DATASHEET - XV-152-E6-84TVRC-10

Touch panel, 24 V DC, 8.4z, TFTcolor, ethernet, RS485, CAN, SWDT, PLC

Powering Business Worldwide

Part no.	**XV-152-E6-84TVRC-10**
	166702
EL Number (Norway)	**4521136**

Product name	Eaton XV-152 Touch panel
Part no.	XV-152-E6-84TVRC-10
EAN	7640130097728
Product Length/Depth	275 millimetre
Product height	52.5 millimetre
Product width	208 millimetre
Product weight	2.15 kilogram
Certifications	UL 508 IEC/EN 61131-2, CE EN 50178 ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61000-6-3 IEC/EN 61000-6-2 IEC/EN 60950 Certified by UL for use in Canada CSA File No.: UL report applies to both US and Canada UL Category Control No.: NRAQ EN 60950 IEC/EN 61000-6-4 DNV GL CUL508 UL508 UL File No.: E205091 CULus IEC/EN 60079-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61241-0 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61241-1 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) Security: CSA Class No.: none UL UL 60950 IEC/EN 61131-2
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	Fanless CPU and system cooling, natural convection-based passive cooling Overload proof USB Host Target and web visualization Portrait format Slot for SD card Ethernet interface USB device UL508, cUL approvals
Fitted with:	Printer output 1 x RS485 (built-in interface) Numeric keyboard Message system (incl. buffer and confirmation) 1 x USB device (built-in interface) 1 x Ethernet 10/100 Mbps (built-in interfaces) 1 x USB host 2.0 (built-in interface) SW interfaces 1 x CANopen®/easyNet (built-in interfaces) Alpha numeric keyboard Message indication Recipes Color display 1 x SmartWire-DT (built-in interface)
Functions	Process default value (input) possible Process value representation (output) possible SmartWire-DT coordination

	Additional software components, loadable
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, rear NEMA 4X IP20
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 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	No, external fuse FAZ Z3, Supply voltage UAux Yes, Short-circuit rating, SmartWire-DT supply voltage
Software	XSOFT-CODESYS-3, PLC-Programming software, Engineering XSOFT-CODESYS-2, Visualisation software, Engineering XSOFT-CODESYS-3, Visualisation software, Engineering EPAM, Visualisation software, Engineering GALILEO, Visualisation software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering
Terminal capacity	0.25 - 1.5 mm^2, 24 - 16 AWG 0.2 - 1.5 mm^2, solid 24 - 16 AWG, solid or stranded
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	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) ≤ 10 ms, Bridging voltage dips
Inrush current	12.5 A (for 6 ms)
Permissible voltage	35 V DC (for a duration of < 100 ms) 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 %)
Power consumption	2.5 W (USB Slave to USB Host) Max. 12 W 9.5 W total
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	Typically UAUX -0.2 V (for 24 V DC slaves) 24 V DC (power-supply - safety extra low voltage) 14.5 V (± 3 % - SmartWire-DT)
Supply current	0.7 A, Imax, SmartWire-DT supply

	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 3 A, Imax, Supply voltage UAux 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
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	SmartWire-DT master
Connection	SmartWire-DT blade terminal SWD4-8MF2
Connection to SmartWire-DT	Yes
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	Ethernet (100Base-TX/10Base-T) easyNet CAN RS485 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	99
Protocol	MODBUS EtherNet/IP CAN TCP/IP Other bus systems
Station	SmartWire-DT master, SmartWire-DT network
Display contrast ratio	300:1
Display lighting	Dimmable via software LED
Display size	170 x 128 mm
Display type	Color display, TFT Standard front with standard membrane (fully enclosed) TFT
Luminance intensity	250 cd/m²
Number of colors of the display	65536
Screen size (diagonal)	8.4 in
Touch technology	Glass with film touch sensor Touch sensor (glass with foil), Resistive touch protective screen 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	Between UPow and 15 V SmartWire-DT supply voltage: no Power supply: no UAUX: no
Protection against polarity reversal	Yes, for supply voltage (Siemens MPI optional) Yes
Backup time	10 years, typ. (time at zero voltage)
Memory	NVRAM (Retain data): 125 kByte 64 MByte internal DRAM (OS, Program and data memory) SD Memory Card Slot: SDA Specification 1.00 (External) NAND-Flash (can be used for data backup): approx. 64 MByte available NOR-Flash: 2 MByte
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		No
Supporting protocol for CAN		Yes
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	8.4
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	275
Height of the front	mm	208
Built-in depth	mm	47

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