

Controller - ILC 390 PN 2TX-IB - 2985314

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Inline Controller with PROFINET interfaces for coupling to other controllers and systems, with programming options according to IEC 61131-3, complete with plug and labeling field.

Product Description

With the ILC 390 PN 2TX-IB, the highly modular Inline Controller range from Phoenix Contact has been extended to include a high-performance PROFINET controller. This controller can be used to extend the field of application of Inline Controllers through to medium-sized applications. With direct integration in the Inline automation system, the compact controller is highly modular and can be adapted to the relevant application requirements. Its integrated PROFINET 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 through 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.

Your advantages

- ✓ Engineering with PC Worx (IEC 61131-3)
- ✓ Integrated PROFINET controller and PROFINET device
- ✓ Numerous protocols supported such as: HTTP, FTP, SNMP, SMTP, SQL, MySQL, etc.
- ✓ Integrated Ethernet interface
- ✓ Complete fieldbus master (8192 I/O points)
- ✓ FTP server
- ✓ Integrated web server for visualization with WebVisit
- ✓ Flash file system



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 077705
GTIN	4046356077705
Weight per Piece (excluding packing)	820.000 g

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Custom tariff number	85371091
Country of origin	Germany

Technical data

Dimensions

Width	182 mm
Height	140.5 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 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (2000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	5g, accordance to IEC 60068-2-6

Control system

Engineering tool	PC WORX
Programming languages supported	Programming in acc. with IEC 61131-3
Diagnostics tool	DIAG+ from version 1.14

IEC 61131 runtime system

Engineering tool	PC WORX
Program memory	typ. 2 Mbyte
Mass storage	4 Mbyte
Retentive mass storage	96 kByte (NVRAM)
Number of control tasks	16
Realtime clock	Integrated (battery backup)

Fieldbus function

Amount of process data	max. 8192 Bit (INTERBUS-Master)
	max. 512 Bit (INTERBUS-Slave)
Number of supported devices	max. 512 (in total, of which 254 are remote bus devices/bus segments)
Number of local bus devices that can be connected	max. 63 (observe current consumption)
Number of devices with parameter channel	max. 62
Number of supported branch terminals with remote bus branch	max. 15
Program memory	typ. 2 Mbyte

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Technical data

Data interfaces

Interface	Ethernet 10Base-T/100Base-TX
Number	2
Connection method	RJ45 jack
Transmission speed	10/100 Mbps
Interface	INTERBUS local bus (master)
Number	1
Connection method	Inline data jumper
Transmission speed	500 kBaud / 2 MBaud (can be switched)
Interface	Parameterization/programming/diagnostics
Number	1
Connection method	6-pos. MINI DIN socket (PS/2)
Interface	INTERBUS (Slave)
Number	1
Connection method	D-SUB-9 female/D-SUB-9 male

PROFINET

Device function	PROFINET-Controller
Specification	Version 1.1
Update rate	min. 1 ms

Direct I/Os

Input name	Digital inputs
Number of inputs	12
Connection method	Inline potential distributor
Connection technology	2, 3, 4-wire
Description of the input	Eight fast inputs, interrupt input
Output name	Digital outputs
Number of outputs	4
Connection method	Spring-cage connection
Connection technology	2, 3, 4-wire
Maximum output current per channel	500 mA

Power supply

Typical current consumption	250 mA (no local bus device connected during idling, bus inactive)
Supply voltage	24 V DC $\pm 5\%$
Supply voltage range	20.4 V DC ... 30 V DC
Residual ripple	$\pm 5\%$
Power dissipation	max. 6 W

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Technical data

Mechanical design

Weight	440 g
Diagnostics display	No
Controller redundancy	yes
Note on controller redundancy	applicative system redundancy possible
Safety function	No

General data

Processor	624 MHz
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Standards and Regulations

Vibration (storage/transport)	5g, 10 Hz ... 150 Hz, in accordance with IEC 60068-2-6
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	5g, accordance to IEC 60068-2-6

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Classifications

eCl@ss

eCl@ss 10.0.1	27242207
eCl@ss 4.0	27250200
eCl@ss 4.1	27240600
eCl@ss 5.0	27242700
eCl@ss 5.1	27242700
eCl@ss 6.0	27242200
eCl@ss 7.0	27242207
eCl@ss 8.0	27242207
eCl@ss 9.0	27242207

ETIM

ETIM 2.0	EC000236
ETIM 3.0	EC000236
ETIM 4.0	EC000236
ETIM 5.0	EC000236
ETIM 6.0	EC000236

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Classifications

ETIM

ETIM 7.0	EC000236
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UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172018
UNSPSC 12.01	43201404
UNSPSC 13.2	39122114
UNSPSC 18.0	39122114
UNSPSC 19.0	39122114
UNSPSC 20.0	39122114
UNSPSC 21.0	39122114

Accessories

Accessories

Drivers and interfaces

Software - AX OPC SERVER - 2985945



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

Parameterization memory

Memory - CF FLASH 256MB - 2988780



Program and configuration memory, plug-in, 256 MB

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Memory - CF FLASH 256MB APPLIC A - 2988793



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

Memory - CF FLASH 256MB PDPI BASIC - 2700549



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 - CF FLASH 256MB PDPI PRO - 2700550



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 - CF FLASH 2GB - 2701185



Program and configuration memory, plug-in, 2 Gbytes.

Memory - CF FLASH 2GB APPLIC A - 2701189



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

Programming

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Accessories

Software - PC WORX DEMO - 2985725



Software package for PC-based automation solutions, PC WORX DEMO, contains all 5 IEC languages, with MSFC compiler, max. 16 bytes input and output data

Software - PC WORX BASIC LIC - 2985275



Software package for PC-based automation solutions, PC WORX BASIC license, contains all 5 IEC languages, without MSFC compiler, max. 2048 byte input and output data, version-specific license key

Software - PC WORX PRO LIC - 2985385



Software package for PC-based automation solutions, PC WORX PRO license, contains all 5 IEC languages, with MSFC compiler, max 128 kB input and output data, version-specific license key

Programming cable

Connecting cable - COM CAB MINI DIN - 2400127



Connecting cable, for connecting the controller to a PC (RS-232) for PC WORX with flow control, 3 m in length

Software - IPASSIGN - 2701094



IPAssign is an easy to use tool for setting the IP address of devices which rely on BOOTP. No installation or administrative rights are required to use IPAssign.

This product is free and only available from the "Downloads" tab.

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Accessories

Necessary add-on products

Memory - CF FLASH 256MB - 2988780



Program and configuration memory, plug-in, 256 MB

Memory - CF FLASH 256MB APPLIC A - 2988793



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

Memory - CF FLASH 2GB - 2701185



Program and configuration memory, plug-in, 2 Gbytes.

Memory - CF FLASH 2GB APPLIC A - 2701189



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

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