

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



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

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| 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 |

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| | | 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 \geq 30 mm (1.18") Flush mounting - Inclination from vertical: $\pm 45^\circ$ (if using natural convection) |
| Product category | | SmartWire-DT coordinators |
| 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 | | 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) \leq 10 ms from rated voltage (24 V DC) \leq 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 (\pm 3 % - SmartWire-DT) |
| Supply current | | 0.7 A, I _{max} , SmartWire-DT supply |

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| | | | 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, I _{max} , 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 |
| Supply voltage at AC, 50 Hz - max | | | 0 |
| Supply voltage at DC - min | | | 20.4 |
| Supply voltage at DC - max | | | 28.8 |
| 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/m ² |
| 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 U _{Pow} 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) |

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| Processor | | RISC CPU, 32 Bit, 400 MHz |
| Equipment heat dissipation, current-dependent Pvid | | 14.5 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 | | 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

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| Programmable logic controllers PLC (EG000024) / Graphic panel (EC001412) | | |
| Electric engineering, automation, process control engineering / Display and control component / Panel (HMI) / Graphic panel (HMI) (ecI@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 |

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| 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 |