

PLC
IndraLogic L
Controller-based



PLC

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Documentation



- High performance with comprehensive functions and numerous interfaces
- Scalable with the innovative IndraControl L platform
- Centralized and distributed I/Os
- 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
Controller				
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
Remanent 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		●	●	●
On-board communication interfaces				
PROFIBUS	Master		●	●
	Slave		●	●
EtherNet/IP	Adapter (slave)	●	●	●
Ethernet TCP/IP		●	●	●
Control link	Ethernet TCP/UDP/IP	●	●	●
RS232			●	●
Function modules				
Quantity		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 μ s	8	8	8
High-speed digital outputs	0.5 A, typ. 500 μ s	4	8	8
Local				
High-speed digital inputs (FAST I/O function module)	Interrupt capability, typ. 40 μ s			○
High-speed digital outputs (FAST I/O function module)	0.5 A, typ. 70 μ s			○
Inline (digital, analog, relay, technology)	32 bytes, max. 256 I/O	○	○	
Inline (digital, analog, relay, technology)	64 Byte, max. 512 E/A			○
Distributed via Inline (IP20)				
PROFIBUS	On-board/function module		●/-	
DeviceNet	Function module			○
Distributed via Fieldline (IP67)				
PROFIBUS	On-board/function module		●/-	○
DeviceNet	Function 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 via PLCopen function blocks			●	●
Task management				
Freely configurable tasks (priority 0-31)	Cyclic, free-running, event-controlled, externally event-controlled	8	8	16
Cycle-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 μ s	Command mix (real, integer, bool, etc.)	150	150	50
	Bool operations	150	140	50
	Word operations	150	140	30
Extended system functions (choice)				
PID controller		●	●	●
Temperature controller		●	●	●
Diagnosis				
Diagnosis(status, warning, error)	Function blocks(software)	●	●	●
	Locally via display(control hardware)		●	●
	Diagnosis memory(64 kB, max. 999 messages)	●	●	●
Debugging monitor for IEC applications		●	●	●
Engineering and operation				
IndraWorks		○	○	○
Compatible with all IndraLogic systems		●	●	●

- Standard
- ▼ In preparation
- Optional

Components

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IndraLogic L ■ Controller-based**Engineering and operation**

Description	Page
Engineering and operation	Software tools

Control hardware

Description	Page
Control hardware	IndraControl L10
Control hardware	IndraControl L20
Control hardware	IndraControl L40

HMI

Description	Page	Details
HMI	Manual operator panel	IndraControl VCH
HMI	Compact operator panels	IndraControl VCP
HMI	Embedded PC	IndraControl VEP
Industrial PCs	Panel PC	IndraControl VPP the 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

Order specifications

Type code	Description	Material 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.