



Touch panel, ir, 24 V DC, 5.7z, STNcolor, ethernet, RS232, RS485

Part no. XVH-342-57SKS-1-10
Article no. 139873

Delivery program

Product range			XVH300
Function			HMI
Display - Type			Color display, CSTN
Touch-technology			Infra-red 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 1 x RS485 1 x RS232
Front type			Standard front with standard membrane Laminated safety glass, non-reflective
Utilization			Flush mounting
Slots			for Compact-Flash™ Cards: 1
Memory card automation			required, see Accessories -> Memory cards
Pluggable communication cards (optional)			no
Heat dissipation		W	24

Technical data

Display

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/m ²	Normally 150
Back-lighting			1 x CCFL dimable via software
Service life of back-lighting		h	Normally 50000
Infra-red touch protective screen			Laminated safety glass, non-reflective

Operation

Technology			Infra-red touch 47 x 31 logic channels
------------	--	--	---

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 1 x RS485 1 x RS232
PLC-licence			no PLC function possible
USB device			USB 1.1, not galvanically isolated
RS-232			RS232 (Sucom A), not isolated (Sub-D 9-pin plug, UNC)
RS-485			RS485 (Suconet K), isolated (Sub-D 9-pin socket, UNC)
Slots			for Compact-Flash™ 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 _{max.}	W	21
Power consumption		W	Normally 17
Heat dissipation		W	24
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 Laminated safety glass, non-reflective
Weight		kg	1.9
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	θ	°C	0 - +50
Storage / Transport	θ	°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_{Aux}

Rated operational voltage	U _{Aux}	V	24 V DC (-15%/+20%)
Protection against polarity reversal			Yes
Potential isolation			No

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	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	24
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	50
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 6.0

PLC's (EG000024) / Graphic panel (EC001412)			
Electric engineering, automation, process control engineering / Control / Operate and Observe (HMI) / 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			1
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			1
With SW interfaces			Yes
Supporting protocol for TCP/IP			Yes
Supporting protocol for PROFIBUS			No
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		Yes
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		Yes
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		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 numeric 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		Yes
Number of password levels		200
Printer output available		Yes
Number of online languages		100
Additional software components, loadable		Yes
Degree of protection (IP), front side		IP65
Operation temperature	°C	0 - 50
Rail mounting possible		No
Wall mounting/direct mounting		No
Suitable for safety functions		No
Width of the front	mm	212
Height of the front	mm	156
Built-in depth	mm	55

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