

#### Touch panel, 24 V DC, 5.7z, STNcolor, ethernet, profibus

Powering Business Worldwide\*

Part no. XVH-330-57MPI-1-10 Article no. 139868

### **Delivery program**

Product range		XVH300
Function		HMI
Display - Type		Color display, CSTN
Touch-technology		Resistive-Touch
Number of colours		256 colors
Resolution	Pixel	320 x 240
Portrait format		yes
Screen diagonal	Inch	5.7
Model		Metal enclosure and front plate
Operating system		Windows CE (license required)
PLC-licence		no PLC function possible
License certificates for onboard interfaces		Can be expanded as required, see Accessories -> License product certificates
built-in interfaces		1 x Ethernet 100base-TX/10base-T 1 x USB device
Front type		Standard front with standard membrane (fully laminated)
Utilization		Flush mounting
Slots		for Compact-Flash <sup>TM-</sup> Cards: 1
Memory card automation		required, see Accessories -> Memory cards
Pluggable communication cards (optional)		no
Heat dissipation	W	19.2

### **Technical data**

### Display

PLC-licence

Display - Type		Color display, CSTN
Screen diagonal	Inch	5.7
Resolution	Pixel	320 x 240
Visible screen area	mm	115 x 86
Number of colours		256 colors
Contrast ratio (Normally)		Normally 35:1
Brightness	cd/m²	Normally 150
Back-lighting		1 x CCFL dimmable via software
Service life of back-lighting	h	Normally 50000
Resistive touch protective screen		Touch sensor (glass with foil)
Operation		
Technology		Resistive-Touch 4 wire
System		
Processor		RISC CPU, 32 Bit, 200 MHz
Internal memory		DRAM (OS, Program and data memory): 64 MByte Flash (can be used for data backup): approx. 1.5 MByte available
External memory		CF-Slot: 1 x CompactFlash Card type I/II for operating system, programs and data
Back-up of real-time clock		
Battery (service life)		Zero maintenance
Backup (time at zero voltage)		Normally 10 years
Operating system		Windows CE (license required)
Engineering		
Visualisation software		GALILEO/EPAM
Interfaces, communication		
built-in interfaces		1 x Ethernet 100base-TX/10base-T 1 x USB device

no PLC function possible

USB device			USB 1.1, not galvanically isolated
Profibus			PROFIBUS galvanically isolated, max. 1.5 MBit/s (SUB-D socket 9 pole, UNC)
Slots			for Compact-Flash <sup>TM-</sup> Cards: 1
Ethernet			100Base-TX/10Base-T
Power supply			
Nominal voltage			24 V DC SELV (safety extra low voltage)
permissible voltage			Effective: 20.4-28.8 V DC (rated operating voltage -15%/+20%) Absolute with ripple: 19.2-30.0 V DC 35 V DC for a duration of < 100 ms
Voltage dips		ms	≤ 20 ms from rated voltage (24 V DC) 2 ms from undervoltage (20.4 V DC)
Power consumption	P <sub>max</sub> .	W	16
Power consumption		W	Normally 12
Heat dissipation		W	19.2
Note on heat dissipation			Heat dissipation with power consumption for 24 V, all ports and interfaces connected
Siemens MPI, (optional)			yes
Type of fuse			Yes (fuse not accessible)
Potential isolation			no potential isolation (0 V-connection to housing potential)
General			
Housing material			Metal, anodized
Front type			Standard front with standard membrane (fully laminated)
Weight		kg	1.7
Degree of protection (IEC/EN 60529, EN50178, VBG 4)			IP65 (at front), IP20 (at rear)
Approvals			
Approvals			cUL
Explosion protection (according to ATEX 94/9/EC)			II 3D Ex II T70°C IP5x: Zone 22, Category 3D (in relation to CE) EN60079-0, EN61241-1, EN13463
Applied standards and directives			
Product standards			EN 50178 EN 50178
Security			EN 60950 UL 60950
Mechanical shock resistance		g	according to IEC 60068-2-27
Vibration			To IEC 68-2-6
Environmental conditions			
Temperature			
Operation	9	°C	0 - +50
Storage / Transport	9	°C	-20 - +60
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	+ 50
Relative humidity			
Relative humidity			10 - 95%, non-condensing
Supply voltage U <sub>Aux</sub>			
Rated operational voltage	$U_{Aux}$	V	24 V DC (-15/+20%)
Protection against polarity reversal			Yes

# Design verification as per IEC/EN 61439

Potential isolation

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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	$P_{vs}$	W	19.2
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	50
EC/EN 61439 design verification			

No

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 of 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 instructi leaflet (IL) is observed.

### **Technical data ETIM 6.0**

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PLC's (EG000024) / Graphic panel (EC001412)			
Electric engineering, automation, process control engineering / Control	/ Operate and Observe (HMI) / G	Graphic panel (HMI) (ecl@ss8.1-27-24-23-02 [BAA722010])	
Supply voltage AC 50 Hz	V	0 - 0	
Supply voltage AC 60 Hz	V	0 - 0	
Supply voltage DC	V	20.4 - 28.8	
Voltage type of supply voltage		DC	
Number of HW-interfaces industrial Ethernet		1	
Number of HW-interfaces PROFINET		0	
Number of HW-interfaces RS-232		1	
Number of HW-interfaces RS-422		0	
Number of HW-interfaces RS-485		0	
Number of HW-interfaces serial TTY		0	
Number of HW-interfaces USB		1	
Number of HW-interfaces parallel		0	
Number of HW-interfaces Wireless		0	
Number of HW-interfaces other		0	
With SW interfaces		Yes	
Supporting protocol for TCP/IP		Yes	
Supporting protocol for PROFIBUS		Yes	
Supporting protocol for CAN		No	
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 No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No No
Supporting protocol for EtherNet/IP		Yes
Supporting protocol for AS-Interface Safety at Work		No No
Supporting protocol for DeviceNet Safety		No No
Supporting protocol for INTERBUS-Safety Supporting protocol for PROFIsafe		No No
		No No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		Yes
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No
Radio standard IMTS		No No
Radio standard UMTS		No No
10 link master		No CTAL
Type of display		STN
With colour display		Yes
Number of colours of the display		256
Number of grey-scales/blue-scales of display		0
Screen diagonal	inch	5.7
Number of pixels, horizontal		320
Number of pixels, vertical		240
Useful project memory/user memory	kByte	64000
With place rupping keyboard		Yes
With alpha numeric keyboard		Yes
Number of function buttons, programmable		0
Number of buttons with LED		0
Number of system buttons		1
With touch screen		Yes
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  Number of password levels		Yes 200
Printer output available		Yes
Number of online languages  Additional software components, loadable		100 Yes
Degree of protection (IP), front side		IP65
	°C	0 - 50
Operation temperature  Rail mounting possible	U	No
Wall mounting/direct mounting		No No
		No No
Suitable for eafety functions		1917
Suitable for safety functions  Width of the front	mm	
Width of the front	mm	212
	mm mm	

# Approvals

Product Standards	UL 60950-01; CSA-C22.2 No. 60950-1; IEC/EN 61131-2; CE marking
UL File No.	E208621
UL Category Control No.	NWGQ2, NWGQ8
CSA File No.	UL report applies to both US and Canada
CSA Class No.	-

North America Certification	UL recognized, certified by UL for use in Canada
Conditions of Acceptability	The investigated Pollution Degree is: 2 Proper bonding to the end-product main protective earthing termination is: Required The following end-product enclosures are required: Fire, Electrical The unit must be supplied via a SELV source. The provided Ethernet Connection is only allowed to connect to inhouse networks.
Specially designed for North America	No
Current Limiting Circuit-Breaker	No
Degree of Protection	IEC: IP65, UL/CSA Type: -

### **Dimensions**

Dimensions

# **Additional product information (links)**

IL04802008Z Enclosed kit information	
IL04802008Z Enclosed kit information	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04802008Z2013_03.pdf
MN04802008Z Operator manual XVH300	
MN04802008Z Betriebsanleitung XVH300 - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04802008Z_DE.pdf
MN04802008Z Operator manual XVH300 - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04802008Z_EN.pdf