DATASHEET - XV-152-D4-84TVR-10

Touch panel, 24 V DC, 8.4z, TFTcolor, ethernet, RS232, RS485, (PLC)

Part no. XV-152-D4-84TVR-10
150602

EL Number (Norway) 4521147

Product name	Eaton XV-152 Touch panel
Part no.	XV-152-D4-84TVR-10
EAN	7640130097148
Product Length/Depth	275 millimetre
Product height	52.5 millimetre
Product width	208 millimetre
Product weight	2.15 kilogram
Certifications	CULus UL Category Control No.: NRAQ UL508 ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) UL UL 60950 EN 50178 EN 60950 UL 508 IEC/EN 61000-6-3 IEC/EN 61131-2 DNV GL IEC/EN 61241-1 (ATEX 94/9/EG: Zone 22, Category 3D (II 3D Ex tc IIIC T70°C IP6x) IEC/EN 61131-2, CE IEC/EN 60950 CSA Class No.: none CUL508 CSA File No.: UL report applies to both US and Canada Certified by UL for use in Canada IEC/EN 61000-6-2 Security: UL File No.: E205091 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 61000-6-4 EAC
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
Enclosure material	Metal, anodized
Features	USB device UL508, cUL approvals USB Host Fanless CPU and system cooling, natural convection-based passive cooling Overload proof Ethernet interface Portrait format Slot for SD card
Fitted with:	1 x Ethernet 10/100 Mbps (built-in interfaces) Recipes Color display 1 x RS232 (built-in interface) 1 x RS485 (built-in interface) Numeric keyboard Alpha numeric keyboard SW interfaces 1 x USB device (built-in interface) 1 x USB host 2.0 (built-in interface) Message system (incl. buffer and confirmation) Printer output Message indication
Functions	Process default value (input) possible Process value representation (output) possible 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 IP20 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 Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18") 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, Visualisation software, Engineering GALILEO, Visualisation software, Engineering XSOFT-CODESYS-2, Visualisation software, Engineering EPAM, Visualisation software, Engineering XSOFT-CODESYS-2, PLC-Programming software, Engineering XSOFT-CODESYS-3, PLC-Programming software, Engineering
Terminal capacity	0.2 - 1.5 mm^2, solid 0.25 - 1.5 mm^2, flexible with ferrule 24 - 16 AWG, solid or stranded
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	≤ 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 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) 18.0 - 31.2 V DC, absolute with ripple 18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %) 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %)
Power consumption	2.5 W (USB Slave to USB Host) 9.5 W total Max. 12 W
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) 14.5 V (± 3 % - SmartWire-DT)
Supply current	3 A, Imax, Supply voltage UAux 0.7 A, Imax, 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
Connection	SmartWire-DT blade terminal SWD4-8MF2
Connection type	SWD: Plug, 8-pole Push in terminals, Supply voltage
Data transfer rate	125 kBit/s, SmartWire-DT 250 kBit/s, SmartWire-DT
Interfaces	Ethernet (100Base-TX/10Base-T) USB 2.0 device (not galvanically isolated)
LED indicator	Status indication of Supply voltage: LED Status indication of SmartWire-DT network: Configurable green or red LED Status indication of SmartWire-DT master: Green and red LEDs
Number of slots	1 (for SD-Card)
Number of SmartWire-DT slaves	58
Protocol	TCP/IP Other bus systems EtherNet/IP MODBUS
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 TFT Standard front with standard membrane (fully enclosed)
Luminance intensity	250 cd/m²
Number of colors of the display	65536
Screen size (diagonal)	8.4 in
Touch technology	Resistive touch Touch sensor (glass with foil), Resistive touch protective screen Glass with film touch sensor
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	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
Backup time	10 years, typ. (time at zero voltage)
Memory	64 MByte internal DRAM (OS, Program and data memory) NAND-Flash (can be used for data backup): approx. 64 MByte available NVRAM (Retain data): 125 kByte SD Memory Card Slot: SDA Specification 1.00 (External) 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			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 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	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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