# DATASHEET - XV-303-10-C00-A00-1B

**Control panel, 24VDC, 10 Inches PCT-Display, 1024x600 pixels, 2xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xSD card slot, PLC function can be fitted by user**

| | |
|---|---|
| **Part no.** | **XV-303-10-C00-A00-1B** |
| | **179660** |
| **EL Number (Norway)** | **4501303** |

| | |
|---|---|
| Product name | Eaton XV-303 Touch panel |
| Part no. | XV-303-10-C00-A00-1B |
| EAN | 7640130098534 |
| Product Length/Depth | 269 millimetre |
| Product height | 58 millimetre |
| Product width | 174 millimetre |
| Product weight | 1.165 kilogram |
| Certifications | UL File No.: E205091<br>IEC/EN 61131-2<br>DNV GL<br>EMC according to 2014/30/EU<br>UL<br>UL 61010-2-201<br>EN 50178<br>CE<br>CUL<br>Certified by UL for use in Canada |
| Product Tradename | XV-303 |
| Product Type | Touch panel |
| Product Sub Type | None |
| Catalog Notes | 12 W for basic device + 2.5 W for USB module<br>Can be fitted by user with article no. 181585 LIC-PLC-A<br>Heat dissipation with power consumption for 24 V<br>License certificates for onboard interfaces not required<br>Optionally with SD card -> article no. 181638 |
| | |
| Enclosure material | Insulated material |
| Features | RS232<br>RS485<br>Operating System Windows Embedded Compact 7 pro<br>Integrated Runtime visualization software license<br>Fanless CPU and system cooling, natural convection-based passive cooling<br>Ethernet interface<br>USB device<br>USB Host<br>Target and web visualization<br>CAN<br>Slot for SD card<br>Portrait format |
| Fitted with: | Message system (incl. buffer and confirmation)<br>Message indication<br>Printer output<br>1 x RS485 (built-in interface)<br>Color display<br>1 x USB host 2.0 (built-in interface)<br>2 x Ethernet 10/100 Mbps (built-in interface)<br>1 x USB device (built-in interface)<br>SW interfaces<br>1 x RS232 (built-in interface)<br>Recipes<br>1 x CANopen®/easyNet (built-in interfaces) |
| Functions | Additional software components, loadable<br>Process default value (input) possible<br>Process value representation (output) possible |
| | |
| Battery runtime | Back-up of real-time clock: BR 2330, non-replaceable (soldered) |
| Degree of protection | NEMA 12<br>NEMA 4X<br>IP20, rear (according to EN 60529-1) |
| Degree of protection (front side) | NEMA 12<br>IP65 |
| Fuse type | Built-in fuse (not accessible) |

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| Lifespan | 50,000 h (Service life of back-lighting) |
| Model | Plastic enclosure and glass panel in plastic frame |
| Mounting method | Flush mounting - Inclination from vertical: ±45° (if using natural convection)<br>Flush mounting - Clearance: Width x Height x Depth ≥ 30 mm (1.18")<br>Flush mounting |
| Potential isolation | Power supply: no |
| Protection against polarity reversal | Yes, for supply voltage (Siemens MPI optional) |
| Product category | HMI-PLC (SPS function, retrofittable) |
| RoHs conformity | Yes |
| Software | XSOFT-CODESYS, Visualisation software, Engineering<br>GALILEO, Visualisation software, Engineering<br>XSOFT-CODESYS-2, PLC-Programming software, Engineering<br>XSOFT-CODESYS-3, PLC-Programming software, Engineering |
| Type | Control panel with 2nd Ethernet port |
| Voltage type | DC |
| | |
| Shock resistance | 15 g, 11 ms, Mechanical |
| Vibration resistance | 5 - 9 Hz, ± 3.5 mm<br>60 - 150 Hz, ± 2 g<br>9 - 60 Hz, ± 0.15 mm |
| | |
| 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 |
| Climatic proofing | Dry heat to IEC 60068-2-2<br>Cold to EN 60068-2-1<br>Damp heat, constant, to IEC 60068-2-3 |
| Environmental conditions | Condensation: Non-condensing |
| Operating temperature - min | 0 °C |
| Operating temperature - max | 50 °C |
| Relative humidity | 10 - 95 % (non-condensing) |
| | |
| Emitted interference | According to IEC/EN 61000-6-4 |
| Interference immunity | According to EN 61000-6-2 |
| Voltage dips | ≤ 10 ms from rated voltage (24 V DC)<br>5 ms from undervoltage (19.2 V DC) |
| | |
| Permissible voltage | 19.2 - 30 V DC, effective (rated operating voltage -20 %/+25 %)<br>18.0 - 31.2 V DC, absolute with ripple<br>35 V DC (for a duration of < 100 ms)<br>18 - 31.2 V DC, battery powered (rated operating voltage -25 %/+30 %) |
| Power consumption | Max. 18 W<br>18 W typ. |
| Rated operational voltage | 24 V DC (power-supply - safety extra low voltage) |
| 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 | 19.2 V DC |
| Supply voltage at DC - max | 30 V DC |
| | |
| Interfaces | USB 2.0 host (not galvanically isolated)<br>USB 2.0 device (not galvanically isolated)<br>RS485 (not galvanically isolated, 9-pin SUB-D plug, UNC)<br>CAN (not galvanically isolated, 9-pin SUB-D plug, UNC)<br>10/100 Mbps Ethernet connection<br>RS232 (not galvanically isolated, 9-pin SUB-D plug, UNC) |
| Number of slots | 1 (for SD-Card) |
| Protocol | EtherNet/IP<br>CAN<br>TCP/IP<br>MODBUS |
| | |
| Display contrast ratio | 500:1 |
| Display lighting | LED |

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|---|---|---|---|
| | | | Dimmable via software |
| Display size | | | 222.72 x 125.28 mm<br>16:9 |
| Display type | | | Color display, TFT, anti-glare<br>TFT<br>Anti-glare tempered glass in plastic bezel |
| Luminance intensity | | | 400 cd/m² |
| Number of colors of the display | | | 16777216 |
| Resolution | | | 1024 x 600 px<br>WSVGA |
| Screen size (diagonal) | | | 10.1 in |
| Touch technology | | | Capacitive multitouch<br>Projected Capacitive Touch (PCT)<br>Multi-touch touch panel touch sensor |
| | | | |
| Backup time | | | 10 years, typ. (time at zero voltage) |
| Memory | | | NVRAM: 128kByte Retain<br>DRAM: 512 MByte RAM<br>SD card, Type: SDSC, SDHC (external memory)<br>Flash: 1 GByte SLC |
| Memory capacity | | | 512,000 kByte |
| Operating system | | | Windows Embedded Compact 7 Pro |
| Processor | | | ARM Cortex-A9 800 MHz |
| | | | |
| Equipment heat dissipation, current-dependent Pvid | | | 18 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 | | | 18 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) (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 | 19.2 - 30 |
| Voltage type of supply voltage | | | DC |

| | | |
|---|---|---|
| Number of HW-interfaces industrial Ethernet | | 2 |
| 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 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 | | No |
| 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 | | 16,777,216 |
| Number of grey-scales/blue-scales of display | | 0 |
| Screen diagonal | inch | 10.1 |
| Number of pixels, horizontal | | 1,024 |
| Number of pixels, vertical | | 600 |
| Useful project memory/user memory | kByte | 512,000 |
| With numeric keyboard | | No |
| With alpha numeric keyboard | | No |
| Number of function buttons, programmable | | 0 |
| Number of buttons with LED | | 0 |
| Number of system buttons | | 1 |
| Touch technology | | Capacitive multitouch |
| 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 | | | 12 |
| Operating temperature | | °C | 0 - 50 |
| Rail mounting possible | | | No |
| Wall mounting/direct mounting | | | No |
| Suitable for safety functions | | | No |
| Width of the front | | mm | 269 |
| Height of the front | | mm | 174 |
| Built-in depth | | mm | 50.1 |


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