD	Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18") Flush mounting - Inclination from vertical: ±45° (if using natural convection) Flush mounting
DISPLAY CONTRAST RATIO	850:1
NUMBER OF SLOTS	1 (for SD-Card)
DISPLAY LIGHTING	LED Dimmable via software
INTERFERENCE IMMUNITY	According to EN 61000-6-2
DISPLAY TYPE	Anti-glare tempered glass in plastic bezel TFT Color display, TFT, anti- glare
PROTECTION AGAINST POLARITY REVERSAL	Yes, for supply voltage (Siemens MPI optional) Yes
RELATIVE HUMIDITY	10 - 95 % (non- condensing)
LIFESPAN	50,000 h (Service life of back-lighting)
RESIDUAL RIPPLE	≤ 5 % (input voltage)
CONNECTION TYPE	Push in terminals, Supply voltage SWD: Plug, 8-pole
RATED CONTROL SUPPLY VOLTAGE	24 V DC (UAUX, -15 %/+20 %) 24 V DC (UPOW, -15 %/+20 %)
INRUSH CURRENT	12.5 A (for 6 ms)
DATA TRANSFER RATE	125 kBit/s, SmartWire-DT 250 kBit/s, SmartWire-DT
DEGREE OF PROTECTION	IP20, rear (according to EN 60529-1) NEMA 12 NEMA 4X
LUMINANCE INTENSITY	400 cd/m ²
DEGREE OF PROTECTION (FRONT SIDE)	NEMA 12 IP65
NUMBER OF COLORS OF THE DISPLAY	16777216
STATION	SmartWire-DT master,

	SmartWire-DT network
VIBRATION RESISTANCE	60 - 150 Hz, ± 2 g 5 - 9 Hz, ± 3.5 mm 9 - 60 Hz, ± 0.15 mm
PROCESSOR	ARM Cortex-A9 800 MHz
ROHS CONFORMITY	Yes
SUPPLY CURRENT	0.7 A, I _{max} , SmartWire-DT supply 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 3 A, I _{max} , Supply voltage U _{Aux} 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 U _{Aux}
MEMORY	DRAM: 512 MByte RAM Flash: 1 GByte SLC SD card, Type: SDSC, SDHC (external memory) NVRAM: 128kByte Retain
FUNCTIONS	Process value representation (output) possible Process default value (input) possible SmartWire-DT coordination Additional software components, loadable
TOUCH TECHNOLOGY	Projected Capacitive Touch (PCT) Capacitive multitouch Multi-touch touch panel touch sensor
MODEL	Plastic enclosure and glass panel in plastic frame
INTERFACES	10/100 Mbps Ethernet connection 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) RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC) USB 2.0 host (not galvanically isolated)
LED INDICATOR	Status indication of SmartWire-DT network: Configurable green or red LED Status indication of SmartWire-DT master: Green and red LEDs Status indication of Supply voltage: LED
VOLTAGE DIPS	5 ms from undervoltage (19.2 V DC) ≤ 10 ms, Bridging voltage dips ≤ 10 ms from rated voltage (24 V DC)
NUMBER OF HW-INTERFACES (PARALLEL)	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 (WIRELESS)	0
NUMBER OF INTERFACES (PROFINET)	0
NUMBER OF ONLINE/RUNTIME LANGUAGES	100
NUMBER OF PASSWORD LEVELS	200
NUMBER OF PIXELS (HORIZONTAL)	1024
NUMBER OF PIXELS (VERTICAL)	600
NUMBER OF SMARTWIRE-DT SLAVES	99
NUMBER OF SYSTEM BUTTONS	1

OPERATING TEMPERATURE - MAX	50 °C
OPERATING TEMPERATURE - MIN	0 °C
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0 A
REPETITION RATE	1 s
SCREEN SIZE (DIAGONAL)	7 in
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	14.4 W
PERMISSIBLE VOLTAGE	<p>35 V DC (for a duration of < 100 ms)</p> <p>18.0 - 31.2 V DC, absolute with ripple</p> <p>18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %)</p> <p>19.2 - 30 V DC, effective (rated operating voltage - 20 %/+25 %)</p>
POTENTIAL ISOLATION	<p>Supply voltage UAUX: no</p> <p>Between UPow and 15 V SmartWire-DT supply voltage: no</p> <p>Power supply: no</p>
POWER CONSUMPTION	<p>14 W typ.</p> <p>Max. 14.4 W</p> <p>11.9 W</p>
PROTOCOL	<p>TCP/IP</p> <p>Other bus systems</p> <p>EtherNet/IP</p> <p>CAN</p> <p>MODBUS</p> <p>EtherCAT</p>
RATED OPERATIONAL CURRENT (IE)	0.7 A
RATED OPERATIONAL VOLTAGE	<p>Typically UAUX -0.2 V (for 24 V DC slaves)</p> <p>14.5 V (± 3 % - SmartWire-DT)</p> <p>24 V DC (power-supply - safety extra low voltage)</p>
SHORT-CIRCUIT PROTECTION	<p>No, external fuse FAZ Z3,</p> <p>Supply voltage UAux</p> <p>Yes, Short-circuit rating, SmartWire-DT supply voltage</p>
SHOCK RESISTANCE	15 g, 11 ms, Mechanical

TERMINAL CAPACITY	0.25 - 1.5 mm ² , flexible with ferrule
	24 - 16 AWG, solid or stranded
	0.2 - 1.5 mm ² , solid

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

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