SIEMENS

Climatix^{TM}

Climatix Communication LON Module
POL906.00/xxx

Communication module to connect a POL6xx.xx Climatix controller to a LON network.

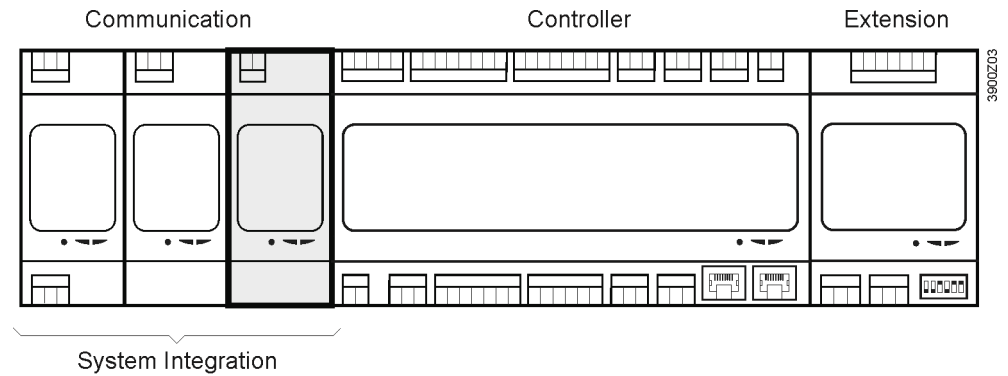The POL906.00/xxx communication module offers the following features:

- Integration into a building automation and control system via LON network
- It includes a LON network controller (Neuron chip) which handles the complete LON network protocol and the user application
- Galvanically isolated connection to the LON network via the 78 kbaud TP/FT-10 transceiver
- User applications can be downloaded into the flash memory using standard LON tools
- Tooling via LON
- The module must be connected to the left side of a POL6xx.xx controller

The POL906.00/xxx communication module is part of the Climatix product range (also refer to Data Sheet 3900 and Mounting instructions M3910).

The LON protocol	LonWorks is a networking platform specifically created to address the unique performance, reliability, installation, and maintenance needs of control applications. The platform is built on a protocol created by Echelon Corporation for networking devices via media such as twisted pair, powerlines, fiber optics, and RF. It is popular for the automation of various functions within buildings such as lighting and HVAC.

Installation concept

System Integration

Technical data

General data

Dimensions	W x H x D: 45 x 110 x 75 mm
Weight excl. packaging	85 g
Base	Plastic, pigeon-blue RAL 5014
Housing	Plastic, light-grey RAL 7035
Power supply	Via system interface from controller
	DC 5 V (+5% / –5%), max. 80 mA

LON

LON interfaces	Plug-in terminals
	Galvanically isolated
	2 wires, interchangeable
LON data memory	56 kbyte flash memory for the user application

Connection terminals

Example FKCT

Equipped with plug	1 Phoenix FKCT 2,5 /2-ST
For other types of plug (optional), refer to PolyCool range document 3900 (CB1Q3900en_xx)	
Solid wire	0.5…2.5 mm²
Stranded wire (twisted or with ferrule)	0.5…1.5 mm²

COMM interface plug

Board-to-board   ZEC1,0/10-LPV-3,5 GY35AUC2CI1

Board-to-board connector

System interface	Equipped with board-to-board plug	ZEC1,0/4-LPV-3,5 GY35AUC2CI1

Cable types	LON	Refer to LON Manual

Environmental conditions	Operation	IEC 721-3-3
	Temperature	-40...70 °C
	Humidity	<90% r.h.
	Atmospheric pressure	Min. 700 hPa, corresponding to max. 3,000 m above sea level
	Transport	IEC 721-3-2
	Temperature	-40...+70 °C
	Humidity	<95% r.h.
	Atmospheric pressure	Min. 260 hPa, corresponding to max. 10,000 m above sea level

Protection	Degree of protection	IP20 (EN 60529)

Standards	Product safety	
	Automatic electrical controls	EN 60730-1
	Electromagnetic compatibility	
	Immunity	EN 60730-1 +A16
	Emissions	EN 60730-1 +A16
	CE conformity	
	EMC directive	2004/108/EC
	Low-voltage directive	2006/95/EC
	Listings	
		UL916, UL873
		CSA C22.2M205
	RoHS directive	
		2002/95/EC (Europe)
		ACPEIP (China)

Ordering data	Climatix LON module	POL906.00/STD

LON service pin and LEDs for diagnostics

Service pin button > used for LON addressing

BSP   BUS

LEDs for BSP and BUS diagnostics (green, red and yellow)

Mode	BUS LED status
Lon communication ok	Green on
Initialization of LON communication	Yellow on
Hardware error	Red on

Mode	BSP LED status
BSP running and communication with controller	Green on
BSP running but no communication with controller	Yellow on
BSP error (software error)	Red blinking at 2 Hz
Hardware error	Red on
BSP upgrade mode	Every second alternating between red and yellow

Engineering notes

- The communication module is attached to the controller with a board-to-board connector
- The connection to the LON bus is made via the T1 port

Disposal notes

The module contains electrical and electronic components and must not be disposed of together with household waste.

Local and currently valid legislation must be observed!

Layout of POL906.00/xxx communication module

Right side   Left side

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