Specifications

Photo is representative

Eaton EP-401363

Eaton Touch panel XV-303, 24 V DC, 7 Inch, 1 x Ethernet, 1 x RS-232, 1 x RS-485, 1 x CAN, Linux, Capacitive multi touch, PLC

General specifications	
PRODUCT NAME	Eaton XV-303 Touch panel
CATALOG NUMBER	EP-401363
MODEL CODE	XV-303-70-B00-A00-2C
EAN	7640130100176
PRODUCT LENGTH/DEPTH	196 mm
PRODUCT HEIGHT	51 mm
PRODUCT WIDTH	135 mm
PRODUCT WEIGHT	0.78 kg
CERTIFICATIONS	CE Certified by UL for use in Canada UL UL File No.: E205091 CUL UL 61010-2-201 IEC/EN 61000-6-2 IEC/EN 61000-6-4 DNV DNV TAA00000NC

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Features & Functions

ENCLOSURE MATERIAL	Insulated material
FITTED WITH:	1 x USB host 2.0 (built-in interface) Recipes 1 x Ethernet 10/100 Mbps (built-in interfaces) Message indication Message system (incl. buffer and confirmation) Printer output SW interfaces 1 x RS232 (built-in interface) Color display 1 x RS485 (built-in interface) 1 x CAN (built-in interfaces)
FUNCTIONS	Process value representation (output) possible Process default value (input) possible Additional software components, loadable

General

BATTERY RUNTIME	Back-up of real-time clock: BR 2330, non-replaceable (soldered)
DEGREE OF PROTECTION	NEMA 4X NEMA 12 IP20, rear (according to EN 60529-1)
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 - Inclination from vertical: ±45° (if using natural convection) Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18") Flush mounting
POTENTIAL ISOLATION	Power supply: no
PROTECTION AGAINST POLARITY REVERSAL	Yes
PRODUCT CATEGORY	XV-300
ROHS CONFORMITY	Yes
SOFTWARE	GALILEO, Visualization software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-3, Visualization software, Engineering
TYPE	Control panel with PLC
VOLTAGE TYPE	DC

Ambient conditions, mechanical

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

Climatic environmental conditions

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 Cold to EN 60068-2-1 Damp heat, constant, to IEC 60068-2-3
ENVIRONMENTAL CONDITIONS	Condensation: Non-condensing

OPERATING TEMPERATURE - MIN	0 °C
OPERATING TEMPERATURE - MAX	50 °C
RELATIVE HUMIDITY	10 - 95 % (non-condensing)

Electro magnetic compatibility

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)

Electrical rating

PERMISSIBLE VOLTAGE	18.0 - 31.2 V DC, absolute with ripple 35 V DC (for a duration of < 100 ms) 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %) 18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %)
POWER CONSUMPTION	11.9 W Max. 14.4 W 14 W typ.
RATED OPERATIONAL VOLTAGE	24 V DC (power-supply - safety extra low voltage)
SUPPLY VOLTAGE AT AC, 50 HZ - MIN	0 VAC
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	0 VAC
SUPPLY VOLTAGE AT DC - MIN	19.2 VDC
SUPPLY VOLTAGE AT DC - MAX	30 VDC

Communication

INTERFACES	10/100 Mbps Ethernet connection RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) CAN (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)
NUMBER OF SLOTS	1 (for SD-Card)
PROTOCOL	EtherCAT EtherNet/IP CAN MODBUS TCP/IP

Display

DISPLAY CONTRAST RATIO	850:1
DISPLAY LIGHTING	LED Dimmable via software
DISPLAY SIZE	153.6 x 90.0 mm 16:9
DISPLAY TYPE	Anti-glare tempered glass in plastic bezel Color display, TFT, anti-glare TFT
LUMINANCE INTENSITY	400 cd/m²
NUMBER OF COLORS OF THE DISPLAY	16777216
RESOLUTION	• 1024 x 600 px • WSVGA
SCREEN SIZE (DIAGONAL)	7 in
TOUCH TECHNOLOGY	Capacitive multitouch Multi-touch touch panel touch sensor

	Projected Capacitive Touch (PCT)

System

BACKUP TIME	10 years, typ. (time at zero voltage)
MEMORY	DRAM: 512 MByte RAM NVRAM: 128kByte Retain Flash: 1 GByte SLC SD card, Type: SDSC, SDHC (external memory)
MEMORY CAPACITY	512,000 kByte
OPERATING SYSTEM	Linux
PROCESSOR	ARM Cortex-A9 800 MHz

Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	14.4 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	14.4 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.

Resources

BROCHURES	eaton-xv-303-xv313-hmi-plc-brochure-br050003-en-us
CATALOGUES	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf eaton-hmi-plc-touch-panel-xv-363-flyer-fl048001en-en-us.pdf
DECLARATIONS OF CONFORMITY	DA-DC-00005047.pdf DA-DC-00005053.pdf
INSTALLATION INSTRUCTIONS	eaton-hmi-xv-303-il048022zu.pdf
MANUALS AND USER GUIDES	eaton-hmi-xv300-multi-touchdisplay-manual-mn048031en-us.pdf eaton-systemdescription-with-embedded-linux-mn050017en-us.pdf
MCAD MODEL	eaton-xv_303_70_b00_a00_xc-drawing.dwg eaton-cadenas-front_view-179649_front.pra eaton-cadenas-side_view-179649_side.pra eaton-cadenas-top_view-179649_top.pra

	eaton-xv_303_70_b00_a00_xc-3d-model.stp eaton-cadenas-path-panels-xv_300-179649.3db
MULTIMEDIA	System solutions based on EtherCAT
PRODUCT NOTIFICATIONS	eaton-xv303-xv313-product-cybersecurity-guideline-mz048009-en-us.pdf eaton-xv303-xv313-end-user-license-agreement-mz048008-en-us.pdf

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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