

# Controller - ILC 191 ME/AN - 2700074

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Inline controller with integrated pulse/direction/PWM interface, RS-485/RS-422, analog inputs (0 ... 10 V), and analog outputs (0 ... 10 V), with programming options according to IEC 61131-3

## Product Description

The ILC 191 ME/AN modular small-scale controller for the Inline I/O system is at the heart of Easy Automation. The new ILC 1X1 series is characterized by its support for the Modbus/TCP and PROFINET Ethernet-based protocols. A new feature is the support for an optional SD card. The controller already has 8 digital inputs and 4 outputs, a two-channel pulse/direction/PWM interface, an integrated RS-232 interface and RS-485/RS-422 interface, and a two-channel analog output and input (0 - 10 V).

## Your advantages

- ✔ Numerous protocols supported such as: HTTP, FTP, SNTP, SNMP, SMTP, SQL, MySQL, etc.
- ✔ Modbus/TCP-Client
- ✔ PROFINET-Device
- ✔ Large program memory and mass storage (1024 kB/1024 kB)
- ✔ Modbus/TCP server
- ✔ HTML 5
- ✔ Free engineering with PC Worx Express (IEC 61131-3)
- ✔ Integrated pulse/direction/PWM interface
- ✔ Integrated RS-485/RS-422 interface
- ✔ Integrated analog I/Os
- ✔ Web server, FTP server, and Flash file system



## Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 1 pc          |
| GTIN         |               |
| GTIN         | 4046356479097 |

## Technical data

### Note

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

# Controller - ILC 191 ME/AN - 2700074

## Technical data

### Dimensions

|        |          |
|--------|----------|
| Width  | 164 mm   |
| Height | 136.8 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 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  |

### Control system

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Engineering tool                | PC WORX                              |
|                                 | PC WORX EXPRESS                      |
| Programming languages supported | Programming in acc. with IEC 61131-3 |
| Diagnostics tool                | DIAG+                                |
| Configuration tool              | Config+ Version 1.01 or later        |

### IEC 61131 runtime system

|                         |  |
|-------------------------|--|
| Engineering tool        | PC WORX                                    |
|                         | PC WORX EXPRESS                            |
| Program memory          | 1 Mbyte                                    |
| Mass storage            | 1 Mbyte                                    |
| Retentive mass storage  | 48 kByte (NVRAM)                           |
| Number of control tasks | 8  |
| Realtime clock          | Yes  |
| Battery                 | Integrated (rechargeable battery buffered) |

### Fieldbus function

|   |  |
|---|--|
| Amount of process data                                      | max. 4096 Bit (INTERBUS)                     |
|   | max. 32768 Bit (internal Modbus /TCP 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 supported branch terminals with remote bus branch | max. 3                                       |
| Program memory  | 1 Mbyte                                      |

### Data interfaces

|           |                              |
|-----------|------------------------------|
| Interface | Ethernet 10Base-T/100Base-TX |
|-----------|------------------------------|

# Controller - ILC 191 ME/AN - 2700074

## Technical data

### Data interfaces

|                    |  |
|--------------------|--|
| 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/operation/diagnostics |
| Number             | 1                                      |
| Connection method  | 6-pos. MINI DIN socket (PS/2)          |
| Transmission speed | max. 115.2 kbps                        |
| Interface          | RS-422/-485                            |
| Number             | 1                                      |
| Connection method  | 4-pos. for full duplex                 |
|                    | 2-pos. for half duplex                 |

### PROFINET

|                 |                 |
|-----------------|-----------------|
| Device function | PROFINET device |
|-----------------|-----------------|

### Direct I/Os

|                                    |   |
|------------------------------------|---|
| Input name                         | Digital inputs  |
| Number of inputs                   | 8   |
| Connection method                  | Inline potential distributor                                |
| Connection technology              | 2, 3, 4-wire  |
| Description of the input           | EN 61131-2 type 1 NPN/PNP                                   |
| 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  |
| Input name                         | Analog inputs   |
| Number of inputs                   | 2   |
| Connection method                  | Inline potential distributor                                |
| Connection technology              | 2-wire  |
| Voltage input signal               | 0 V DC ... 10 V DC (Resolution: 11 bits)                    |
| Output name                        | Analog outputs  |
| Number of outputs                  | 2   |
| Connection method                  | Inline potential distributor                                |
| Connection technology              | 2-wire  |
| Voltage output signal              | 0 V DC ... 10 V DC (Resolution: 11 bits)                    |
| Output name                        | Pulse directional output for 5 V signals                    |
| Number of pulse direction outputs  | 2 (can be used as an alternative to pulse width modulation) |

# Controller - ILC 191 ME/AN - 2700074

## Technical data

### Direct I/Os

|                       |                        |
|-----------------------|------------------------|
| Connection method     | Spring-cage connection |
| Connection technology | 2, 3-wire              |
| Output voltage        | 5 V                    |
| Limit frequency       | 150 kHz                |

### Power supply

|                             |  |
|-----------------------------|--|
| Typical current consumption | 310 mA                                       |
| Max. current consumption    | 960 mA (460 mA + 500 mA analog power supply) |
| Supply voltage              | 24 V DC                                      |
| Supply voltage range        | 19.2 V DC ... 30 V DC                        |
| Residual ripple             | ± 5 %  |
| Power dissipation           | max. 7.5 W                                   |

### Mechanical design

|                       |       |
|-----------------------|-------|
| Weight                | 285 g |
| Diagnostics display   | No    |
| Controller redundancy | No    |
| Safety function       | No    |

### General data

|           |                       |
|-----------|-----------------------|
| Processor | Altera Nios II 64 MHz |
|-----------|-----------------------|

### Standards and Regulations

|                                    |   |
|------------------------------------|---|
| Electromagnetic compatibility      | Conformance with EMC Directive 2014/30/EU   |
| Interference emission              | Noise emission test as per EN 61000-6-4 EN 55011 Class A  |
| Immunity to surge                  | Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: 0.5 kV/0.5 kV (symmetrical/asymmetrical), fieldbus cable shield 1 kV |
| Immunity to burst                  | Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion A, all interfaces 1 kV Criterion B, all interfaces 2 kV  |
| Immunity to EF                     | Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m  |
| Immunity to ESD                    | Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge  |
| Immunity to conducted interference | Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V  |
| Vibration (storage/transport)      | 5g  |
| Shock                              | 25g, Criterion 1, according to IEC 60068-2-27   |
| Vibration (operation)              | 5g  |

### Environmental Product Compliance

|            |  |
|------------|--|
| REACH SVHC | Lead 7439-92-1                                 |
| China RoHS | Environmentally Friendly Use Period = 50 years |

# Controller - ILC 191 ME/AN - 2700074

## Technical data

### Environmental Product Compliance

|  |   |
|--|---|
|  | 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 |
| ETIM 7.0 | EC000236 |

### 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 |

## Approvals

### Approvals

---

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

# Controller - ILC 191 ME/AN - 2700074

## Approvals

Ex Approvals

ATEX

### Approval details

|           |  |   |               |
|-----------|--|---|---------------|
| UL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 140324 |
|-----------|--|---|---------------|

|            |  |   |               |
|------------|--|---|---------------|
| cUL Listed |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 140324 |
|------------|--|---|---------------|

|     |  |  |                          |
|-----|--|--|--------------------------|
| EAC |  |  | RU *-<br>DE.A*30.B.00238 |
|-----|--|--|--------------------------|

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|

## Accessories

Accessories

Drivers and interfaces

Software - AX OPC SERVER - 2985945



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

Software - PC WORX UA SERVER-PLC 10 - 2402684



OPC UA server for communication with a maximum of 10 modular small-scale controllers (AXC 1xxx or ILC 1x1)

## Controller - ILC 191 ME/AN - 2700074

### Accessories

Software - PC WORX UA SERVER-PLC 40 - 2402685



OPC UA server for communication with a maximum of 25 controllers

---

Software - PC WORX UA SERVER-PLC 80 - 2402686



OPC UA server for communication with a maximum of 200 controllers

---

### Parameterization memory

Memory - SD FLASH 512MB - 2988146



Program and configuration memory, plug-in, 512 Mbyte.

---

Program / configuration memory - SD FLASH 512MB APPLIC A - 2701799



Program and configuration memory for extending the internal Flash memory, plug-in, 512 MB, with license key for function block libraries, e.g., for: SNMP, SQL, wireless, motion functions, etc.

---

Memory - SD FLASH 512MB PDPI BASIC - 2701800



Program and configuration memory, plug-in, 512 MB with license key for licensing the PDPI - BASIC functional block for precise multi-channel controllers with self-optimization, e.g., for heating and cooling functions or hydraulic movements.

---

## Controller - ILC 191 ME/AN - 2700074

### Accessories

Memory - SD FLASH 512MB PDPI PRO - 2701801



Program and configuration memory, plug-in, 512 MB with license key for licensing the PDPI - PRO functional block for precise multi-channel controllers with self-optimization, additional functions: e.g., for setpoint processing, for heating and cooling functions.

---

Program / configuration memory - SD FLASH 2GB - 2988162



Program and configuration memory, for extending the internal flash memory, pluggable, 2 GB.

---

Program / configuration memory - SD FLASH 2GB APPLIC A - 2701190



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

---

### 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.

---

---



Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [I/O Modules](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[70L-IDC5S](#) [70L-OAC-L](#) [70Z3289-4](#) [G21960000700](#) [G21960002700](#) [G34960002700](#) [G88104401](#) [OACU](#) [C4SWOUT](#) [PB16H](#)  
[G34960001700](#) [G3TA-OA101SZ-1](#) [DC24](#) [G77-S](#) [G78-16-E](#) [5607189](#) [DA5](#) [ODC-24A](#) [IDC5P](#) [FC6A-N16B1](#) [6421](#) [70MRCQ32-HL](#)  
[G3TAOD201SDC24](#) [C200H-LK201-V1](#) [G3TA-OA202SZ-US](#) [DC12](#) [GT1-OD16](#) [GT1-AD04CST](#) [B7AM-6BS](#) [70GRCQ24-HS](#) [6422](#)  
[84110410](#) [GT1-OD16MX](#) [G7VC-OC16-B7](#) [70MRCK24-DIN](#) [6202](#) [6402](#) [PI/NI-2D/24](#) [FC6A-J2C1](#) [FC6A-KC1C](#) [FC6A-R081](#) [FC6A-](#)  
[J8CU1](#) [GP32900003700](#) [641-480-5022](#) [PB16H](#) [84145010](#) [84110210](#) [FRUSB1601](#) [PCL-720+-BE](#) [FRRJ451601](#) [AP24MX3DB25F](#) [ADAM-](#)  
[5053S-AE](#)