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Eaton 141823

Eaton XV-102 Touch panel, 24 V DC, 3.5z,
TFTmono, ethernet, RS232, CAN

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PRODUCT NAME	Eaton XV-102 Touch panel
CATALOG NUMBER	141823
PRODUCT LENGTH/DEPTH	136 mm
PRODUCT HEIGHT	30 mm
PRODUCT WIDTH	100 mm
PRODUCT WEIGHT	0.275 kg
CERTIFICATIONS	IEC/EN 61000-6-2 UL File No.: E208621 IEC/EN 61000-6-4 CE Certified by UL for use in Canada CUL508 EN 50178 UL 60950-01 UL Recognized EN 60950 UL Category Control No.: NWGQ2 CSA-C22.2 No. 60950-1 IEC/EN 61131-2 UL 60950 UL report applies to both US and Canada CSA Class No.: NWGQ8 EAC

FEATURES	Portrait format
	UL508, cUL approvals
	Ethernet interface
	USB device
10.10 TEMPERATURE RISE	Slot for SD card
	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 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	Does not apply, since the entire switchgear needs to

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	eaton-electronics-dimensions-xv-touch-panel-dimensions.eps
	eaton-operator-panels-xv-touch-panel-dimensions.eps
	eaton-electronics-dimensions-xv-touch-panel-dimensions-002.eps
	eaton-operator-panels-xv-touch-panel-3d-drawing-005.eps
	eaton-operator-panels-xv-touch-panel-3d-drawing-004.eps

SHOCK	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:	<p>Message system (incl. buffer and confirmation)</p> <p>Numeric keyboard</p> <p>Printer output</p> <p>1 x RS232 (built-in interface)</p> <p>Recipes</p> <p>1 x Ethernet 10/100 Mbps (built-in interfaces)</p> <p>Alpha numeric keyboard</p> <p>Message indication</p> <p>1 x USB device (built-in interface)</p> <p>1 x CANopen®/easyNet (built-in interfaces)</p> <p>SW interfaces</p>
FUSE TYPE	Built-in fuse (not accessible)
ENCLOSURE MATERIAL	Plastic
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	28.8 VDC
SUPPLY VOLTAGE AT DC - MIN	20.4 VDC
WIDTH OF THE FRONT	136 mm
PRODUCT CATEGORY	XV-100
RESOLUTION	<ul style="list-style-type: none"> 320 x 240 px

	• QVGA
AIR PRESSURE	795 - 1080 hPa (operation)
EXPLOSION SAFETY CATEGORY FOR DUST	ATEX dust-ex-protection, II 3D Ex II T70°C IP5x: Zone 22, Category 3D ATEX dust-ex-protection, in relation to CE
DISPLAY SIZE	70 x 53 mm
BACKUP TIME	10 years, typ. (time at zero voltage)
EXPLOSION SAFETY CATEGORY FOR GAS	Explosion protection according to EN 61241-1 Explosion protection according to EN 13463_x Explosion protection according to EN 60079-0
MEMORY CAPACITY	64,000 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	25 mm
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5 W
FRONT HEIGHT	100 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	32
NUMBER OF HW-INTERFACES (INDUSTRIAL ETHERNET)	1
NUMBER OF HW-INTERFACES (OTHER)	0
BATTERY RUNTIME	Back-up of real-time clock:

	CR 2032 (190 mA/h), zero maintenance (soldered)
VOLTAGE TYPE	DC
CONDITIONS OF ACCEPTABILITY	<p>The investigated Pollution Degree is: 2</p> <p>The unit must be supplied via a SELV source.</p> <p>UL/CSA</p> <p>The following end-product enclosures are required:</p> <p>Fire</p> <p>The provided Ethernet Connection is only allowed to connect to inhouse networks.</p>
OPERATING SYSTEM	Windows CE 5.0 (license included)
SOFTWARE	GALILEO/EPAM
MOUNTING METHOD	<p>Flush mounting</p> <p>Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18")</p> <p>Flush mounting - Inclination from vertical: $\pm 45^\circ$ (if using natural convection)</p>
DISPLAY CONTRAST RATIO	300:1
NUMBER OF SLOTS	1 (for SD-Card)
DISPLAY LIGHTING	Dimmable via software LED
DISPLAY TYPE	<p>B/W display, TFT</p> <p>Standard front with standard membrane (fully enclosed)</p> <p>TFT</p>
PROTECTION AGAINST POLARITY REVERSAL	<p>Yes, for supply voltage (Siemens MPI optional)</p> <p>Yes</p>
RELATIVE HUMIDITY	10 - 95 % (non-condensing)
LIFESPAN	40,000 h (Service life of back-lighting)
RATED CONTROL SUPPLY VOLTAGE	24 V DC (UAUX, -20 %/+25 %)
DEGREE OF PROTECTION	<p>IP65</p> <p>IP20, rear</p>
LUMINANCE INTENSITY	250 cd/m ²
DEGREE OF PROTECTION (FRONT SIDE)	<p>IP65</p> <p>NEMA 4X</p>
NUMBER OF COLORS OF THE DISPLAY	32

VIBRATION RESISTANCE	According to IEC/EN 60068-2-6
PROCESSOR	RISC CPU, 32 Bit, 400 MHz
ROHS CONFORMITY	Yes
MEMORY	128 MByte internal NAND-Flash (can be used for data backup) 64 MByte internal DRAM (OS, Program and data memory) SD Memory Card Slot: SDA Specification 1.00 (External)
FUNCTIONS	Process default value (input) possible Process value representation (output) possible Additional software components, loadable HMI
TOUCH TECHNOLOGY	Touch sensor (glass with foil), Resistive touch protective screen Resistive touch
MODEL	Insulating enclosure and front plate
INTERFACES	CAN, not galvanically isolated (SUB-D plug 9 pole, UNC) RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) USB 2.0 device (not galvanically isolated) Ethernet (100Base-TX/10Base-T)
VOLTAGE DIPS	≤ 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 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)	1
NUMBER OF HW-	0

INTERFACES (WIRELESS)	
NUMBER OF INTERFACES (PROFINET)	0
NUMBER OF ONLINE/RUNTIME LANGUAGES	100
NUMBER OF PASSWORD LEVELS	200
NUMBER OF PIXELS (HORIZONTAL)	320
NUMBER OF PIXELS (VERTICAL)	240
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
SCREEN SIZE (DIAGONAL)	3.5 in
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	5 W
PERMISSIBLE VOLTAGE	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 %) 35 V DC (for a duration of < 100 ms)
POTENTIAL ISOLATION	Power supply: no
POWER CONSUMPTION	Max. 5 W 5 W
PROTOCOL	TCP/IP EtherNet/IP Other bus systems CAN MODBUS
RATED OPERATIONAL VOLTAGE	24 V DC (power-supply - safety extra low voltage)
SHOCK RESISTANCE	Mechanical, According to IEC/EN 60068-2-27

