

PLC
IndraLogic L
Controller based



PLC

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Documentation



- Powerful, with extensive functionality and interfaces
- Scalable with the innovative IndraControl L platform
- Centralized and decentralized I/O
- Open interfaces for networking via Ethernet or PROFIBUS
- Easy expansion with function modules (IndraLogic L40)
- easy integration of HMI solutions

The IndraLogic L PLC solutions are based on the scalable IndraControl L control platform. It is available in a uniform and compatible system design for your applications in different performance classes. Their compact construction with terminal technology and simple DIN rail mounting make them suitable for use in every type of automation environment. The elimination of wearing parts such as batteries and fans permits high reliability and cost savings in a maintenance-free design. Starting with the IndraLogic L20 control, an integrated display allows convenient diagnostics and parameterization of the control without additional hardware. Eight fast inputs and outputs are integrated in the control at no additional cost.

Technical data

		IndraLogic L10	IndraLogic L20	IndraLogic L40
Control units				
Runtime system	Conforming with IEC 61131-3	●	●	●
Multitasking		●	●	●
Data management	Code, data, retentive data, user data	●	●	●
Storage	Boot project	●	●	●
	PLC project as packed archive file	●	●	●
	User data to the internal memory and a removable storage medium	●	●	●
Support	Function modules			4
	System events	●	●	●
User memory	Total: code, data	4 MB	3 MB	24 MB
Retentive memory	Total: system, user	32 kB	64 kB	128 kB
On-board diagnosis and settings				
Status display (boot, sercos, test)	Display / LED	-/●	●/-	●/-
Errors, warnings, messages, system reset	Display, keys / LED	-/●	●/-	●/-
Ethernet settings (IP address)	Display, keys / LED	-/●	●/-	●/-

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Voltage monitoring, watchdog		●	●	●
Relay output ready for operation		●	●	●
Interfaces on board				
PROFIBUS	Master		●	●
	Slave		●	●
EtherNet/IP	Adapter (Slave)	●	●	●
Ethernet TCP/IP		●	●	●
Control grouping	Ethernet TCP/UDP/IP	●	●	●
RS232			●	●
Function modules				
Number		0	0	4
PROFIBUS-Master				○
DeviceNet				○
Fast I/O				○
HMI				
IndraControl VCP, VCH	Ethernet TCP/IP, OPC	○	○	○
IndraControl VEP, VEH	Ethernet TCP/IP, OPC	○	○	○
IndraControl VSP, VPP, VSB/VDP, VPB/VDP	Ethernet TCP/IP, OPC	○	○	○
Inputs/outputs				
On-board				
High-speed digital inputs	Interrupt capability, typ. 50 µs	8	8	8
High-speed digital outputs		4	8	8
Local				
High-speed digital inputs (FAST I/O function module)	Interrupt capability, typ. 40 µs			○
High-speed digital outputs (FAST I/O function model)	0.5 A, typ. 70 µs			○
Inline (digital, analog, relais, technology)	32 Byte, max. 256 I/O	○	○	
Inline (digital, analog, relais, technology)	64 Byte, max. 512 E/A			○
Distributed via Inline (IP20)				
PROFIBUS	On-board/function module		●/-	
DeviceNet	Functional module			○
Distributed via Fieldline (IP67)				
PROFIBUS	On-board/function module		●/-	○
DeviceNet	Functional module			○
Distributed via IndraControl S67				
PROFIBUS	On-board/function module		●/-	

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DeviceNet	On-board/function module			-/○
Logic-Control				
PLC runtime system				
IndraLogic 1G kernel	Conforming with IEC 61131-3	●	●	●
Program organization	According to IEC 61131-3	●	●	●
Loading and executing IEC 61131-3 applications		●	●	●
Motion-control functions using PLCopen function blocks			●	●
Task management				
Freely projectable tasks (priority 0-31)	Cyclic, free-running, event-controlled, externally event-controlled	8	8	16
Synchronous processing of the I/O process image		●	●	●
Min. PLC cycle time	Synchronous to the system cycle	1 ms	1 ms	1 ms
PLC processing times				
Typical processing time for 1,000 instructions in µs	Command mix (Real, Integer, Bool etc.)	150	150	50
	Bool-Operation	150	140	50
	Word-Operation	150	140	30
System functions (choice)				
PID controller		●	●	●
Temperature controller		●	●	●
Diagnostics				
Diagnosis(status, warning, error)	Function blocks(Software)	●	●	●
	Locally via display(control hardware)		●	●
	Diagnostics memory(64 kB, max. 999 messages)	●	●	●
Debugging monitor for IEC applications		●	●	●
Engineering and Operation				
IndraWorks		○	○	○
Compatibility with all IndraLogic systems		●	●	●

- Default
- ▼ In preparation
- Optional

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IndraLogic L ■ Controller based**Components**

Engineering and operating

Description	Page
Engineering and operating	Software tools

Control hardware and interfaces

Description	Page
Controllers	IndraControl L10
Controllers	IndraControl L20
Controllers	IndraControl L40

HMI

Description	Page	Details
HMI	Hand-held operator panel	IndraControl VxH
HMI	compact operator terminals	IndraControl VCP
HMI	Embedded PC	IndraControl VEP
Industrial PCs	Panel-PC	IndraControl VPP – PC solution for high-end industrial requirements
Industrial PCs	Box-PC / Displays	IndraControl VPB and VDP

I/O

Description	Page	Details
IP 20	Inline	
I/O	IP 67	Fieldline, IndraControl S67

Ordering information

Type code	Description	Part number:
FWA-CML10*-IL*-04VRS-D0-0003	Firmware IndraControl L10	R911321638
FWA-CML20*-IL*-04VRS-D0-0003	Firmware IndraControl L20	R911319862
FWA-CML402-IL*-04VRS-D0-0024	Firmware IndraControl L40	R911319858

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It must be remembered that our products are subject to a natural process of wear and aging.