## DATASHEET - XV-303-70-B02-A00-1C



Control panel with PLC, 24 VDC, 7 Inches PCT-Display, 1024x600 pixels, 1xEthernet, 1xRS232, 1xRS485, 1xCAN, 1xProfibus, 1xSD card slot



Part no. Catalog No. No.

XV-303-70-B02-A00-1C 179653 Alternate Catalog XV-303-70-B02-A00-1C

Similar to illustration

### **Delivery program**

Product range		XV300 7"
Product range		XV-303
Function		HMI-PLC (integrated SPS function)
Description		Control panel with PLC and Profibus
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	Pix	WSVGA 1024 x 600
Portrait format		yes
Screen diagonal	Inc	sh 7 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 USB host 2.0 1 x USB device 1 x CANopen®/easyNet 1 x PROFIBUS/MPI
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
Heat dissipation	W	14.4

#### **Technical data** Disnlay

Display		
Display - Type		Color display, TFT, anti-glare
Screen diagonal	Inch	7 widescreen
Resolution	Pixel	WSVGA 1024 x 600
Visible screen area	mm	153.6 × 90.0
Format		16:9
Number of colours		16777216 (Color depth 24 bit)
Contrast ratio (Normally)		Normally 850:1

Backup direst-ine clock     Interpretation clock     Interpretation clock       Backup direst-ine clock     Normaly 10 year       Backup direst-ine clock     Normaly 10 year       Figure and volk visualization     Suff-COUESYS       PC-Pogramming suffware     Suff-COUESYS       Target and wolk visualization     Year       PC-Crease     Suff-COUESYS       Suff-COUESYS     Suff-COUESYS       Appring system     Year       Pachage     Worker Electron clock       Parting system     Notes Electron clock       Departing system     Notes Electron clock       Interfaces, communication     Notes Electron clock       USS foot     Suff-COUESYS       USS foot     Suff-COUESYS       USS device     1 × Electron clock       USS device     Suff-COUESYS       USS devi				N
ControlControlControlOperationProtect for during from the for the formation of t	Brightness		cd/m <sup>2</sup>	Normally 400
OperationProduct waterProduct water w	Back-lighting			
TechnologyPolgened Capacity From 2019Took sensorMail Funct hank pandSystemMail Funct hank pandPressorMail Funct hank pandPressorMail Funct hank pandInternal memoryMail Funct hank pandEdemain denorySo rat, Fire SDS, SDRCReturn denorySo rat, Fire SDS, SDRCReturn denoryMail Funct hank pandBackag den targe without pandMail Funct pandBackag den targe without pandMail Fu	Service life of back-lighting		h	Normally 50000
inclusion     Multi-such such paral       System     AMI Carter. As 800, Mir-       Pression     Multi-such such paral       Decimal memory     Multi-such such paral       External memory     Multi-such such such paral       External memory     Multi-such such such such such such such such	Operation			
System         AML Cores A 800 Mich           Processor         AML Cores A 800 Mich           Internal minumy         Signal and Mich           Detend memory         Signal and Mich           Construction         Signal and Mich           Detend memory         Signal and Mich           Backurg from sitzero voltage)         Fignal and Mich           Engineering         Signal and Mich           Vulsatistic ontowner         Signal and Mich           PLC-Forgramming schware         Signal and Mich           Construction         Signal and Mich           PLC-forgramming schware         Signal and Mich           Develop youth         Signal and Mich	Technology			Projected Capacitive Touch (PCT)
Process         AMX Concerve HED/Mite           Internal memory         AMX Concerve HED/Mite           Extend memory         COUNT           Extend memory         COUNT           Back-op of real-inducion         Provide SDS CS DMC           PLC-Programming advance         Provide SDS CS DMC           Counting system         Provide SDS CS DMC           Therified SDS CS DMC         Provide SDS CS DMC           Differences         Proves	Touch sensor			Multi-touch touch panel
InterminencyImage: Section of the section	System			
initial control interaction     Fash: 108 SEC     Fash: 108 SEC       Exemany     SO card, Type: SOSC. SOIC       Backup of real-line dock.     mon-realeceable, IB23B soldered in       Backup of real-line dock.     SOFF-CODESYS 3       PLC-Pogramming software     Version Endocable.       PLC-Brogeneming software     Version Endocable.       Diskin infrafese     Version Endocable.       UBS software     Version Endocable. </td <td>Processor</td> <td></td> <td></td> <td>ARM Cortex-A9 800 MHz</td>	Processor			ARM Cortex-A9 800 MHz
Definition     Particle CPU and system cooling, matural convector-based passive cooling       Backuy (fravice life)     non-splice addition       Backuy (fravice life)     non-splice addition       Backuy (fravice life)     Normaly U years       Backuy (fravice life)     Self-CODESYS - Self	Internal memory			Flash: 1GB SLC
Backup diretakime clock     Image: space	External memory			SD card, Type: SDSC, SDHC
Battery (service life)     nen-replaceable, BR2203 soldared in       Battery (service life)     Namality (traves)       Expineering     Annality (traves)       PLC-Programming software     ALLEO       PLC-Programming software     ALLEO       PLC-Programming software     Yes       PLC-Econce     PLC       Operating system     PLC       PLC-Econce communication     PLC       Interfaces, communication     PLC       USB device     PLC       Selection interfaces     PLC	Cooling			Fanless CPU and system cooling, natural convection-based passive cooling
Backup fine at zero voltage!     Normaliy It years       Engineering     BALLED       Yakalakaton ondowere     BALLED       Skort CODESYS 3       Target and we biskuitzetion     Yes       PC-learce     Windows Embedded Compact 7 Pro       Optiming ontware     Windows Embedded Compact 7 Pro       Therefaces, communication     Windows Embedded Compact 7 Pro       Interfaces, communication     Windows Embedded Compact 7 Pro       USB desice     Windows Embedded Compact 7 Pro       Status 1: Name     Normality Bytem       USB desice     Windows Embedded Compact 7 Pro       USB desice<	Back-up of real-time clock			
Engineering       Mailaision software       BAILED         Yisaliasion software       SUSTICODESYS         PLC-Programming software       XSDIT-CODESYS         Target and web visualization       Yee         PLC-Inconce       Yee         Operating year       Yee         PlC-Inconce       Yee<	Battery (service life)			non-replaceable, BR2330 soldered in
Visualisation software     PLC Engramming software     SURE FLOODESNS 3       PLC Programming software     Visualization     SURE FLOODESNS 3       PLC facence     SURE FLOODESNS 3     SURE FLOODESNS 3       Dearen ing system     PLC facence inclusive     PLC facence inclusive       Dearen ing system     PLC facence inclusive     PLC facence inclusive       Interfaces.     PLC facence in	Backup (time at zero voltage)			Normally 10 years
PLC-Programming software       NSPF-CODESYS         PLC-Programming software       SSPF-CODESYS-3         Triget and be visualization       Image and the visualization         PLC-Iscance       Image and the visualization         PLC-Iscance       Image and the visualization         PLC-Iscance       Image and the visualization         Purper lay software       Image and the visualitation         Purper lay s	Engineering			
PLC-frogramming software     Feator     Soft FLCODESYS2       Target and web visualization     Feator     Feator       PLC-facence inclusive	Visualisation software			
I arget and web visualizationSOFI-CODESVS-3Target and web visualizationYesYesDelationePCU increase inclusiveOperating systemYesWindows Embedded Compact 7 ProInterfaces, communicationYesYesbuilt-in interfacesYesYesbuilt-in interfacesYesYesVisualizationYesYesUSB lostYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesStatusYesYesPerfuseYesYesStatusYesYesNaminal voltageYesYesPower soughtYesYesStatusYesYesNaminal voltageYesYesPerfuseYesYesStatusYesYesNaminal voltageYesYesPower soughtYesYesStatusYesYesStatusYesYesPower soughtYesYesPower soughtYesYesPower soughtYesYesStatusYesYesNota and solght yesYesYesPower soughtYesYes				
PLC Itence       PLC Itence inclusive       PLC Itence inclusive         Operating system       Microws Embedded Compact 7 Pro         Interfaces, communication       Interfaces, communication         built-in interfaces       Interfaces, poin D-sub plug, UNC<				XSOFT-CODESYS-3
Operating system     Windows Embedded Compect 7 Pro       Interfaces, communication     I + Eherner 10100 Mps       Interfaces     I + Eherner 10100 Mps       INTERFACE     I + Eherner 10100 Mps       USB device     I + Eherner 10100 Mps       INTERFACE     Mot galvanically isolated       Stats     I + Eherner 10100 Mps       Restation     I + Eherner 10100 Mps       Restation     I + Eherner 10100 Mps       Stats     I + Eherner 10100 Mps       Stats     I + Eherner 10100 Mps       Restation     I + Eherner 10100 Mps       Restation     I + Eherner 10100 Mps       Porter Instance     I + I + Eherner 10100 Mps       Porter Insta				
Interfaces, communication         built-in interfaces       is is set in the second is in the second is is the second is the second is is the second is the second is the second is is the second is the second is the second is is the second is the	PLC-licence			
built-in interfaces       is thermat 10100 Mbps         built-in interfaces       use 20.0 to glavinacially isolated         USB device       Ws 20.0 to glavinacially isolated         Built-in interfaces       Ws 20.0 to glavinacially isolated         Built-in interfaces       Ws 20.0 to glavinacially isolated         Built-in interfaces       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         Built-in interfaces       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         Built-in interfaces       ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         CAN       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         CAN       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         CAN       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         CAN       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         CAN       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         Nomal voltage       Ws 10 glavinacially isolated, 9-pin D-sub plug, UNC         Poweronsuppin       Ws 10 glavinacially isolated, 9-p				Windows Embedded Compact 7 Pro
Image: State				
USB device       VSB device       VSB 2,0, not galvanically isolated         R5-232       Not galvanically isolated, 9-pin D-sub plug, UNC         R5-485       Not galvanically isolated, 9-pin D-sub plug, UNC         CAN       Not galvanically isolated, 9-pin D-sub plug, UNC         Profibus       FOP (BUS-DP, not galvanically isolated, 9-pin D-sub plug, UNC         Slots       To SD card: 1         Ethernet       10/100 Mps         Power supply       Yes 200 VDC (rated operating voltage - 20%/r425%)         Power supply       Yes 200 VDC (rated operating voltage - 20%/r425%)         Voltage dips       Power consumption         Power consumption       Power         Note on heat dissipation       Yes         Note on heat dissipation       Yes         Power consumption       Power         Note on heat dissipation       Yes         Protection against polarity reversal       Yes         Type of fuse       Yes         Power consumption       Yes         Protection against polarity reversal       Yes         Type of fuse       Yes         Protection against polarity reversal       Yes         Type of fuse       Yes         Power consumption       Yes         Protection against polarity re				1 x RS232 1 x RS485 1 x USB host 2.0 1 x USB device 1 x CANopen®/easyNet
RS-322     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       Profibus     Not galvanically isolated, 9-pin D-sub plug, UNC       Slats     PROFIBUS-DP, not galvanically isolated, 9-pin D-sub plug, UNC       Proters supply     Protestion against polarity reversal       Nominal voltage     Profibus       Voltage dips     V UD C SELV (safety extra low voltage)       Prever consumption     Prac.       Power consumption     Prac.       Power consumption     Prac.       Protection against polarity reversal     V       Voltage dips     V       Protection against polarity reversal     V       Russ of the sub polarity reversal     V       Protection against polarity reversal     V       Russ of the sub polarity reversal     V       Russ	USB Host			USB 2.0, not galvanically isolated
R-485     Not galvanically isolated, 9-pin D-sub plug, UNC       CAN     Not galvanically isolated, 9-pin D-sub plug, UNC       CAN     Not galvanically isolated, 9-pin D-sub plug, UNC       Profibus     Not galvanically isolated, 9-pin D-sub plug, UNC       Slots     Image: Construction of the sub plug, UNC       Power supply     Yes       Power consumption     Yes       Power consumption     Pmax.       Power consumption     Pmax.       Power consumption     Pmax.       Protection against polarity reversal     Voit 14.4       Not galvanically isolated, 9-pin D-sub plug, UNC     Sins form intervoltage (19.2 V DC)       Protection against polarity reversal     Voit 30.2 V DC SELV (safety extra low voltage)       Protection against polarity reversal     Voit 14.4       Not galvanically isolated, 9-pin D-sub plug, UNC     Voit 14.4       Protection against polarity reversal     Voit 14.4       Protection a	USB device			USB 2.0, not galvanically isolated
CAN     Not galvanically isolated, 9 pin D-sub plug, UNC       Profibus     Not galvanically isolated, 9 pole SUB-D socket, UNC       Sitos     For SD card: 1       Ethernet     10100 Mbps       MPI     10100 SUB       Power supply     Yes       Pominal voltage     24 V C SELV (safety extra low voltage)       permissible voltage     44 V C SELV (safety extra low voltage)       Power supply     Sinter (SEE)       Voltage dips     satery powered: 18,0-31,2 V DC (rated operating voltage -20%/425%)       Voltage dips     ms     \$10 ms from arted voltage (24 V C)       Power consumption     Pmax.     W     14.4       Power consumption     Pmax.     W     14.4       Not dissipation     Yes     14.4       Note on heat dissipation     Yes     Yes (Second Care)       Protection against polarity reversal     yes     Yes (Yes Care)       Potential isolation     yes     Yes (Yes Care)       Protection against polarity reversal     yes     Yes (Yes Care)       Potential isolation     yes     Yes (Yes Care)       Protection against polarity reversal     Yes     Yes (Yes Care)       Protection against polarity reversal     Yes     Yes (Yes Care)       Potential isolation     Yes (Yes Care)     Yes (Yes Care)       Pr	RS-232			Not galvanically isolated, 9-pin D-sub plug, UNC
Profibus     Profibus     Profibus-DP, nd galvanically isolated, 9 pole SUB-D socket, UNC       Slots     For SD card: 1       Ethernet     10/100 Mbps       MPI     Voltage       porver supply     Voltage dips       Voltage dips     Voltage dips       Power consumption     Peak.       Power consumption     Peak.       Potection against polarity reversal     M       Protection against polarity reversal     M       Potection against polarity reversal     M       Potestion against polarity r	RS-485			Not galvanically isolated, 9-pin D-sub plug, UNC
Slots       for SD card: 1         Ethernet       10/100 Mbps         MPI       Yes         Power supply       24 VDC SELV (safety extra low voltage)         permissible voltage       24 VDC SELV (safety extra low voltage)         permissible voltage       8         Voltage dips       8         Voltage dips       8         Power consumption       8         Power consumption       8         Note on heat dissipation       9         Potection against polarity reversal       9         Potential isolation       9	CAN			Not galvanically isolated, 9-pin D-sub plug, UNC
Ethernet         In/100 Mbps           MPI         vs           Power supply         VD (D0 Mbps           permissible voltage         VD (D2 SELV (safety extra low voltage)           permissible voltage         VD (D2 SELV (safety extra low voltage)           Voltage dips         VD (D2 SELV (safety extra low voltage)           Voltage dips         ms         \$10 ms from rated voltage (24 V DC) \$50 VD C for a duration of < 100 ms	Profibus			PROFIBUS-DP, not galvanically isolated, 9 pole SUB-D socket, UNC
MPI         Yes           Power supply         24 V DC SELV (safety extra low voltage)           permissible voltage         Ffective: 19.2-30.0 V DC (rated operating voltage -20%/+25%) Absolute with ripple: 18.0-31.2 V DC           Voltage dips         ms         Sattery powered: 18.0-31.2 V DC           Voltage dips         ms         Sattery powered: 18.0-31.2 V DC           Power consumption         Mms         Sattery powered: 18.0-31.2 V DC           Power consumption         Mms         Sattery powered: 18.0-31.2 V DC           Power consumption         Pomax         W         I.4           Note on heat dissipation         Note on taccessible         Heat dissipation with power consumption for 24 V           Potential isolation         Yes         Y	Slots			for SD card: 1
MPI         Yes           Power supply         24 V DC SELV (safety extra low voltage)           permissible voltage         Ffective: 19.2-30.0 V DC (rated operating voltage -20%/+25%) Absolute with ripple: 18.0-31.2 V DC           Voltage dips         ms         Sattery powered: 18.0-31.2 V DC           Voltage dips         ms         Sattery powered: 18.0-31.2 V DC           Power consumption         Mms         Sattery powered: 18.0-31.2 V DC           Power consumption         Mms         Sattery powered: 18.0-31.2 V DC           Power consumption         Pomax         W         I.4           Note on heat dissipation         Note on taccessible         Heat dissipation with power consumption for 24 V           Potential isolation         Yes         Y	Ethernet			10/100 Mbps
Power supply         Average of the second seco				
Nominal voltage         Av 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 (mated operating voltage -25%/+30%) 35 V DC for a duration of < 100 ms				
permissible voltage       Image: Constraint of				24 V DC SELV (safety extra low voltage)
Power consumption       Pmax.       W       14.4         Power consumption       V       Normally 14         Heat dissipation       W       14.4         Note on heat dissipation       W       14.4         Protection against polarity reversal       V       Instruction of the second seco				Absolute with ripple: 18,0-31,2 V DC Battery powered: 18,0-31,2 V DC (rated operating voltage -25%/+30%)
Power consumptionWNormally 14Heat dissipationW4.4Note on heat dissipationHeat dissipation with power consumption for 24 V 1.9 W for basic device + 2.5 W for USB moduleProtection against polarity reversalYYType of fuseYYPotential isolationYYGeneralYYHousing materialInsulated material blackFront typeInti-glare tempered glass in plastic bezel	Voltage dips		ms	
Heat dissipationW14.4Note on heat dissipationHeat dissipation with power consumption for 24 V 1.9 W for basic device + 2.5 W for USB moduleProtection against polarity reversalImage: Constraint of the second seco	Power consumption	P <sub>max</sub> .	W	14.4
Note on heat dissipationHeat dissipation with power consumption for 24 V 11.9 W for basic device + 2.5 W for USB moduleProtection against polarity reversalYesType of fuseYes (fuse not accessible) noPotential isolationNote of the second se	Power consumption		W	Normally 14
Protection against polarity reversal     I1.9 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     Insulated material black       Front type     Insulated material black	Heat dissipation		W	14.4
Type of fuse     Yes (fuse not accessible)       Potential isolation     no       General     Insulated material black       Housing material     Insulated material black       Front type     Anti-glare tempered glass in plastic bezel	Note on heat dissipation			
Potential isolation     Image: Constraint of the second of t	Protection against polarity reversal			yes
General       Housing material       Front type   Insulated material black Anti-glare tempered glass in plastic bezel	Type of fuse			Yes (fuse not accessible)
Housing material     Insulated material black       Front type     Anti-glare tempered glass in plastic bezel	Potential isolation			no
Front type Anti-glare tempered glass in plastic bezel	General			
	Housing material			Insulated material black
	Front type			Anti-glare tempered glass in plastic bezel
Dimensions (W x H x D) mm 196 x 135 x 51	Dimensions (W x H x D)		mm	196 x 135 x 51
flush mounted Clearance: W x H x D ≥ 30 mm (1.18")	flush mounted			Clearance: W x H x D $\geq$ 30 mm (1.18")

			Inclination from vertical: ±45° (if using natural convection)
Weight		kg	0.74
Degree of protection (IEC/EN 60529, EN50178, VBG 4)			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
			ARITIME
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	θ	°C	-20 - +60
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	+ 50
Relative humidity			
Condensation			Non-condensing
Relative humidity			10 - 95%, non-condensing

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	14.4
Heat dissipation capacity	P <sub>diss</sub>	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.
10.4 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**

PLC's (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		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		2	
With SW interfaces		Yes	
Supporting protocol for TCP/IP		Yes	
Supporting protocol for PROFIBUS		Yes	
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 WLAN 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		16777216
Number of grey-scales/blue-scales of display		0
Screen diagonal	inch	7
Number of pixels, horizontal		1024
Number of pixels, vertical		600
Useful project memory/user memory	kByte	512000
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
Operation temperature	°C	0 - 50
Rail mounting possible		No
Wall mounting/direct mounting		No
Suitable for safety functions		No
Width of the front	mm	196
Height of the front	mm	135
Built-in depth	mm	43.1

# 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



