DATASHEET - XV-303-10-B00-A00-1C



Control panel with PLC, 24 V DC, 10 Inches PCT-Display, 1024x600 pixels, 1xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xSD card slot



Part no. XV-303-10-B00-A00-1C

Catalog No. 179661

Alternate Catalog XV-303-10-B00-A00-1C

No.

Similar to illustration

Delivery program		
Product range		XV300 10.1"
Product range		XV-303
Function		HMI-PLC (integrated SPS function)
Description		Control panel with PLC
Common features of the model series		Ethernet interface CAN USB device USB Host RS232 RS485 Slot for SD card Operating System Windows Embedded Compact 7 pro Integrated Runtime visualization software license
Display - Type		Color display, TFT, anti-glare
Touch-technology		Capacitive multi-touch technology (PCT)
Number of colours		16777216 (Color depth 24 bit)
Resolution	Pixel	WSVGA 1024 x 600
Portrait format Portrait format		yes
Screen diagonal	Inch	10.1 widescreen
Model		Plastic enclosure and glass panel in plastic frame
Operating system		Windows Embedded Compact 7 Pro
PLC-licence		PLC licence inclusive
License certificates for onboard interfaces		Not required
built-in interfaces		1 x Ethernet 10/100 Mbps 1 x RS232 1 x RS485 1 x CANopen®/easyNet 1 x USB host 2.0 1 x USB device
Front type		Anti-glare tempered glass in plastic bezel
Utilization		Flush mounting
Slots		for SD card: 1
Memory card automation		Optionally with SD card -> article no. 181638
Pluggable communication cards (optional)		no
Touch sensor		Multi-touch touch panel

Technical data

Heat dissipation

Disnlay

Display		
Display - Type		Color display, TFT, anti-glare
Screen diagonal	Inch	10.1 widescreen
Resolution	Pixel	WSVGA 1024 x 600
Visible screen area	mm	222.72 x 125.28
Format		16:9
Number of colours		16777216 (Color depth 24 bit)
Contrast ratio (Normally)		Normally 500:1
Brightness	cd/m ²	Normally 400

18

Service life of back-lighting Operation Technology Touch sensor System Processor Internal memory		h	Normally 50000 Projected Capacitive Touch (PCT) Multi-touch touch panel
Operation Technology Touch sensor System Processor			Projected Capacitive Touch (PCT)
Technology Touch sensor System Processor			
Touch sensor System Processor			Multi-touch touch panel
System Processor			,
Processor			
Internal memory			ARM Cortex-A9 800 MHz
			DRAM: 512 MB RAM
			Flash: 1GB SLC NVRAM: 128kB Retain
External memory			SD card, Type: SDSC, SDHC
Cooling			Fanless CPU and system cooling, natural convection-based passive cooling
Back-up of real-time clock			
Battery (service life)			non-replaceable, BR2330 soldered in
Backup (time at zero voltage)			Normally 10 years
Engineering			
Visualisation software			GALILEO XSOFT-CODESYS
PLC-Programming software			XSOFT-CODESYS-2 XSOFT-CODESYS-3
Target and web visualization			Yes
PLC-licence			PLC licence inclusive
Operating system			Windows Embedded Compact 7 Pro
Interfaces, communication			
built-in interfaces			1 x Ethernet 10/100 Mbps 1 x RS232 1 x RS485 1 x CANopen®/easyNet 1 x USB host 2.0 1 x USB device
USB Host			USB 2.0, not galvanically isolated
USB device			USB 2.0, not galvanically isolated
RS-232			Not galvanically isolated, 9-pin D-sub plug, UNC
RS-485			Not galvanically isolated, 9-pin D-sub plug, UNC
CAN			Not galvanically isolated, 9-pin D-sub plug, UNC
Slots			for SD card: 1
Ethernet			10/100 Mbps
MPI			no
Power supply Nominal voltage			24 V DC SELV (safety extra low voltage)
			· ·
permissible voltage			Effective: 19.2-30.0 V DC (rated operating voltage -20%/+25%) Absolute with ripple: 18,0-31,2 V DC Battery powered: 18,0-31,2 V DC (rated operating voltage -25%/+30%) 35 V DC for a duration of < 100 ms
Voltage dips		ms	≤ 10 ms from rated voltage (24 V DC) 5 ms from undervoltage (19.2 V DC)
Power consumption	P _{max} .	W	18
Power consumption		W	Normally 18
Heat dissipation		W	18
Note on heat dissipation			Heat dissipation with power consumption for 24 V 12 W for basic device + 2.5 W for USB module
Protection against polarity reversal			yes
Type of fuse			Yes (fuse not accessible)
Potential isolation			no
General			
Housing material			Insulated material black
Front type			Anti-glare tempered glass in plastic bezel
Dimensions (W x H x D)		mm	269 x 174 x 58
flush mounted			Clearance: W x H x D ≥ 30 mm (1.18")
Weight		ka	Inclination from vertical: ±45° (if using natural convection) 1.13
Degree of protection (IEC/EN 60529, EN50178, VBG 4)		kg	1.13 IP65 (in the front as per EN 60529-1), IP20 (on rear as per EN 60529-1) NEMA 4X

			NEMA12 (as per NEMA 250-2003)
Approvals			
Approvals			cUL 61010-2-201
shipping classification			DNV GL
			DNV-GL MARITIME
Applied standards and directives			
EMC			2004/108/EEC
Emitted interference			IEC/EN 61000-6-4
Interference immunity			IEC/EN 61000-6-2
Product standards			EN50178/IEC/EN 61131-2
Mechanical shock resistance		g	15g / 11ms
Vibration			59 Hz +- 3.5 mm 960 Hz +- 0.15 mm 60150 Hz ± 2 g
Free fall, packaged		m	IEC/EN 60068-2-31
RoHS			conform
Environmental conditions			
Climatic environmental conditions			
Climatic proofing			Cold to EN 60068-2-1 Dry heat to IEC 60068-2-2 Damp heat as per EN 60068-2-3
Air pressure (operation)		hPa	795 - 1080
Temperature			
Storage / Transport	9	°C	-20 - +60
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	+ 50
Relative humidity			
Condensation			Non-condensing

Design verification as per IEC/EN 61439

Relative humidity

2001gii 1011110441011 40 por 120,211 01 100			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	18
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	50
Degree of Protection			IP65 (in the front as per EN 60529-1), IP20 (on rear as per EN 60529-1) NEMA 4X $$
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$			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 - 95%, non-condensing

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 Insulation properties	
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 7.0

Biechie enjinementing, automation, process control engineering / Display voltage AC 50 Hz	PLC's (EG000024) / Graphic panel (EC001412)				
Supply voltage AC 08 Hz V 0 - 0 Supply voltage BC V 12 - 30 Voltage type of supply voltage C DC Number of Hi/H-interfaces industrial Ethernet I I Number of Hi/H-interfaces RS-322 1 1 Number of Hi/H-interfaces RS-428 2 1 Number of Hi/H-interfaces RS-428 2 2 Number of Hi/H-interfaces RS-428 2 2 Number of Hi/H-interfaces RS-428 2 2 Number of Hi/H-interfaces Use 2 2 Number of Hi/H-interfaces Use 2 2 Number of Hi/H-interfaces Use 2 3 Number of Hi/H-interfaces Use 2 4 Number of Hi/H-interfaces Use 3 4 Number of Hi/H-interfaces Use 4 4 Number of Hi/H-interfaces Use 4 4 Supporting protocol for CP/P 4 4 Supporting protocol for PROFIBUS 5 6 Supporting protocol for NAX 6 4 Supporting protocol fo	Electric engineering, automation, process control engineering / Display and control c	component / Panel (H	HMI) / Graphic panel (HMI) (ecl@ss10.0.1-27-33-02-01 [AFX016003])		
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Kalo attandard Shutsoth No Radio attandard SRM 88211 No Radio attandard SRM No Radio attandard SRM No Radio attandard SRM No Salici attandard SRM No 10 Ink master No 10 Ink master No With colour display Po Number of dollay 1077218 Number of glosys-cales/blue-scales of display 1077218 Number of pipels, ventrical 10			
Radio standard GNR No Radio standard UMTS No 10 link master No Type of display TFT With colour display Yes Number of display Po Number of display Po Screen display 10 Number of plaels, brotzontal Po With numeric keyboard Po With alpha numeric keyboard Po With plael platform buttons, programmable Po Number of plaels hottons Po With heating a possible from buttons, programmable Po With heating plaels buttons Po With heating plaels from buttons Po With heating plaels from buttons P	Radio standard Bluetooth		No
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Number of pixels, horizontal 1024 Number of pixels, vertical 600 Useful project memory/user memory 548 pt 51000 With alpha numeric keyboard 600 With alpha numeric keyboard 600 Number of function buttons, programmable 600 Number of buttons with LED 600 Number of system buttons 600 Touch technology 0 With message indication 600 With message system (incl. buffer and confirmation) 600 With printer output 600	Number of grey-scales/blue-scales of display		0
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Number of function buttons, programmable 6	With numeric keyboard		No
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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 Yes Number of password levels Yes Number of online languages Yes Additional software components, loadable Yes Degree of protection (IP), front side Yes Degree of protection (NEMA), front side Yes Rail mounting possible Yes Wall mounting/direct mounting Yes Suitable for safety functions Yes With of the front No With of the front No Height of the front Imm 269 With of the front Imm 269 With of the front Imm 269	Number of function buttons, programmable		0
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Rail mounting possible Wall mounting/direct mounting Suitable for safety functions No Width of the front mm 269 Height of the front mm 174	With message system (incl. buffer and confirmation) Process value representation (output) possible Process default value (input) possible With recipes Number of password levels With printer output Number of online languages Additional software components, loadable		Yes Yes Yes Yes Yes 200 Yes 100 Yes
Wall mounting/direct mounting Suitable for safety functions Width of the front Height of the front Mo Mo Mo Mo Mo Mo Mo Mo Mo M	With message system (incl. buffer and confirmation) Process value representation (output) possible Process default value (input) possible With recipes Number of password levels With printer output Number of online languages Additional software components, loadable Degree of protection (IP), front side		Yes Yes Yes Yes 200 Yes 100 Yes IP65
Suitable for safety functions No Width of the front mm 269 Height of the front mm 174	With message system (incl. buffer and confirmation) Process value representation (output) possible Process default value (input) possible With recipes Number of password levels With printer output Number of online languages Additional software components, loadable Degree of protection (IP), front side Degree of protection (NEMA), front side	°C	Yes Yes Yes Yes Yes 200 Yes 100 Yes IP65
Width of the front mm 269 Height of the front mm 174	With message system (incl. buffer and confirmation) Process value representation (output) possible Process default value (input) possible With recipes Number of password levels With printer output Number of online languages Additional software components, loadable Degree of protection (IP), front side Degree of protection (NEMA), front side Operation temperature	°C	Yes Yes Yes Yes Yes 200 Yes 100 Yes 12 0 - 50
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Approvals

Product Standards	UL 61010-2-201; IEC/EN 61131-2; CE
UL File No.	E205091
North America Certification	UL listed, certified by UL for use in Canada
Specially designed for North America	No
Current Limiting Circuit-Breaker	No
Degree of Protection	IEC: IP65, NA: NEMA4X, NEMA12

Dimensions





