

Controller - ILC 131 ETH - 2700973

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The controller enables integration of I/O signals from MODBUS periphery devices into the control program via MODBUS/TCP. Programming takes place with PC Worx Express or PC Worx (IEC 61131-3).

Product description

With the ILC 131 ETH, the highly modular Inline controller range from Phoenix Contact has been extended to include a powerful high-performance controller. This controller can be used to extend the possible field of application of Inline controllers right down to smaller applications. With direct integration into the Inline automation system, the high-performance controller is highly modular and can be adapted to the relevant application requirements. Its integrated Ethernet interface enables parameterization and programming using PC Worx automation software according to IEC 61131, and it can also exchange data with OPC servers simultaneously and communicate with TCP/IP-compatible devices.

The Inline controller range covers a wide performance range. From entry-level versions to high-end controllers, users can find the right controller for their application. Within the product portfolio, users can choose between controllers with different computing capacities, with or without PROFINET controllers, and with or without GL approval.

Product Features

- Numerous protocols supported such as: HTTP, FTP, SNTP, SNMP, SMTP, SQL, MySQL, etc.
- Free engineering with PC Worx Express (IEC 61131-3)
- Complete fieldbus master (4096 I/O points)
- Integrated web server for visualization with WebVisit
- FTP server
- Flash file system



Key commercial data

Packing unit	1 PCE
GTIN	 4 046356 665490
Custom tariff number	85371091
Country of origin	GERMANY

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Technical data

Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	80 mm
Height	119.8 mm
Depth	71.5 mm

Control system

Programming tool	PC Worx/PC Worx Express
Diagnostics tool	DIAG+
Configuration tool	Config+ Version 1.01 or later

Mechanical design

Weight	285 g
Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above mean sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above mean sea level)
Vibration (operation)	5 g
Shock	25g, Criterion 1, according to IEC 60068-2-27

Data interfaces

Interface	INTERBUS local bus (master)
Connection method	Inline data jumper
Transmission speed	500 kBaud / 2 MBaud umschaltbar
Interface	Parameterization/operation/diagnostics
Connection method	RS-232-C, 6-pos. MINI-DIN socket (PS/2), Ethernet 10/100 (RJ45)
Transmission speed	max. 115,2 kBit/s
Interface	Ethernet 10Base-T/100Base-TX
Connection method	RJ45 socket
Transmission speed	10/100 MBit/s

PROFINET IO

Device function	PROFINET device
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Power supply

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Technical data

Power supply

Typical current consumption	210 mA
Max. current consumption	870 mA (370 mA communications power + 500 mA analog voltage supply)
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Residual ripple	± 5 %

Fieldbus function

Amount of process data	max. 2048 Bit (INTERBUS)
	max. 8192 Bit (internal Modbus Client)
Number of supported devices	max. 63
Number of local bus devices that can be connected	max. 63 (observe current consumption)
Number of devices with parameter channel	max. 8
Module classification	INTERBUS master

Direct I/Os

Input name	Digital inputs
Connection method	Inline potential distributor
Output name	Digital outputs
Connection method	2, 3, 4-wire
Maximum output current per channel	500 mA

IEC 61131 runtime system

Programming tool	PC Worx/PC Worx Express
Processing speed	1.7 ms (1 K mix instructions)
	90 µs (1 K bit instructions)
Program memory	192 kByte (16 K instructions (IL))
Data memory	192 kByte
Retentive data memory	8 kByte (NVRAM)
Number of data blocks	(depends on data memory)
Number of timers, counters	(depends on data memory)
Number of control tasks	8
Realtime clock	Yes

Classifications

eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27240601
eCl@ss 5.0	27242215

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Classifications

eCl@ss

eCl@ss 5.1	27242207
eCl@ss 6.0	27242207
eCl@ss 7.0	27242207
eCl@ss 8.0	27242207

ETIM

ETIM 3.0	EC000236
ETIM 4.0	EC000236
ETIM 5.0	EC000236

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172018
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

Approvals

Approvals

UL Listed / cUL Listed / UL Listed / cUL Listed / cULus Listed

Ex Approvals

ATEX / ATEX

Approvals submitted

Approval details

UL Listed 

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Approvals



Accessories

Accessories

Cable/conductor

Connecting cable - PRG CAB MINI DIN - 2730611



Connecting cable, for connecting the controller to a PC (RS-232) for PC Worx, 3 m in length

Memory

Memory - SD FLASH 256MB - 2988120



Program and configuration memory, plug-in, 256 MB

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Accessories

Memory - SD FLASH 256MB APPLIC A - 2988816



Program and configuration memory, plug-in, 256 Mbytes with license key for function block libraries, e.g., for: SNMP, SQL, wireless, motion functions, etc.

Memory - SD FLASH 256MB PDPI PRO - 2700552



Program and configuration memory, plug-in, 256 MB with license key for licensing the PDPI - PRO function block for precise multi-channel controllers with self-optimization, additional functions: e.g., for setpoint processing, for heating and cooling functions.

Memory - SD FLASH 256MB PDPI BASIC - 2700551



Program and configuration memory, plug-in, 256 MB with license key for licensing the PDPI - BASIC function block for precise multi-channel controllers with self-optimization, additional functions: e.g., for heating and cooling functions or hydraulic movements.

Memory - SD FLASH 2GB - 2988162



Program and configuration memory

Memory - SD FLASH 2GB APPLIC A - 2701190



Program and configuration memory, plug-in, 2 Gbytes with license key for function block libraries, e.g., for: SNMP, SQL, wireless, motion functions, etc.

Software

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Accessories

Software - AX OPC SERVER - 2985945



AX OPC SERVER, communication interface for OPC-capable visualization with PC WORX-based controls.