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

179661

EL Number

4501321

(Norway)

(NUI Way)	
Product name	Eaton XV-303 Touch panel
Part no.	XV-303-10-B00-A00-1C
EAN	7640130098732
Product Length/Depth	269 millimetre
Product height	58 millimetre
Product width	174 millimetre
Product weight	1.165 kilogram
Certifications	IEC/EN 61131-2 UL File No.: E205091 EMC according to 2014/30/EU CUL CE UL DNV GL UL 61010-2-201 EN 50178 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 Heat dissipation with power consumption for 24 V License certificates for onboard interfaces not required Optionally with SD card -> article no. 181638 PLC license inclusive
Enclosure material	Insulated material
Features	USB Host USB device RS232 Target and web visualization RS485 Ethernet interface CAN Fanless CPU and system cooling, natural convection-based passive cooling Portrait format Slot for SD card Operating System Windows Embedded Compact 7 pro Integrated Runtime visualization software license
Fitted with:	1 x USB host 2.0 (built-in interface) 1 x RS485 (built-in interface) 1 x RS232 (built-in interface) 1 x RS232 (built-in interface) Printer output Color display Message system (incl. buffer and confirmation) Recipes 1 x CANopen®/easyNet (built-in interfaces) Message indication 1 x USB device (built-in interface) SW interfaces 1 x Ethernet 10/100 Mbps (built-in interfaces)
Functions	Additional software components, loadable Process value representation (output) possible Process default value (input) possible
Battery runtime	Back-up of real-time clock: BR 2330, non-replaceable (soldered)
Degree of protection	IP20, rear (according to EN 60529-1) NEMA 12 NEMA 4X
Degree of protection (front side)	IP65 NEMA 12
Fuse type	Built-in fuse (not accessible)
Lifespan	50,000 h (Service life of back-lighting)

Flush mounting - Clearance Protection against polarity reversal Product category Rolfs conformity Profuct Category Rolfs conformity Profuct Category Rolfs conformity Rolfs conf	plass panel in plastic frame
Protection against polarity reversal Product category Rolfs conformity Yes, for supply voltage ISN Rolfs conformity Yes Rolfs Conformity Rolfs R	ation from vertical: ±45° (if using natural convection) ance: Width x Height x Depth ≥ 30 mm (1.18")
Product category Roble conformity  Roble conformity  Roble conformity  Software  Softw	
Rots conformity Software Softw	(Siemens MPI optional)
Software Software Scheme Schem	PS function)
SPORT-CODESY'S-3, PLC-P   SOPT-CODESY'S-3, PLC-P   SOPT-CODESY'S-3, PLC-P   SOPT-CODESY'S-2, P	
Voltage type       DC         Shock resistance       15 g, 11 ms, Mechanical         Vibration resistance       5 - 9 Hz, ± 3.5 mm 8 - 60 Mz, ± 0.15 mm 80 - 150 Hz, ± 2 g         Air pressure       795 - 1080 hPa (operation)         Ambient operating temperature - min       0 °C         Ambient storage temperature - max       50 °C         Ambient storage temperature - max       60 °C         Climatic proofing       Damp heat, constant, to 16 ms, books 2-1 Cold to 16 h0088-2-1 Cold to 16 h0088-2-1         Environmental conditions       Condensation: Non-conde of 10 ms, books 2-1 Cold to 16 h0088-2-1         Environmental conditions       Condensation: Non-conde of 10 ms, books 2-1 Cold to 16 h0088-2-1         Environmental conditions       Condensation: Non-conde of 10 ms, books 2-1 Cold to 16 h0088-2-1         Environmental conditions       Condensation: Non-conde of 10 ms, books 2-1 cold to 16 h0088-2-1         Environmental conditions       0 °C         Operating temperature - min       0 °C         Operating temperature - max       50 °C         Relative humidity       10 - 95 % (non-condensing 10 ms, books 20 ms, books 2	software, Engineering C-Programming software, Engineering alisation software, Engineering C-Programming software, Engineering
Shock resistance    15 g, 11 ms, Mechanical   16 g, 15 ms, 15 ms	
Vibration resistance  \$ 5 - 9 Hz, ± 2.5 mm 9 - 60 Hz, ± 2.5 mm 9 -	
Vibration resistance  \$ 5 - 9 Hz, ± 2.5 mm 9 - 60 Hz, ± 2.5 mm 9 -	
Air pressure Air pressure Ambient operating temperature - min Ambient operating temperature - max Ambient storage temperature - max Ambient storage temperature - max  Ambient storage temperature - max  Ambient storage temperature - max  Climatic proofing Damp heat, constant, to 16 Cord to 18 0008-2-2 Cord	ı
Ambient operating temperature - min Ambient operating temperature - max Ambient storage temperature - max Ambient storage temperature - max Ambient storage temperature - max Climatic proofing Climatic proofing Climatic proofing Climatic proofing Climatic proofing Climatic proofing Condensation: Non-conde operating temperature - min Operating temperature - min Operating temperature - max Condensation: Non-condensing Con	
Ambient operating temperature - max  Ambient storage temperature - min  Ambient storage temperature - max  Climatic proofing  Damp heat, constant, to 15 fb pry heat to 1EC 60088-2-2 Cold to EN 60008-2-2 Cold to EN 60088-2-2 Cold to EN 60088	on)
Ambient storage temperature - min Ambient storage temperature - max 60 °C Climatic proofing Climatic proofing Climatic proofing Climatic proofing Condensation: Non-condered by heat to IEC 6008-2-1 Condensation: Non-condered by Condensation: Non-condered by Condensation: Non-condered by Condensation: Non-condered by Condensation: Non-condensing Condensation: Non-condensing Condensation: Non-condered by Condensation: Non-condensing C	
Ambient storage temperature - max  Climatic proofing  Damp heat, constant, to IE Dry heat to IEC 5008-2-1 Cold to Ex Mo088-2-1 Cold to Ext	
Climatic proofing  Climatic proofing  Climatic proofing  Damp heat, constant, to IE Dry heat to IEC 60068-2-2 Cold to EN 60068-2-2 Cold to EN 60068-2-2 Cold to EN 60068-2-1  Environmental conditions  Operating temperature - min  Operating temperature - max  Relative humidity  In - 95 % (non-condensing to IEC/EN 61000 Cold interference  According to IEC/EN 61000 Cold interference immunity  Voltage dips  ✓ 10 ms from rated voltage for min strong to IEC/EN 61000 Cold interference immunity  Permissible voltage  Permissible voltage  Rated operational voltage  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - max  Supply voltage at DC - min  Supply voltage at DC - min  Supply voltage at DC - min  Supply voltage at DC - max  Interfaces  USB 2.0 hest (not galvanically isol 10/100 Mbps Etheret con RS232 Inot galvanically isol	
Environmental conditions  Condensation: Non-conde  Operating temperature - min  O °C  Operating temperature - max  Relative humidity  Emitted interference  Emitted interference  Interference immunity  Voltage dips  S 10 ms from rated voltage  Fermissible voltage  Permissible voltage  Permissible voltage  Power consumption  Max. 18 W 18 W 19.  Rated operational voltage  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - min  Supply voltage at DC - min  Top/IP  EtherNet/IP  MDBUS	
Operating temperature - min Operating temperature - max Felative humidity  Emitted interference Interference immunity Voltage dips  Fermissible voltage  Permissible voltage  Permissible voltage  Power consumption  Max. 18 W 18.0 - 31.2 V DC, absolute 18 31.2 V DC, battery pow 35 V DC (for a duration of supply voltage at AC, 50 Hz - min Supply voltage at AC, 50 Hz - min Supply voltage at DC - min Supply voltage at DC - max  Interfaces  Interfaces  USB 2.0 host (not galvanically issolute of S222 (not galvanically issolute of S2222 (not galvanically issolute of S2222 (no	
Operating temperature - max  Relative humidity  Emitted interference  Interference immunity  Voltage dips  Supply voltage  Permissible voltage  Permissible voltage  Permissible voltage  Permissible voltage  Rated operational voltage  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - min  Supply voltage at DC - min  Supply voltage at DC - max  Territory of the voltage of the	idensing
Relative humidity  Emitted interference  Interference immunity  According to EC/EN 61000  Interference immunity  According to EN 61000-6-2  \$\frac{2}{10}\$ ms from rated voltage of ms from undervoltage (1)  Permissible voltage  \$19.2 - 30 \times \ti	
Emitted interference Interference immunity  Voltage dips  2 10 ms from rated voltage form undervoltage	
Number of slots  Voltage dips  According to EN 61000-6-2 Voltage dips  \$\frac{10 \text{ ms from rated voltage}}{5 \text{ ms from undervoltage}} \text{ 10 ms from rated voltage} \text{ 10 ms from undervoltage} \text{ 17 ms from undervoltage} \text{ 18 - 31.2 V DC, absolute vision in 18 - 31.2 V DC, battery pow 35 V DC (for a duration of 4 ms 18 W typ.  Rated operational voltage  \$\text{Supply voltage at AC, 50 Hz - min} \text{ 0V AC}  24 V DC (power-supply - since the context of the context	ing)
Number of slots  Voltage dips  According to EN 61000-6-2 Voltage dips  \$\frac{10 \text{ ms from rated voltage}}{5 \text{ ms from undervoltage}} \text{ 10 ms from rated voltage} \text{ 10 ms from undervoltage} \text{ 17 ms from undervoltage} \text{ 18 - 31.2 V DC, absolute vision in 18 - 31.2 V DC, battery pow 35 V DC (for a duration of 4 ms 18 W typ.  Rated operational voltage  \$\text{Supply voltage at AC, 50 Hz - min} \text{ 0V AC}  24 V DC (power-supply - since the context of the context	
Voltage dips  Solve from rated voltage forms from undervoltage (1)  Permissible voltage  19.2 - 30 V DC, effective from 18.0 - 31.2 V DC, absolute voltage (1)  18.0 - 31.2 V DC, battery pown 35 V DC (for a duration of 4)  Power consumption  Max. 18 W 18 W vtp.  Rated operational voltage  24 V DC (power-supply - state)  Supply voltage at AC, 50 Hz - min  OV AC  Supply voltage at AC, 50 Hz - max  OV AC  Supply voltage at DC - min  19.2 V DC  Supply voltage at DC - max  USB 2.0 host (not galvanically isok 10/100 Mbps Ethernet con RS232 (not galvanically isok 10/100 Mbps Ethernet con RS232 (not galvanically isok USB 2.0 device (not galvanically isok USB 2.0 device (not galvanically FetherNet/IP MODBUS	000-6-4
Fermissible voltage  Permissible voltage  19.2 - 30 V DC, effective (rr 18.0 - 31.2 V DC, absolute vil 18.3 - 31.2 V DC, battery pow 35 V DC (for a duration of 4 Na W 18 W typ.  Rated operational voltage  24 V DC (power-supply - silvapply voltage at AC, 50 Hz - min  OV AC  Supply voltage at AC, 50 Hz - max  OV AC  Supply voltage at DC - min  Supply voltage at DC - max  USB 2.0 host (not galvanically isolated) (not galv	6-2
18.0 - 31.2 V DC, babolute via 18 - 31.2 V DC, battery pow 35 V DC (for a duration of 4 18 - 31.2 V DC). Extery pow 35 V DC (for a duration of 4 18 W typ.)    Rated operational voltage   24 V DC (power-supply - six	
Rated operational voltage  Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - max  OV AC  Supply voltage at DC - min  Supply voltage at DC - max  OV BC  Supply voltage at DC - max  Therefore  Supply voltage at DC - max  Supply voltage at DC - max  Supply voltage at DC - max  Therefore  Supply voltage at DC - max  Supply voltage at DC - max  Therefore  Supply voltage at DC - max  Therefore  Supply voltage at DC - max  Therefore  Supply voltage at DC - min  Supply voltage at DC - max  Supply voltage at DC - min  Supply voltage at DC - max  Supply voltage at DC - min  Supp	oowered (rated operating voltage -25 %/+30 %)
Supply voltage at AC, 50 Hz - min  Supply voltage at AC, 50 Hz - max  O V AC  Supply voltage at DC - min  Supply voltage at DC - max  30 V DC  Interfaces  USB 2.0 host (not galvanically isolator) 10/100 Mbps Ethernet con RS232 (not galvanically isolator) 10/100 Mbps Ethernet	
Supply voltage at AC, 50 Hz - max  Supply voltage at DC - min  Supply voltage at DC - max  30 V DC  USB 2.0 host (not galvanically isolator) (CAN (not galvanically isolator) (not galvanically isolat	- safety extra low voltage)
Supply voltage at DC - min  Supply voltage at DC - max  30 V DC  USB 2.0 host (not galvanically isolator) 10/100 Mbps Ethernet con RS232 (not galvanically isolator) 10/100 Mbps Ethernet con RS2485 (not galvanically isolator) 10/100 Mbps Ethernet	
Supply voltage at DC - max  30 V DC  Interfaces  USB 2.0 host (not galvanic cally isolation) 10/100 Mbps Ethernet con RS232 (not galvanically isolation) 10/100 Mbps Ethernet con RS232 (n	
Interfaces  USB 2.0 host (not galvanic CAN (not galvanic CAN (not galvanically isola 10/100 Mbps Ethernet con RS232 (not galvanically iso RS485 (not galvanically iso RS485 (not galvanically iso RS485 (not galvanically ison RS485 (not galvanically i	
CAN (not galvanically isola 10/100 Mbps Ethernet con RS232 (not galvanically isola 10/100 Mbps Ethernet con RS232 (not galvanically isola USB 2.0 device (not galvanically isola USB 2.0 device) (not galvanically	
Protocol TCP/IP EtherNet/IP MODBUS	solated, 9-pin SUB-D plug, UNC) connection isolated, 9-pin SUB-D plug, UNC) isolated, 9-pin SUB-D plug, UNC)
EtherNet/IP MODBUS	
Display contrast ratio 500:1	
Display lighting LED Dimmable via software	

Display size	16:9
Dienlay type	222.72 x 125.28 mm
Display type	Color display, TFT, anti-glare TFT
	Anti-glare tempered glass in plastic bezel
Luminance intensity	400 cd/m²
Number of colors of the display	16777216
Resolution	1024 x 600 px WSVGA
Screen size (diagonal)	10.1 in
Touch technology	Capacitive multitouch Multi-touch touch panel touch sensor Projected Capacitive Touch (PCT)
Backup time	10 years, typ. (time at zero voltage)
Memory	NVRAM: 128kByte Retain SD card, Type: SDSC, SDHC (external memory) Flash: 1 GByte SLC DRAM: 512 MByte RAM
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

## **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	19.2 - 30		
Voltage type of supply voltage		DC		
Number of HW-interfaces industrial Ethernet		1		

Number of HAV miner face Former   Number of HAV miner face FS 422   1   Number of HAV miner face FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Market FS 422   2   Number of HAV miner face Warriage with part of the Mark	Number of interference PROFINITY		
Number of HMP-interface RS-428         1           Number of HMP-interface RS-488         2           Number of HMP-interface Special         2           Number of HMP-interface Special         2           Number of HMP-interface Special         2           Sepondary protocol for LSPH         4           Sepondary protocol for LSPH         4           Sepondary protocol for LSPH         4           Sepondary protocol for LSPH         6           Sepondary protocol for LSPH         8           Sepo	Number of interfaces PROFINET		0
Number of Minimifaces sarial TTY   Minimiface of Minimifaces sarial TTY   Minimiface of Minimifaces sarial TTY   Minimiface of Minimifaces sarial Number of Min			
Number of Windfraces USS         2           Number of Windfraces USS         0           Number of Windfraces USS         0           Number of Windfraces USS         0           Number of Windfraces Winders         0           Number of Windfraces Winders         0           Number of Windfraces USS         0           Number of Mink Windfraces USS         0           Supporting protect for TCNIP         0           Supporting protect for TCNIP         0           Supporting protect for EMB         0			
Number of HW-interfaces provided         9           Number of Winterfaces provided         9           Number of Winterfaces Winders         9         10           Number of Winterfaces Winders         9         10           Number of Winterfaces Winders         9         10           Supporting protocol for Winterfaces other         9         10           Supporting protocol for PROPIDEDS         9         10           Supporting protocol for MCNA         9         10           Supporting protocol for MCNA         9         10           Supporting protocol for MCNA         9         10           Supporting protocol for Modulus         9         10         10			
Number of HW-interfaces Winderse         0         <			0
Number of HW-interface Offer         1	Number of HW-interfaces USB		2
Number of InWinderlances ather         1         98           Value Supporting protect for CTAPP         2         78           Supporting protect for CEAN         3         18           Supporting protect for CEAN         4         78           Supporting protect for CEAN         4         78           Supporting protect for MITERUS         5         70           Supporting protect for MITERUS         6         70           Supporting protect for Michael         6         70           Supporting protect for LON         70         70           Supporting protect for PROFINET CBA         70         70           Supporting protect for PROFINET CBA         70         70           Supporting protec	Number of HW-interfaces parallel		0
NSW INSERTINGEN         Yes           Supporting protocol in TCPIP         76           Supporting protocol for CAN         76           Supporting protocol for INTERIUS         76           Supporting protocol for Data Highway         76           Supporting protocol for PORTINGET         76           Supporting protocol for PORTINGET         76           Supporting protocol for Portinget for Section         76           Supporting protocol for Portinget for Section         76           Supporting protocol for Portinget for Section         76           Supporting protocol f	Number of HW-interfaces Wireless		0
Supporting protectife PROFIBUS         (%)           Supporting protectife PROFIBUS         (%)           Supporting protectife to Data-Highway         (%)           Supporting protectife to EDMA         (%)           Supporting protectife to EDMA         (%)           Supporting protectife to EDMA         (%)           Supporting protectife to FROFINET CBA         (%)	Number of HW-interfaces other		1
Supporting protected for PRIMBUS         Meson (Company protected for PRIMBUS)         Meson (Company protected for Device Primbus)         Meson (Company protected for Device Primbus)         Meson (Company primbus)         Meson (	With SW interfaces		Yes
Supporting protocol for ENTRBUS         Yes           Supporting protocol for INTRBUS         No           Supporting protocol for Modifies         No           Supporting protocol for Deve Met         No           Supporting protocol for Deve Met         No           Supporting protocol for SUDINET         No           Supporting protocol for FRORNET 10         No           Supporting protocol for PRORNET 20A         No           Supporting protocol for PRORNET 20A<	Supporting protocol for TCP/IP		Yes
Supporting protocol for INTERBUS         Incompany protocol for AGS         Incompany protocol for AGS         Incompany protocol for MCM         Incompany protocol for Duta-Highway         Incompany protocol for	Supporting protocol for PROFIBUS		No
Supporting protocol for ASIS         Na           Supporting protocol for INCN          Na           Supporting protocol for Molbus          Na           Supporting protocol for DeviceMeR         Na         Na           Supporting protocol for DEVERHIGHMAN         Na         Na           Supporting protocol for DEVERHIGHMAN         Na         Na           Supporting protocol for FROMENET (IA         Na         Na           Supporting protocol for PROMENET (BA         Na         Na           Supporting protocol for PROMENET (BA         Na         Na           Supporting protocol for FROMENET (BA         Na         Na           Supporting protocol for Develved Safety AWOK         Na         Na           Supporting protocol for Develved Safety AWOK         Na         Na           Supporting protocol for Situry BUS Pa         Na         Na           Supporting protocol for Situry BUS Pa         Na         Na           Radio standard S Ble	Supporting protocol for CAN		Yes
Supporting protocol for Modious                   Res           Supporting protocol for Data-Highway         0         0           Supporting protocol for SUDONET         0         0           Supporting protocol for PROFINET (I)         0         0           Supporting protocol for PROFINET (BA)         0         0           Supporting protocol for PROFINET (BA)         0         0           Supporting protocol for Fundation Elidibus         0         0           Supporting protocol for Enderhauf?         0         0           Supporting protocol for Enderhauf?         0         0           Supporting protocol for NTERBUS-Safety at Work         0         0           Supporting protocol for NTERBUS-Safety at Work         0         0           Supporting protocol for Safety at Work         0         0           Supporting protocol for NTERBUS-Safety         0         0           Supporting protocol for Safety at Work         0         0           Radio standard Wister (Baselance)         0         0         0	Supporting protocol for INTERBUS		No
Supporting protocol for Data-Highway         Mo           Supporting protocol for Data-Highway         No           Supporting protocol for Data-Highway         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for FROFINET IO         No           Supporting protocol for FROFINET BA         No           Supp	Supporting protocol for ASI		No
Supporting protocol for DeviceNet         Image: Company of the DeviceNet of DeviceNet         Image: Company of the DeviceNet of DeviceNet         Image: Company of DeviceNet of DeviceNet of Supporting protocol for LION         Image: Company of DeviceNet of DeviceNet of DeviceNet of DeviceNet of DeviceNet of DeviceNet of PROFINET IO         Image: Company of DeviceNet of DeviceNet of PROFINET IO         Image: Company of DeviceNet of DeviceNet of DeviceNet Safety         Image: Company of DeviceNet of DeviceNet Safety         Image: Company of	Supporting protocol for KNX		No
Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for SERCOS         No           Supporting protocol for Fundation Fieldbus         No           Supporting protocol for PROFIsta         No           Supporting protocol for PROFIsta         No           Supporting protocol for StateyBUS 9         No           Radio standard Bluetoth         No           Radio standard Bluetoth         No           Radio standard GBMS         No           Radio standard GBMS         No           Radio standard GBMS         No           Ruber of July 1         No           Vibra of July 2         No	Supporting protocol for Modbus		Yes
Supporting protocol for SUCONET         No           Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET IOS         No           Supporting protocol for PROFINET IOS         No           Supporting protocol for SERGOS         No           Supporting protocol for Embridance Stated         No           Supporting protocol for Embridance Safety at Work         No           Supporting protocol for DeviceAbles Stated         No           Supporting protocol for ProficeAbles Stated         No           Supporting protocol for Sel-Interface Safety at Work         No           Supporting protocol for InterRBUS-Safety         No           Supporting protocol for Sel-Interface Safety at Work         No           Supporting protocol for Sel-Interface Safety         No           Supporting protocol for Sel-Interface Safety         No           Supporting protocol for Sel-Interface Safety         No           Radio standard Blustooth         No           Radio standard Selfy         No           Radio standard SM         No           Radio standard SM         No           Radio standard SM         No           Radio standard SM         No           Rubber of siglays         16,77216           Number of pixel	Supporting protocol for Data-Highway		No
Supporting protocol for PROFINET IO         No           Supporting protocol for PROFINET IOA         No           Supporting protocol for PROFINET CBA         No           Supporting protocol for EREOGS         No           Supporting protocol for Eurodation Fieldbus         No           Supporting protocol for Exervisery         Yes           Supporting protocol for Exervisery         No           Supporting protocol for Exervisery         No           Supporting protocol for Profisery         No           Supporting protocol for PROFIsery         No           Supporting protocol for PROFIsery         No           Supporting protocol for SafetyBUS P         No           Supporting protocol for SafetyBUS P         No           Radio standard Bluetoth         No           Radio standard Buetoth         No           Radio standard GPRIS         E           Radio standard GPRIS         E           Rose of stally         E	Supporting protocol for DeviceNet		No
Supporting protocol for PROFINET IOS         No           Supporting protocol for SERICOS         No           Supporting protocol for ERECOS         No           Supporting protocol for ENERTICOS         No           Supporting protocol for ENERTICOS         No           Supporting protocol for Enerticol [Pl         Yes           Supporting protocol for Enerticol [Pl         No           Supporting protocol for ENERTICOS         No           Supporting protocol for INTERBUS-Safety         No           Supporting protocol for ORDIFISATE         No           Supporting protocol for Other bus systems         No           Radio standard Billeboth         No           Radio standard Billeboth         No           Radio standard Billeboth         No           Radio standard WITS         No           Radio standard GBRS         No           Radio standard UMTS         No           Io link master         No           With colour sighty         Yes           Number of pixels, botracatal         In         Radio           Number of pixel	Supporting protocol for SUCONET		No
Supporting protocol for PROFINET IOS         No           Supporting protocol for SERICOS         No           Supporting protocol for ERECOS         No           Supporting protocol for ENERTICOS         No           Supporting protocol for ENERTICOS         No           Supporting protocol for Enerticol [Pl         Yes           Supporting protocol for Enerticol [Pl         No           Supporting protocol for ENERTICOS         No           Supporting protocol for INTERBUS-Safety         No           Supporting protocol for ORDIFISATE         No           Supporting protocol for Other bus systems         No           Radio standard Billeboth         No           Radio standard Billeboth         No           Radio standard Billeboth         No           Radio standard WITS         No           Radio standard GBRS         No           Radio standard UMTS         No           Io link master         No           With colour sighty         Yes           Number of pixels, botracatal         In         Radio           Number of pixel	Supporting protocol for LON		No
Supporting protect for PROFINET CBA         No           Supporting protect for SERDOS         No           Supporting protect for Feandation Fieldbus         No           Supporting protect for EtherNet/IP         Yes           Supporting protect for EtherNet/IP         No           Supporting protect for DeviceNet Safety         No           Supporting protect for DeviceNet Safety         No           Supporting protect for IPROFIsale         No           Supporting protect for SafetyBUS p         No           Supporting protect for other bus systems         No           Radio standard Blustooth         No           Radio standard WF-1802.11         No           Radio standard GSM         No           Ruber of siplay         <			No
Supporting protocol for SERCOS         No           Supporting protocol for Foundation Fieldbus         No           Supporting protocol for EnderNeuIPP         Yes           Supporting protocol for SERCOS         No           Supporting protocol for DeviceNeuIPS Sefety         No           Supporting protocol for INTERBUS-Safety         No           Supporting protocol for PROFIsafo         No           Supporting protocol for SERCHBUS G         No           Supporting protocol for SerbeyBUS G         No           Radio standard Bluetooth         No           Radio standard Wi-Fi80211         No           Radio standard Wi-Fi80211         No           Radio standard SMA         No           Radio standard GMA         No           Robinstance         Yes           Vith colour display         Yes           Number of pixels, brizontal         In           Number of			No
Supporting protocol for Foundation Fieldbus         No           Supporting protocol for EtherNet/IP         Yes           Supporting protocol for AS-Interface Safety st Work         No           Supporting protocol for DeviceNet Safety         No           Supporting protocol for INTERBUS-Safety         No           Supporting protocol for SafetyBUS p         No           Supporting protocol for SafetyBUS p         No           Supporting protocol for Other bus systems         No           Radio standard Bustooth         No           Radio standard Bustooth         No           Radio standard GSM         No           Radio standard GSM         No           Radio standard UMTS         No           IO link master         No           Vibracy of display         Yes           With colour display         Yes           Number of colors of the display         16,777.216           Number of grey-scales/blue-scales of display         16,777.216           Number of pixels, horizontal         10         1.024           Number of pixels, horizontal         16         1.024           Number of pixels, vertical         16         10           Useful project memory/user memory         18/19         12.000			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 PROFISEA         No           Supporting protocol for PROFISEA         No           Supporting protocol for SafetyBUS p         No           Supporting protocol for Other bus systems         No           Radio standard Bluetooth         No           Radio standard Wir-F 802.11         No           Radio standard GSM         No           Radio standard GSM         No           Radio standard UMTS         No           10 link master         No           With colour display         Yes           Number of colours of the display         16,777,216           Number of grey-scales/blue-scales of display         16,777,216           Number of pixels, horizontal         10,02           Number of pixels, horizontal         10,02           Number of pixels, horizontal         10,02           With numeric keyboard         10,02           With numeric keyboard         10,02           With numeric keyboard         10,02           Number of function buttons, programmable         10,02           Numbe			
Supporting protocol for AS-Interface Safety at Work         No           Supporting protocol for DeviceNet Safety         No           Supporting protocol for INTERBUS-Safety         No           Supporting protocol for PAGIFISATE         No           Supporting protocol for SafetyBUS p         No           Supporting protocol for other bus systems         No           Radio standard Bluetooth         No           Radio standard GPRS         No           Radio standard GSM         No           Radio standard UMTS         No           IO link master         No           Type of display         TF           With colour siplay         Ges           Number of grey-scales/blue-scales of display         (a)           Screen diagonal         inch         10.1           Number of pixels, horizontal         (a)         10.24           Number of pixels, broizontal         (a)         10.24           Number of pixels, vertical         (a)         10.24           Number of pixels were memory         kByt         51			
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 SafetyBUS p         No           Supporting protocol for other bus systems         No           Radio standard Bluetooth         No           Radio standard Wi-Fi 802.11         No           Radio standard GSM         No           Radio standard GSM         No           Radio standard UMTS         No           10 link master         No           Type of display         TFT           Number of colours of the display         16,777,216           Number of grey-scales/blue-scales of display         16,277,216           Number of pixels, horizontal         10,24           Number of pixels, berizontal         10,24           Number of pixels, berizontal         10,24           Number of pixels, vertical         60           Useful project memory/user memory         kBte         51,2000           With alpha numeric keyboard         No           With alpha numeric keyboard         No           Number of function buttons, programmable         0			
Supporting protocol for PROFIsafe         No           Supporting protocol for SafetyBUS p         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 GSM         No           Radio standard GSM         No           Radio standard UMTS         No           IO link master         No           Type of display         Yes           Number of colours of the display         Yes           Number of gray-scales/blue-scales of display         0           Screen diagonal         inch           Number of pixels, horizontal         1,024           Number of pixels, beriza         80           Number of pixels, vertical         90           With numeric keyboard         No           With numeric keyboard         No           With alpha numeric keyboard         No           Number of function buttons, programmable         0           Number of function buttons, programmable         0           Number of function buttons, programmable         0           Number of buttons with LED         0			
Supporting protocol for PROFIsafe Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Radio standard Bluetooth Radio standard GPRS Radio standard GPRS Radio standard GPRS Radio standard UNITS IO link master Type of display Number of colours of the display Number of pixels, horizontal Number of pixels, vertical Useful project memory/user memory With alpha numeric keyboard Number of function buttons, programmable Number of function buttons, programmable Number of system buttons Number of system buttons	,		
Supporting protocol for SafetyBUS p Supporting protocol for other bus systems Radio standard Bluetooth Radio standard WFF 802.11 Radio standard GPRS Radio standard GSM Radio standard UMTS Radio standard UMTS Rodio standard UMT	,		
Supporting protocol for other bus systems Radio standard Bluetooth Radio standard WF-F 802.11 Radio standard GPRS Radio standard GSM Radio standard UMTS Rodio standar			
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         0           Number of grey-scales/blue-scales of display         0           Screen diagonal         inch         10.1           Number of pixels, horizontal         10.24           Number of pixels, vertical         600           Useful project memory/user memory         kByte         512,000           With alpha 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			
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 alpha 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           Number of system buttons         1			
Radio standard GPRS         No           Radio standard UMTS         No           10 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         10.24           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           Number of system buttons         1			
Radio standard GSM Radio standard UMTS Rodio standard UMTS Roli ink master Roll ink master Rol			
Radio standard UMTS  10 link master  Type of display  With colour display  Number of colours of the display  Number of grey-scales/blue-scales of display  Screen diagonal  Number of pixels, horizontal  Number of pixels, vertical  Useful project memory/user memory  With numeric keyboard  With alpha numeric keyboard  Number of function buttons, programmable  Number of system buttons  Number of system buttons  No  No  No  No  No  No  No  No  No  N			
IO link master Type of display TFT With colour display Number of colours of the display Number of grey-scales/blue-scales of display Screen diagonal Number of pixels, horizontal Number of pixels, vertical Useful project memory/user memory With numeric keyboard With alpha numeric keyboard Number of function buttons, programmable Number of buttons with LED Number of system buttons Number of system buttons  No			
Type of display With colour display Number of colours of the display Number of grey-scales/blue-scales of display  Screen diagonal Number of pixels, horizontal Number of pixels, vertical Useful project memory/user memory With numeric keyboard With alpha numeric keyboard Number of function buttons, programmable Number of buttons with LED Number of system buttons  Number of system buttons			
With colour display Number of colours of the display Number of grey-scales/blue-scales of display Screen diagonal Number of pixels, horizontal Number of pixels, vertical Useful project memory/user memory With numeric keyboard With alpha numeric keyboard Number of function buttons, programmable Number of buttons with LED Number of system buttons			
Number of colours of the display  Number of grey-scales/blue-scales of display  Screen diagonal  Number of pixels, horizontal  Number of pixels, vertical  Useful project memory/user memory  With numeric keyboard  With alpha numeric keyboard  Number of function buttons, programmable  Number of buttons with LED  Number of system buttons  Number of system buttons  16,777,216  0  0  1.024  600  600  No  No  No  No  No  No  No  No  No			
Number of grey-scales/blue-scales of display  Screen diagonal  Number of pixels, horizontal  Number of pixels, vertical  Useful project memory/user memory  With numeric keyboard  With alpha numeric keyboard  Number of function buttons, programmable  Number of buttons with LED  Number of system buttons  O  Number of system buttons			
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			
Number of pixels, horizontal  Number of pixels, vertical  Useful project memory/user memory  With numeric keyboard  With alpha numeric keyboard  No  Number of function buttons, programmable  Number of buttons with LED  Number of system buttons  1		inch	
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		men	
Useful project memory/user memory With numeric keyboard No With alpha numeric keyboard No Number of function buttons, programmable Number of buttons with LED 0 Number of system buttons 1			
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		l <sub>2</sub> D <sub>1</sub> ± -	
With alpha numeric keyboard  Number of function buttons, programmable  0  Number of buttons with LED  0  Number of system buttons  1		круте	
Number of function buttons, programmable 0 Number of buttons with LED 0 Number of system buttons 1			
Number of buttons with LED 0 Number of system buttons 1			
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 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