DATASHEET - XV-152-E8-10TVRC-10

Touch panel, 24 V DC, 10.4z, TFTcolor, ethernet, RS485, profibus, SWDT, PLC

Part no. XV-152-E8-10TVRC-10
166705

EL Number (Norway) 4521139

Product name	Eaton XV-152 Touch panel
Part no.	XV-152-E8-10TVRC-10
EAN	7640130097759
Product Length/Depth	345 millimetre
Product height	54 millimetre
Product width	260 millimetre
Product weight	2.95 kilogram
Certifications	IEC/EN 61241-0 (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 Certified by UL for use in Canada IEC/EN 61000-6-2 IEC/EN 61131-2 UL Category Control No.: NRAQ DNV GL ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) EN 50178 CULus UL 60950 EN 60950 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) UL508 IEC/EN 60079-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61131-2, CE UL 508 IEC/EN 60950 UL CSA Class No.: none UL File No.: E205091 Security: CUL508 IEC/EN 61000-6-4
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 Heat dissipation with power consumption for 24 V License certificates for onboard interfaces not required Optionally with SD card -> article no. 139807 PLC license inclusive
Enclosure material	Metal, anodized
Features	USB device UL508, cUL approvals USB Host Portrait format Ethernet interface Slot for SD card Overload proof Fanless CPU and system cooling, natural convection-based passive cooling Target and web visualization
Fitted with:	1 x RS485 (built-in interface) Printer output Numeric keyboard Recipes 1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x USB host 2.0 (built-in interface) 1 x SmartWire-DT (built-in interface) 1 x PROFIBUS/MPI (built-in interface) SW interfaces Color display Message indication Message system (incl. buffer and confirmation) MPI interface Alpha numeric keyboard 1 x USB device (built-in interface)
Functions	Additional software components, loadable

	Process value representation (output) possible SmartWire-DT coordination Process default value (input) possible
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 ≥ 30 mm (1.18") Flush mounting - Inclination from vertical: ±45° (if using natural convection)
Product category	SmartWire-DT coordinators
Repetition rate	1 s
Residual ripple	≤ 5 % (input voltage)
RoHs conformity	Yes
Short-circuit protection	Yes, Short-circuit rating, SmartWire-DT supply voltage No, external fuse FAZ Z3, Supply voltage UAux
Software	XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-3, Visualisation software, Engineering EPAM, Visualisation software, Engineering GALILEO, Visualisation software, Engineering XSOFT-CODESYS-2, Visualisation software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering
Terminal capacity	0.25 - 1.5 mm^2, 24 - 16 AWG 24 - 16 AWG, solid or stranded 0.2 - 1.5 mm^2, solid
Type	Coordinator for the SmartWire-DT communications system
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	10 - 95 % (non-condensing) IEC/EN 50178
Voltage dips	≤ 10 ms from rated voltage (24 V DC) ≤ 10 ms, Bridging voltage dips 5 ms from undervoltage (19.2 V DC)
Inrush current	12.5 A (for 6 ms)
Permissible voltage	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) 18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %)
Power consumption	2.5 W (USB Slave to USB Host) Max. 12 W 9.5 W total
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 (± 3 % - SmartWire-DT) Typically UAUX -0.2 V (for 24 V DC slaves)

Supply current	If SmartWire-DT modules with a total power consumption > 0.7 A are connected, a power feeder module EU5C-SWD-PF2 has to be used; SmartWire-DT supply 0.7 A, Imax, SmartWire-DT supply 3 A, Imax, Supply voltage UAux If contactors with a total power consumption > 3 A are connected, a power feeder module EU5C-SWD-PF1/2 has to be used, 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
Addressing	Address set automatically
Communication interface	PROFIBUS SmartWire-DT master
Connection	SmartWire-DT blade terminal SWD4-8MF2
Connection to SmartWire-DT	Yes
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) RS485
LED indicator	Status indication of Supply voltage: LED Status indication of SmartWire-DT master: Green and red LEDs Status indication of SmartWire-DT network: Configurable green or red LED
Number of slots	1 (for SD-Card)
Number of SmartWire-DT slaves	99
Protocol	TCP/IP MODBUS Other bus systems PROFIBUS EtherNet/IP
Station	SmartWire-DT master, SmartWire-DT network
Display contrast ratio	300:1
Display lighting	LED Dimmable via software
Display size	211 x 158 mm
Display type	Color display, TFT TFT Standard front with standard membrane (fully enclosed)
Luminance intensity	250 cd/m²
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
Resolution	640 x 480 px VGA
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	UAUX: no Power supply: no Between UPow and 15 V SmartWire-DT supply voltage: no
Protection against polarity reversal	Yes Yes, for supply voltage (Siemens MPI optional)
Backup time	10 years, typ. (time at zero voltage)
Memory	SD Memory Card Slot: SDA Specification 1.00 (External) NOR-Flash: 2 MByte NVRAM (Retain data): 125 kByte 64 MByte internal DRAM (OS, Program and data memory) NAND-Flash (can be used for data backup): approx. 64 MByte available
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			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 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		0
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		2
With SW interfaces		Yes
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 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	10.4
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	345
Height of the front	mm	260
Built-in depth	mm	49

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