

Controller - ILC 171 ETH 2TX - 2700975

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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 171 ETH 2TX, 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 interfaces enable 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 pc
Weight per Piece (excluding packing)	360.0 GRM
Custom tariff number	85371091
Country of origin	Germany

Technical data

Note

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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

Ambient conditions

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)
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	5g

Control system

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

Mechanical design

Weight	295 g
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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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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. 4096 Bit (INTERBUS)
	max. 32768 Bit (internal Modbus Client)
Number of supported devices	max. 128
Number of local bus devices that can be connected	max. 63 (observe current consumption)
Number of devices with parameter channel	max. 24
Number of branch terminals with remote bus branch	max. 3
Module classification	INTERBUS master

Direct I/Os

Output name	Digital outputs
Number of outputs	4
Connection method	2, 3, 4-wire
Maximum output current per channel	500 mA
Input name	Digital inputs
Number of inputs	8
Connection method	Inline potential distributor
Description of the input	EN 61131-2 type 1 NPN/PNP

IEC 61131 runtime system

Programming tool	PC Worx/PC Worx Express
Processing speed	1.5 ms (1 K mix instructions)
	90 µs (1 K bit instructions)
Program memory	512 kByte (43 K instructions (IL))
Mass storage	512 kByte
Retentive mass storage	48 kByte (NVRAM)
Number of data blocks	depends on mass storage
Number of timers, counters	depends on mass storage
Number of control tasks	8
Realtime clock	Yes

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Classifications

eCl@ss

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

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UL Listed / cUL Listed / UL Listed / cUL Listed / DNV / RINA / GL / GL-SW / BSH / LR / GL / DNV / RINA / GL-SW / BSH / BV / cULus Listed / GL

Ex Approvals

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

Approvals submitted

Approval details

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DNV

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