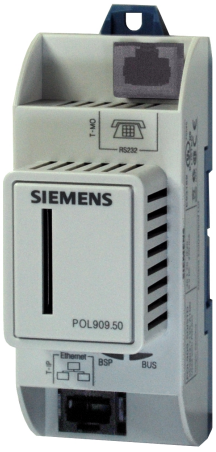
SIEMENS

Climatix™

Communication Advanced Web Module

POL909.50/xxx



Communication module to enable Web functionality for a Climatix POL6xx.xx controller

- Equipped with 64 MB of flash memory, 64 MB of SDRAM
- Internet-based device powered by ARM926EJ-S™ ARM® Thumb® Processor
- Embedded WindowsCE® platform with Web server application
- The module must be connected to the left side of a POL6xx.xx controller
- Generic tree view to read and write data points
- Platform to program Web applications
- Network parameters configurable via controller, HMI, SCOPE or Web
- Alarm server for SMS / mail
- Peer-to-peer communication
- RAS server
- Full modem RS-232 port
  - GSM / GPRS support
  - Dial in and dial out
- The POL909.50/xxx communication module is part of the Climatix product range. Refer also to Data sheet Q3900 and Mounting instructions M3910

Technology

Advanced Web module

The advanced Web module extends the communication capabilities of the Climatix controllers. It communicates using different protocols that can be loaded to the embedded WindowsCE® platform.

With the preloaded WindowsCE® operating system, all network address parameters can be set statically, handled by a DHCP server or, if nothing is present, negotiated by the AutoIP functionality of the operating system.

To manage the device, a set of Web-based extensions for the Web server are loaded to download files to access the registry or handle processes.
Unlike other solutions, the AWM can be handled in managed and unmanaged net-works.

Functionality

The advanced communication module (AWM) is an Internet-based device powered by ARM926EJ-S™ ARM® Thumb® Processor.

Equipped with 64 MB of flash memory, 64 MB of SDRAM, the possibility of using SD-card and preloaded with WindowsCE operating system, the AWM is a powerful starting point for an Internet or communication application.

To allow access to local area networks, the onboard Ethernet controller provides the flexibility to integrate this device into networks.

Software Web server

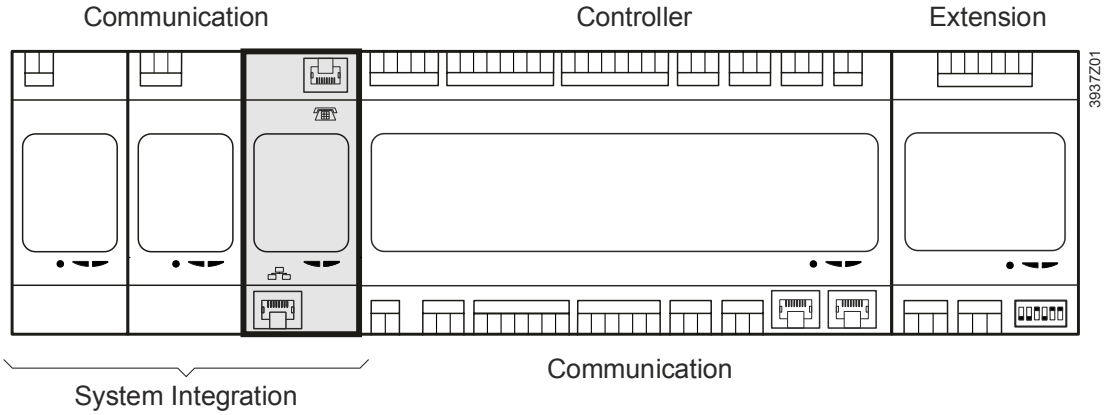
The Web server with its BGI capabilities and the remote management extensions (RMS) enable the user to implement and load his own Web pages and extend them with programmed Web functions. Using the RMS, all pages can be loaded to the file system.

No more recompilations or firmware setup is needed. The access to certain pages can be granted based on user or group policies.

Generic tree view

The preloaded generic tree view application always reflects the loaded control program. After a modification of the controller application, only one restart is necessary to enable the operation of data points inside a Web browser. With the Java technologies used, this operation always shows the actual process data of the Climatix controller.

Installation concept



Technical data

General Data	
Dimensions (w x h x d)	45 x 110 x 75 mm
Materials and Colors	• Base: Plastic, pigeon-blue RAL 5014 • Housing: Plastic, light-grey RAL 7035
Weight excl. packaging	102g

Power supply	
Power supply	Via system interface from controller DC 5 V (± 5 %), max. 270 mA

Hardware	
Microprocessor	ARM926EJ-S™ ARM® Thumb® Processor, 400 MHz
Memory	• 64 MB NAND FLASH (3.3 V) • 64 MB SDRAM (133 MHz) • SD-Card support
SD-Card slot	SD-Card up to 8 GB

Interfaces	
IP	
Type	Ethernet 10/100 Mbit (IEEE 802.3U)
Cable connection	RJ45 jack, 8 pins
Data connectivity	100 BaseT Ethernet, with autosensing
Modem port	
Type	Modem: RJ45-RS-232 serial
Cable connection	RJ45 jack, 8 pins
Features	Support of GSM, GPRS modems

Interface plug	
COMM interface plug	Equipped with board-to-board: ZEC1,0/10-LPV-3,5 GY35AUC2CI1

Flash programming	
Flash programming	JTAG support through CPU, download via Ethernet

Software	
Operating system	Windows CE 6.0
Storage	Flash File System
Web server	With BGI extension and access security
RMS	Remote management for file handling, process management and registry
Generic treeview	Out of the box operation of loaded HVAC applications

Ambient conditions and protection classification	
Degree of protection of housing to EN 60529	IP20
Climatic ambient conditions Transport as per EN 60721-3-2	 Class 2K3 Temperature: -40…70 °C Humidity: < 95 % r.h. Atmospheric pressure: Min. 260 hPa, corresponding to max. 10000 m above sea level
Operation as per EN 60721-3-3	Class 3K7 Temperature: -40...70 °C Air humidity: < 90% r.h. Atmospheric pressure: Min. 700 hPa, corresponding to max. 3000 m above sea level

Standards, directives and approvals	
Product standard	EN 60730-1 Automatic electronic controls for household and similar use
Electromagnetic compatibility	For residential, commercial, and industrial environments.
EU conformity (CE)	CE1T3930xx
RCM conformity	CB1T3909en_C1
Listings	UL916, UL873 http://database.ul.com/ CSA C22.2M205 http://www.csagroup.org
EAC	Eurasian conformity
Environmental compatibility	The product environmental declaration (CB1E3950_01) contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Functions

LEDs "BSP" and "BUS" for diagnostics

LED	Color	Flashing frequency	Meaning/Mode
BSP	Red/Green	1 s red / 1 s green	BSP upgrade mode
	Orange	Flashing at 1 Hz	BSP upgrade failed, bad image
	Orange/Green	1 s orange / 1 s green	BSP upgrade partial done, wait for continue
	Green	Steady "on"	BSP operating and communication with controller working
	Orange	Steady "on"	BSP operating but no communication with controller
	Red	Flashing at 2 Hz	BSP error (Software error)
	Red	Steady "on"	Hardware fault
	Red/Orange	500 ms / 1000 ms	Emergency OS is operating, execute BSP upgrade again
BUS	Green	Steady "on"	• All applications running
	Red	Steady "on"	• At least one application has error-state
	Orange	Steady "on"	• Startup. The LED stays yellow until all applications are in state OK/Running
	Red/Green	1 s red / 1 s green	• Installing or updating SCADA system • Installing or updating HMI4WEB
	Orange	Flashing at 1 Hz	• SCADA Installation/Update failed • HMI4WEB Installation/Update failed

If both LEDs stay dark: Power supply is outside the allowed range!

Ordering

Type	Stock number	Designation
POL909.50/STD	S55803-Y195-A100	Advanced WEB communication module 2

Delivery/Included:

Phoenix Type	Designation
ZEC 1,0/10-LPV-3,5 GY35AUC2CI1	Board-to-board COMM interface plug

Devices are from PHOENIX CONTACT, www.phoenixcontact.com.

Product documentation

Document ID	Title	Topic
Q3900en	Climatix range	Climatix product range
M3910	Mounting instruction Climatix	Mounting and installation
J3935	Integration guide: POL909.50	Integration workflow

Notes

Security

National safety regulations

⚠ CAUTION

National safety regulations

Failure to comply with national safety regulations may result in personal injury and property damage

- Observe national provisions and comply with the appropriate safety regulations.

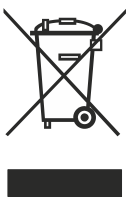
Passwords

- After commissioning: Change the default password. A secure password
  - comprises of letters, numbers and special characters
  - is at least 20 characters long
  - does not include a name or words from dictionaries or similar

Engineering: concept

- The communication module is attached to the controller with a board-to-board connector
- The connection to Ethernet is made via T-IP port (RJ45 jack)

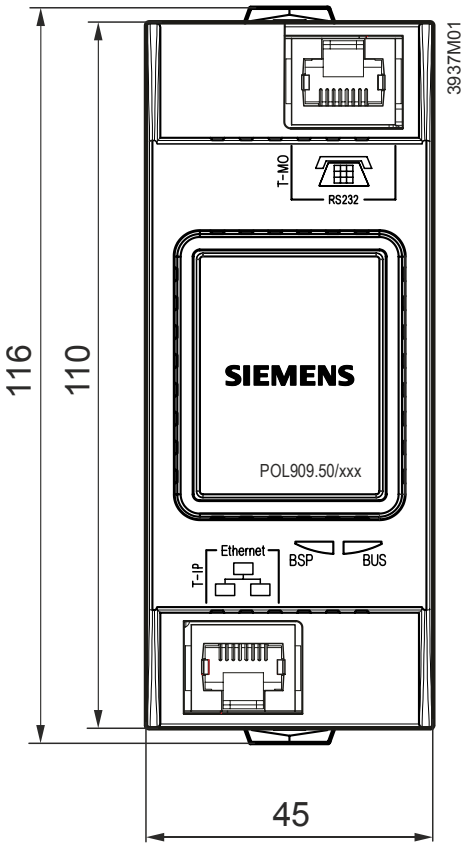
Disposal

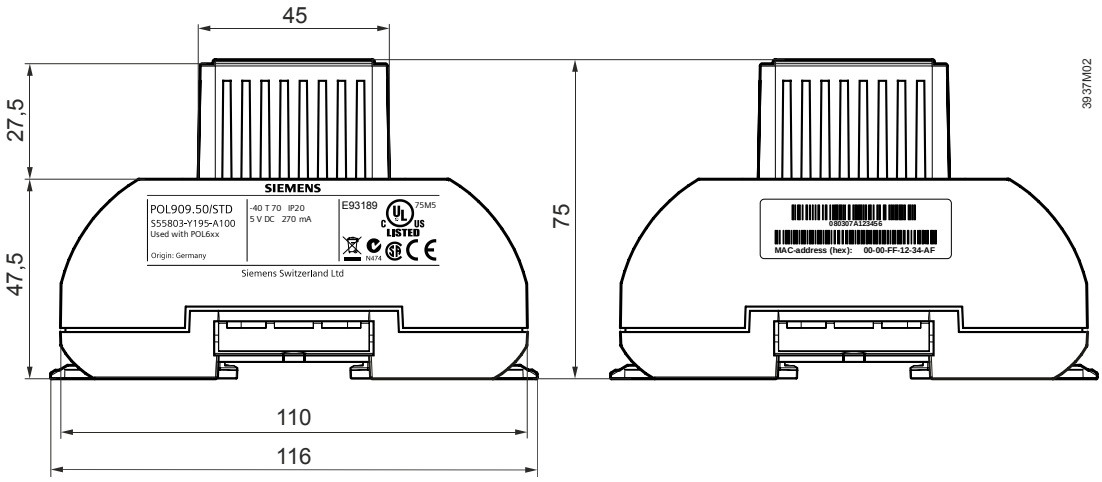


The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Dimensions





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