



Touch panel, 24 V DC, 5.7z, TFTcolor, ethernet, RS232, RS485, profibus, (PLC)

Part no. XV-152-D8-57TVR-10
150528
EL Number 4521143
(Norway)

General specifications		
Product name		Eaton XV-152 Touch panel
Part no.		XV-152-D8-57TVR-10
EAN		7640130097124
Product Length/Depth		212 millimetre
Product height		52.5 millimetre
Product width		156 millimetre
Product weight		1.3 kilogram
Certifications		CUL508 CSA File No.: UL report applies to both US and Canada UL508 IEC/EN 61131-2 Security: IEC/EN 60950 UL File No.: E205091 IEC/EN 61000-6-4 ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) UL 60950 EN 50178 IEC/EN 61241-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) EN 60950 UL 508 IEC/EN 61000-6-3 IEC/EN 61241-1 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) DNV GL UL IEC/EN 60079-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) Certified by UL for use in Canada CSA Class No.: none UL Category Control No.: NRAQ CULus IEC/EN 61000-6-2 IEC/EN 61131-2, CE 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
Features & Functions		
Enclosure material		Metal, anodized
Features		USB Host USB device Portrait format Ethernet interface Slot for SD card Fanless CPU and system cooling, natural convection-based passive cooling UL508, cUL approvals
Fitted with:		Alpha numeric keyboard 1 x PROFIBUS/MPI (built-in interface) Message indication Message system (incl. buffer and confirmation) 1 x RS232 (built-in interface) 1 x RS485 (built-in interface) Printer output Color display Numeric keyboard SW interfaces 1 x USB device (built-in interface) Recipes 1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x USB host 2.0 (built-in interface)
Functions		Process default value (input) possible Additional software components, loadable

		Process value representation (output) possible
General information		
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)		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 - Clearance: Width x Height x Depth ≥ 30 mm (1.18") Flush mounting Flush mounting - Inclination from vertical: ±45° (if using natural convection)
Product category		HMI-PLC (SPS function, retrofittable)
Repetition rate		1 s
Residual ripple		≤ 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		XSOFT-CODESYS-3, Visualization software, Engineering EPAM, Visualization software, Engineering XSOFT-CODESYS-2, Visualization software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering GALILEO, Visualization software, Engineering
Terminal capacity		0.25 - 1.5 mm ² , flexible with ferrule 0.2 - 1.5 mm ² , solid 24 - 16 AWG, solid or stranded
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		IEC/EN 50178 10 - 95 % (non-condensing)
Electro magnetic compatibility		
Voltage dips		5 ms from undervoltage (19.2 V DC) ≤ 10 ms from rated voltage (24 V DC)
Electrical rating		
Inrush current		12.5 A (for 6 ms)
Permissible voltage		18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %) 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %) 18.0 - 31.2 V DC, absolute with ripple 35 V DC (for a duration of < 100 ms)
Power consumption		Max. 7 W 2.5 W (USB Slave to USB Host) 9.5 W total 7 W
Rated control supply voltage		24 V DC (UPOW, -20 %/+25 %) 24 V DC (UAUX, -20 %/+25 %)
Rated operational voltage		24 V DC (power-supply - safety extra low voltage)
Supply current		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		SWD: Plug, 8-pole Push in terminals, Supply voltage
Data transfer rate		250 kBit/s, SmartWire-DT 125 kBit/s, SmartWire-DT
Interfaces		USB 2.0 device (not galvanically isolated) Ethernet (100Base-TX/10Base-T)
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		99
Protocol		MODBUS Other bus systems TCP/IP EtherNet/IP PROFIBUS
Station		SmartWire-DT master, SmartWire-DT network
Display		
Display contrast ratio		300:1
Display lighting		Dimmable via software LED
Display size		115 x 86 mm
Display type		Color display, TFT Standard front with standard membrane (fully enclosed) TFT
Luminance intensity		250 cd/m ²
Number of colors of the display		65536
Screen size (diagonal)		5.7 in
Touch technology		Touch sensor (glass with foil), Resistive touch protective screen Resistive touch Glass with film touch sensor
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 UAUX: no
Protection against polarity reversal		Yes Yes, for supply voltage (Siemens MPI optional)
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		9.5 W
Heat dissipation capacity Pdis		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 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	7
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		1
With SW interfaces		Yes
Supporting protocol for EtherCAT		No
Supporting protocol for TCP/IP		Yes
Supporting protocol for PROFIBUS		Yes
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	5.7
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	212
Height of the front	mm	156
Built-in depth	mm	47