



Touch panel, 24 V DC, 10.4z, TFTcolor, ethernet, RS232, RS485, (PLC)

Part no. **XV-152-D4-10TVR-10**
150608
EL Number **4521153**
(Norway)

General specifications	
Product name	Eaton XV-152 Touch panel
Part no.	XV-152-D4-10TVR-10
EAN	7640130097186
Product Length/Depth	345 millimetre
Product height	54 millimetre
Product width	260 millimetre
Product weight	2.95 kilogram
Certifications	IEC/EN 61000-6-3 CSA File No.: UL report applies to both US and Canada UL 508 IEC/EN 61241-1 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61000-6-2 EN 50178 UL508 IEC/EN 61000-6-4 UL 60950 IEC/EN 61241-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) UL File No.: E205091 IEC/EN 61131-2 DNV GL Certified by UL for use in Canada UL Category Control No.: NRAQ EN 60950 CULus IEC/EN 60950 Security: IEC/EN 61131-2, CE ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 60079-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) CUL508 CSA Class No.: none UL
Product Tradename	XV-152
Product Type	Touch panel
Product Sub Type	None
Catalog Notes	12 W for basic device + 2.5 W for USB module 4-wire Technology 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
Features & Functions	
Enclosure material	Metal, anodized
Features	Slot for SD card Fanless CPU and system cooling, natural convection-based passive cooling Overload proof Ethernet interface USB Host USB device Portrait format UL508, cUL approvals
Fitted with:	1 x RS232 (built-in interface) Color display 1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x USB device (built-in interface) Numeric keyboard Alpha numeric keyboard SW interfaces 1 x USB host 2.0 (built-in interface) Message indication 1 x RS485 (built-in interface) Message system (incl. buffer and confirmation) Printer output Recipes
Functions	Process value representation (output) possible Additional software components, loadable Process default value (input) possible

General information	
Battery runtime	Back-up of real-time clock: CR 2032 (190 mA/h), zero maintenance (soldered)
Current consumption	0.6 A, continuous current, Power Supply, 24 V DC
Degree of protection	IP20 IP20, rear NEMA 4X
Degree of protection (front side)	IP65 NEMA 4X
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 Flush mounting - Clearance: Width x Height x Depth \geq 30 mm (1.18") Flush mounting - Inclination from vertical: \pm 45° (if using natural convection)
Product category	HMI-PLC (SPS function, retrofittable)
Repetition rate	1 s
Residual ripple	\leq 5 % (input voltage)
RoHS conformity	Yes
Short-circuit protection	No, external fuse FAZ Z3, Supply voltage UAux Yes, Short-circuit rating, SmartWire-DT supply voltage
Software	EPAM, Visualization software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-3, Visualization software, Engineering XSOFT-CODESYS-2, Visualization software, Engineering GALILEO, Visualization software, Engineering
Terminal capacity	0.25 - 1.5 mm ² , flexible with ferrule 24 - 16 AWG, solid or stranded 0.2 - 1.5 mm ² , solid
Voltage type	DC
Ambient conditions, mechanical	
Shock resistance	Mechanical, According to IEC/EN 60068-2-27
Vibration resistance	According to IEC/EN 60068-2-6
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
Operating temperature - min	0 °C
Operating temperature - max	50 °C
Relative humidity	10 - 95 % (non-condensing) IEC/EN 50178
Electro magnetic compatibility	
Voltage dips	\leq 10 ms, Bridging voltage dips \leq 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 V DC)
Electrical rating	
Inrush current	12.5 A (for 6 ms)
Permissible voltage	35 V DC (for a duration of < 100 ms) 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 %)
Power consumption	Max. 12 W 2.5 W (USB Slave to USB Host) 9.5 W total 12 W
Rated control supply voltage	24 V DC (UAUX, -20 %/+25 %) 24 V DC (UPOW, -20 %/+25 %)
Rated operational current (Ie)	0.7 A
Rated operational voltage	24 V DC (power-supply - safety extra low voltage) 14.5 V (\pm 3 % - SmartWire-DT)
Supply current	0.7 A, I _{max} , SmartWire-DT supply 3 A, I _{max} , 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
Communication		
Addressing		Address set automatically
Connection		SmartWire-DT blade terminal SWD4-8MF2
Connection type		Push in terminals, Supply voltage SWD: Plug, 8-pole
Data transfer rate		250 kBit/s, SmartWire-DT 125 kBit/s, SmartWire-DT
Interfaces		Ethernet (100Base-TX/10Base-T) USB 2.0 device (not galvanically isolated)
LED indicator		Status indication of SmartWire-DT master: Green and red LEDs Status indication of SmartWire-DT network: Configurable green or red LED Status indication of Supply voltage: LED
Number of slots		1 (for SD-Card)
Number of SmartWire-DT slaves		58
Protocol		EtherNet/IP Other bus systems MODBUS TCP/IP
Station		SmartWire-DT master, SmartWire-DT network
Display		
Display contrast ratio		300:1
Display lighting		Dimmable via software LED
Display size		211 x 158 mm
Display type		TFT Color display, TFT Standard front with standard membrane (fully enclosed)
Luminance intensity		250 cd/m ²
Number of colors of the display		65536
Screen size (diagonal)		10.4 in
Touch technology		Touch sensor (glass with foil), Resistive touch protective screen Glass with film touch sensor Resistive touch
Input/Output		
Resolution		640 x 480 px VGA
Safety		
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
Potential isolation		Power supply: no Between UPow and 15 V SmartWire-DT supply voltage: no UAUX: no
Protection against polarity reversal		Yes, for supply voltage (Siemens MPI optional) Yes
System		
Backup time		10 years, typ. (time at zero voltage)
Memory		NVRAM (Retain data): 125 kByte SD Memory Card Slot: SDA Specification 1.00 (External) NAND-Flash (can be used for data backup): approx. 64 MByte available 64 MByte internal DRAM (OS, Program and data memory) NOR-Flash: 2 MByte
Memory capacity		64,000 kByte
Operating system		Windows CE 5.0 (license included)
Processor		RISC CPU, 32 Bit, 400 MHz
Design verification		
Equipment heat dissipation, current-dependent Pvid		14.5 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		14.5 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 9.0

Programmable logic controllers PLC (EG000024) / Graphic panel (EC001412)		
Electric engineering, automation, process control engineering / Display and control component / Panel (HMI) / Graphic panel (HMI) (ecl@ss13-27-33-02-01 [AFX016008])		
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 (supply voltage)		DC
Power consumption	W	12
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		1
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 EtherCAT		No
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 WLAN 802.11		No
Radio standard GPRS		No
Radio standard GSM		No
Radio standard UMTS		No
IO link master		No
Type of display		TFT
Colour display		Yes
Number of colours of the display		65536
Number of grey-scales/blue-scales of display		0
Screen diagonal	inch	10.4
Number of pixels, horizontal		640
Number of pixels, vertical		480
Useful project memory/user memory	kByte	64000
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
Certified for UL hazardous location class I		No
Certified for UL hazardous location class II		No
Certified for UL hazardous location class III		No
Certified for UL hazardous location division 1		No
Certified for UL hazardous location division 2		No
Certified for UL hazardous location group A (acetylene)		No
Certified for UL hazardous location group B (hydrogen)		No
Certified for UL hazardous location group C (ethylene)		No
Certified for UL hazardous location group D (propane)		No
Certified for UL hazardous location group E (metal dusts)		No
Certified for UL hazardous location group F (carbonaceous dusts)		No
Certified for UL hazardous location group G (non-conductive dusts)		No
Operating temperature	°C	0 - 50
Rail mounting possible		No

Wall mounting/direct mounting			No
Suitable for safety functions			No
Width of the front		mm	345
Height of the front		mm	260
Built-in depth		mm	49