DATASHEET - XV-152-D0-57TVR-10

Touch panel, 24 V DC, 5.7z, TFTcolor, ethernet, RS232, (PLC)

Part no.	**XV-152-D0-57TVR-10**
	150525
EL Number (Norway)	**4521140**

Product name	Eaton XV-152 Touch panel
Part no.	XV-152-D0-57TVR-10
EAN	7640130097094
Product Length/Depth	212 millimetre
Product height	52.5 millimetre
Product width	156 millimetre
Product weight	1.3 kilogram
Certifications	IEC/EN 61241-1 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) UL File No.: E205091 DNV GL UL508 UL IEC/EN 60950 IEC/EN 61000-6-3 CSA Class No.: none IEC/EN 60079-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) CSA File No.: UL report applies to both US and Canada IEC/EN 61131-2, CE UL 60950 IEC/EN 61241-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) EN 50178 Security: UL Category Control No.: NRAQ ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) CUL508 Certified by UL for use in Canada IEC/EN 61000-6-4 IEC/EN 61131-2 CULus IEC/EN 61000-6-2 UL 508 EN 60950 EAC
Product Tradename	XV-152
Product Type	Touch panel
Product Sub Type	None
Catalog Notes	4-wire Technology 7 W for basic device + 2.5 W for USB module Can be fitted by user with article no. 142581 LIC-PLC-MXP-COMPACT Heat dissipation with power consumption for 24 V License certificates for onboard interfaces not required Optionally with SD card -> article no. 139807
Enclosure material	Metal, anodized
Features	USB device Slot for SD card USB Host Fanless CPU and system cooling, natural convection-based passive cooling Ethernet interface Portrait format UL508, cUL approvals
Fitted with:	Numeric keyboard Alpha numeric keyboard Message indication Printer output SW interfaces 1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x USB host 2.0 (built-in interface) 1 x RS232 (built-in interface) Message system (incl. buffer and confirmation) 1 x USB device (built-in interface) Recipes Color display
Functions	Process value representation (output) possible Process default value (input) possible Additional software components, loadable

Battery runtime	Back-up of real-time clock: CR 2032 (190 mA/h), zero maintenance (soldered)
Current consumption	0.4 A, continuous current, Power Supply, 24 V DC
Degree of protection	IP20 IP20, rear NEMA 4X
Degree of protection (front side)	NEMA 4X IP65
Fuse type	Built-in fuse (not accessible)
Lifespan	40,000 h (Service life of back-lighting)
Model	Metal enclosure and front plate
Mounting method	Flush mounting - Inclination from vertical: ±45° (if using natural convection) Flush mounting Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18")
Product category	HMI-PLC (SPS function, retrofittable)
Residual ripple	≤ 5 % (input voltage)
RoHs conformity	Yes
Short-circuit protection	No, external fuse FAZ Z3, Supply voltage UAux
Software	XSOFT-CODESYS-2, Visualisation software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-3, Visualisation software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering GALILEO, Visualisation software, Engineering EPAM, Visualisation software, Engineering
Voltage type	DC
Shock resistance	Mechanical, According to IEC/EN 60068-2-27
Vibration resistance	According to IEC/EN 60068-2-6
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
Operating temperature - min	0 °C
Operating temperature - max	50 °C
Relative humidity	IEC/EN 50178 10 - 95 % (non-condensing)
Voltage dips	5 ms from undervoltage (19.2 V DC) ≤ 10 ms from rated voltage (24 V DC)
Inrush current	12.5 A (for 6 ms)
Permissible voltage	18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %) 18.0 - 31.2 V DC, absolute with ripple 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %) 35 V DC (for a duration of < 100 ms)
Power consumption	9.5 W total Max. 7 W 2.5 W (USB Slave to USB Host)
Rated control supply voltage	24 V DC (UPOW, -20 %/+25 %) 24 V DC (UAUX, -20 %/+25 %)
Rated operational current (Ie)	0.7 A
Rated operational voltage	24 V DC (power-supply - safety extra low voltage)
Supply current	3 A, Imax, Supply voltage UAux
Supply voltage at AC, 50 Hz - min	0 V AC
Supply voltage at AC, 50 Hz - max	0 V AC
Supply voltage at DC - min	20.4 V DC
Supply voltage at DC - max	28.8 V DC
Interfaces	Ethernet (100Base-TX/10Base-T) USB 2.0 device (not galvanically isolated)
Number of slots	1 (for SD-Card)
Protocol	TCP/IP Other bus systems

	MODBUS EtherNet/IP
Display contrast ratio	300:1
Display lighting	Dimmable via software LED
Display size	115 x 86 mm
Display type	TFT Standard front with standard membrane (fully enclosed) Color display, TFT
Luminance intensity	250 cd/m²
Number of colors of the display	65536
Screen size (diagonal)	5.7 in
Touch technology	Glass with film touch sensor Resistive touch Touch sensor (glass with foil), Resistive touch protective screen
Resolution	640 x 480 px VGA
Explosion safety category for dust	ATEX dust-ex-protection, in relation to CE ATEX dust-ex-protection, II 3D Ex II T70°C IP5x: Zone 22, Category 3D
Potential isolation	Power supply: no UAUX: no
Protection against polarity reversal	Yes Yes, for supply voltage (Siemens MPI optional)
Backup time	10 years, typ. (time at zero voltage)
Memory	NAND-Flash (can be used for data backup): approx. 64 MByte available NVRAM (Retain data): 125 kByte NOR-Flash: 2 MByte 64 MByte internal DRAM (OS, Program and data memory) SD Memory Card Slot: SDA Specification 1.00 (External)
Memory capacity	64,000 kByte
Operating system	Windows CE 5.0 (license included)
Processor	RISC CPU, 32 Bit, 400 MHz
Equipment heat dissipation, current-dependent Pvid	9.5 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	9.5 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.

Technical data ETIM 8.0

Programmable logic controllers PLC (EG000024) / Graphic panel (EC001412)			
Electric engineering, automation, process control engineering / Display and control component / Panel (HMI) / Graphic panel (HMI) (ecl@ss10.0.1-27-33-02-01 [AFX016003])			
Supply voltage AC 50 Hz		V	0 - 0
Supply voltage AC 60 Hz		V	0 - 0
Supply voltage DC		V	20.4 - 28.8
Voltage type of supply voltage			DC
Number of HW-interfaces industrial Ethernet			1
Number of interfaces PROFINET			0
Number of HW-interfaces RS-232			1
Number of HW-interfaces RS-422			0
Number of HW-interfaces RS-485			0
Number of HW-interfaces serial TTY			0
Number of HW-interfaces USB			2
Number of HW-interfaces parallel			0
Number of HW-interfaces Wireless			0
Number of HW-interfaces other			0
With SW interfaces			Yes
Supporting protocol for TCP/IP			Yes
Supporting protocol for PROFIBUS			No
Supporting protocol for CAN			No
Supporting protocol for INTERBUS			No
Supporting protocol for ASI			No
Supporting protocol for KNX			No
Supporting protocol for Modbus			Yes
Supporting protocol for Data-Highway			No
Supporting protocol for DeviceNet			No
Supporting protocol for SUCONET			No
Supporting protocol for LON			No
Supporting protocol for PROFINET IO			No
Supporting protocol for PROFINET CBA			No
Supporting protocol for SERCOS			No
Supporting protocol for Foundation Fieldbus			No
Supporting protocol for EtherNet/IP			Yes
Supporting protocol for AS-Interface Safety at Work			No
Supporting protocol for DeviceNet Safety			No
Supporting protocol for INTERBUS-Safety			No
Supporting protocol for PROFIsafe			No
Supporting protocol for SafetyBUS p			No
Supporting protocol for other bus systems			Yes
Radio standard Bluetooth			No
Radio standard Wi-Fi 802.11			No
Radio standard GPRS			No
Radio standard GSM			No
Radio standard UMTS			No
IO link master			No
Type of display			TFT
With colour display			Yes
Number of colours of the display			65,536
Number of grey-scales/blue-scales of display			0
Screen diagonal		inch	5.7
Number of pixels, horizontal			640

Number of pixels, vertical			480
Useful project memory/user memory		kByte	64,000
With numeric keyboard			Yes
With alpha numeric keyboard			Yes
Number of function buttons, programmable			0
Number of buttons with LED			0
Number of system buttons			1
Touch technology			Resistive touch
With message indication			Yes
With message system (incl. buffer and confirmation)			Yes
Process value representation (output) possible			Yes
Process default value (input) possible			Yes
With recipes			Yes
Number of password levels			200
With printer output			Yes
Number of online languages			100
Additional software components, loadable			Yes
Degree of protection (IP), front side			IP65
Degree of protection (NEMA), front side			4X
Operating temperature		°C	0 - 50
Rail mounting possible			No
Wall mounting/direct mounting			No
Suitable for safety functions			No
Width of the front		mm	212
Height of the front		mm	156
Built-in depth		mm	47

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