

Specifications

Eaton 140018

Eaton XV-102 Touch panel, 24 V DC, 3.5z, TFTcolor, ethernet, PLC



Photo is representative



General specifications

PRODUCT NAME	Eaton XV-102 Touch panel
CATALOG NUMBER	140018
MODEL CODE	XV-102-B0-35TQR-10-PLC
EAN	7640130095656
PRODUCT LENGTH/DEPTH	136 mm
PRODUCT HEIGHT	30 mm
PRODUCT WIDTH	100 mm
PRODUCT WEIGHT	0.245 kg

CERTIFICATIONS

CSA-C22.2 No. 60950-1
UL Category Control No.:
NWGQ2
UL 60950-01
EN 50178
UL 60950
Certified by UL for use in
Canada
DNV GL
UL File No.: E208621
IEC/EN 61000-6-2
IEC/EN 61131-2
UL report applies to both
US and Canada
CSA Class No.: NWGQ8
EN 60950
IEC/EN 61000-6-4
UL Recognized
CUL508
CE
EAC

Product specifications

FEATURES	Portrait format Slot for SD card UL508, cUL approvals USB device Fanless CPU and system cooling, natural convection-based passive cooling Ethernet interface
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 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.

Resources

DRAWINGS	eaton-electronics-dimensions-xv-touch-panel-dimensions.eps eaton-electronics-dimensions-xv-touch-panel-dimensions-002.eps eaton-operator-panels-xv-touch-panel-3d-drawing-004.eps eaton-general-xv-touch-panel-symbol.eps
ECAD MODEL	DA-CE-ETN.XV-102-B0-35TQR-10-PLC
INSTALLATION INSTRUCTIONS	IL048007ZU
MANUALS AND USER GUIDES	eaton-systemdescription-with-embedded-linux-mn050017en-us.pdf MN04802004Z_EN MN04802091Z_EN MN048008ZU_EN MN04802013Z_EN
MATERIAL SAFETY DATA SHEET (MSDS)	MSDS Panasonic Manganese Dioxide Lithium Battery (Series CR).pdf
MCAD MODEL	eaton-xv-102-35-1-3d-model.stp
TEST REPORT	UN38.3 Panasonic CR2032.pdf

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:	Message system (incl. buffer and confirmation) SW interfaces Color display Printer output 1 x USB device (built-in interface) Message indication Recipes Numeric keyboard Alpha numeric keyboard 1 x Ethernet 10/100 Mbps (built-in interfaces)
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	HMI-PLC (integrated SPS function)

RESOLUTION	• 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)
MEMORY CAPACITY	64,000 kByte
AMBIENT OPERATING TEMPERATURE - MAX	50 °C
AMBIENT OPERATING TEMPERATURE - MIN	0 °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	0
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	The unit must be supplied via a SELV source. The following end-product enclosures are required: Fire UL/CSA The investigated Pollution

	Degree is: 2 The provided Ethernet Connection is only allowed to connect to inhouse networks.
OPERATING SYSTEM	Windows CE 5.0 (license included)
SOFTWARE	GALILEO, Visualization software, Engineering XSOFT-CODESYS-3, Visualization software, Engineering EPAM, Visualization software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-2, Visualization software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering
MOUNTING METHOD	Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18") Flush mounting Flush mounting - Inclination from vertical: ±45° (if using natural convection)
DISPLAY CONTRAST RATIO	300:1
NUMBER OF SLOTS	1 (for SD-Card)
DISPLAY LIGHTING	LED Dimmable via software
DISPLAY TYPE	Standard front with standard membrane (fully enclosed) Color display, TFT TFT
PROTECTION AGAINST POLARITY REVERSAL	Yes Yes, for supply voltage (Siemens MPI optional)
RELATIVE HUMIDITY	10 - 95 % (non-condensing)
LIFESPAN	40,000 h (Service life of back-lighting)
RESIDUAL RIPPLE	≤ 5 % (input voltage)
RATED CONTROL SUPPLY VOLTAGE	24 V DC (UAUX, -20 %/+25 %) 24 V DC (UPOW, -20 %/+25 %)
DEGREE OF PROTECTION	IP20, rear

	IP65
LUMINANCE INTENSITY	250 cd/m ²
DEGREE OF PROTECTION (FRONT SIDE)	NEMA 4X IP65
NUMBER OF COLORS OF THE DISPLAY	65536
VIBRATION RESISTANCE	According to IEC/EN 60068-2-6
PROCESSOR	RISC CPU, 32 Bit, 400 MHz
ROHS CONFORMITY	Yes
MEMORY	SD Memory Card Slot: SDA Specification 1.00 (External) 32 kByte internal NVRAM (retained data) 64 MByte internal DRAM (OS, Program and data memory) 128 MByte internal NAND-Flash (can be used for data backup)
FUNCTIONS	Additional software components, loadable Process default value (input) possible Process value representation (output) possible
TOUCH TECHNOLOGY	Resistive touch Glass with film touch sensor Touch sensor (glass with foil), Resistive touch protective screen
MODEL	Insulating enclosure and front plate
INTERFACES	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)	0
NUMBER OF HW-INTERFACES (RS-422)	0
NUMBER OF HW-INTERFACES (RS-485)	0
NUMBER OF HW-	0

INTERFACES (SERIAL TTY)	
NUMBER OF HW-INTERFACES (USB)	1
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)	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	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 %)
POTENTIAL ISOLATION	Supply voltage UAUX: no Power supply: no
POWER CONSUMPTION	Max. 5 W 5 W
PROTOCOL	TCP/IP MODBUS Other bus systems EtherNet/IP
RATED OPERATIONAL VOLTAGE	24 V DC (power-supply - safety extra low voltage)
SHOCK RESISTANCE	Mechanical, According to IEC/EN 60068-2-27

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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