Specifications



Photo is representative



Eaton EP-401373

Eaton Touch panel XV-313, 24 V DC, 10.1 Inch, 1 x Ethernet, 1 x RS-232, 1 x RS-485, 1 x CAN, Linux, Capacitive multi touch, HMI-PLC (integrated SPS function)

General specifications	8
PRODUCT NAME	Eaton XV-313 Touch panel
CATALOG NUMBER	EP-401373
MODEL CODE	XV-313-10-B00-A00-2C
EAN	7640130100275
PRODUCT LENGTH/DEPTH	282 mm
PRODUCT HEIGHT	55.7 mm
PRODUCT WIDTH	190 mm
PRODUCT WEIGHT	1.21 kg
CERTIFICATIONS	UL UL 61010-2-201 UL File No.: E205091 CUL CE Certified by UL for use in Canada IEC/EN 61000-6-2 IEC/EN 61000-6-4 DNV DNV TAA00000NC



Features & Functions	
ENCLOSURE MATERIAL	Insulated material
FITTED WITH:	1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x RS232 (built-in interface) Printer output SW interfaces Color display Recipes 1 x USB host 2.0 (built-in interface) 1 x RS485 (built-in interface) Message indication Message system (incl. buffer and confirmation) 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	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 backlighting)
MODEL	Plastic enclosure and glass panel in aluminum mounting frame
MOUNTING METHOD	Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18") Flush mounting - Inclination from vertical: ±45° (if using natural convection) Rear 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
ТҮРЕ	Control panel with PLC for rear mounting
VOLTAGE TYPE	DC

Ambient conditions, mechanical	
SHOCK RESISTANCE	15 g, 11 ms, Mechanical
VIBRATION RESISTANCE	60 - 150 Hz, ± 2 g 9 - 60 Hz, ± 0.15 mm 5 - 9 Hz, ± 3.5 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	5 ms from undervoltage (19.2 V DC) ≤ 10 ms from rated voltage (24 V DC)

Electrical rating	
PERMISSIBLE VOLTAGE	19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %) 35 V DC (for a duration of < 100 ms) 18.0 - 31.2 V DC, absolute with ripple 18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %)
POWER CONSUMPTION	Max. 18 W 18 W typ. 15.5 W
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	USB 2.0 host (not galvanically isolated) 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) RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC)
NUMBER OF SLOTS	1 (for SD-Card)
PROTOCOL	EtherNet/IP TCP/IP CAN MODBUS EtherCAT

Display	
DISPLAY CONTRAST RATIO	500:1
DISPLAY LIGHTING	LED Dimmable via software
DISPLAY SIZE	16:9 222.72 x 125.28 mm
DISPLAY TYPE	Color display, TFT, anti-glare TFT Anti-glare tempered glass in plastic bezel
LUMINANCE INTENSITY	400 cd/m²
NUMBER OF COLORS OF THE DISPLAY	16777216
RESOLUTION	1024 x 600 pxWSVGA
SCREEN SIZE (DIAGONAL)	10.1 in

TOUCH TECHNOLOGY	Multi-touch touch panel touch sensor Capacitive multitouch Projected Capacitive Touch
	(PCT)

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

Design verification	
EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID	18 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	18 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.

Is the panel builder's responsibility.
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The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
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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-00005053.pdf
	DA-DC-00005047.pdf
INSTALLATION INSTRUCTIONS	eaton-hmi-xv-313- il048023zu.pdf
MANUALS AND USER GUIDES	eaton-systemdescription-with- embedded-linux-mn050017en- us.pdf
	eaton-hmi-xv300-multi- touchdisplay-manual- mn048031en-us.pdf
MCAD MODEL	eaton-cadenas-side view- 179672 side.pra
	eaton-xv 313 10 b00 axx xc- 3d-model.stp
	eaton-cadenas-front view- 179672 front.pra

	eaton-cadenas-path-panels- xv 300-179672.3db eaton-cadenas-top view- 179672 top.pra
	eaton-xv 313 10 b00 axx xc-drawing.dwg
MULTIMEDIA	System solutions based on EtherCAT
PRODUCT NOTIFICATIONS	eaton-xv303-xv313-end-user- license-agreement-mz048008- en-us.pdf
	eaton-xv303-xv313-product- cybersecurity-guideline- mz048009-en-us.pdf

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	



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