Electric Drives and Controls

Hydraulics

Linear Motion and Assembly Technologies

Pneumatics

Service



IndraLogic V PC-based



2 PLC

## IndraLogic V ■ PC-based

Documentation



- · Powerful, with extensive functionality and interfaces
- Scalable with the innovative IndraControl V platform
- Open interfaces for networking via Ethernet or PROFIBUS
- Extremely well-suited for industry, with its robust device technology
- Integrated HMI solution WinStudio and IndraWorks Operation

The IndraLogic V PC-based PLC solutions are based on innovative IndraControl V hardware platform in different performance classes.

Whether you prefer using a PC and operator panel in one unit or as separate components, you have flexibility in the control and visualization of your applications when you use IndraLogic V.

Scaled device portfolio in extremely robust design in combination with Real-time operating systems VxWorks/VxWin or Microsoft Windows CE allows reliable use in different areas of application.

And the best part of all - with the IndraWorks engineering framework, project planning and programming are easy, concise and fast.

#### **Technical data**

		IndraLogic VE	IndraLogic V
Control units		<u>'</u>	
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	System events	•	•
User memory	Total: code, data	24 MB	48 MB
Retentive memory	Total: system, user	256 kB	2 MB
On-board diagnosis	and settings		
Status display (boot, sercos, test)	SoftPanel	•	•
Errors, warnings, messages, system reset	SoftPanel	•	•
Ethernet settings (IP address)	SoftPanel	•	•

PLC

# IndraLogic V ■ PC-based

matchdog Interfaces on board PROFIBUS  Ethernet TCP/IIP  Ethernet TCP/IIP  Ethernet TCP/IIP  Function modules HMI IndraControl VCP, VCH OPC IndraControl VEP, VEH OPC OPC IndraControl VSP, VPP, VSBVUP, VPB/ VCP Ingressing uniques  Local Distributed via Infine (IP20) PROFIBUS On-board Obstributed via Infine (IP50) PROFIBUS On-board Obstributed via Infine (IP67) PROFIBUS On-board On-	Voltage monitoring,		•	•
PROFIBUS				
Ethernet TCP/IP				
Control grouping Ethernet TCP/IDP/IP • • • • • • • • • • • • • • • • • • •		Master		
Function modules HMI  IndraControl VCP, CPC VCH OC			•	•
HMI   IndraControl VCP, VCH		Ethernet TCP/UDP/IP	•	•
IndraControl VCP, VCH OPC				
OPC				
VEH OPC IndraControl VSP. VPP VSB/VDP, VPP/ VSB/VDP,	VCH	OPC	0	0
VPP, VSB/VPP, VPB/VPP           Inputs/outputs           Local         Distributed via Inline (IP20)           PROFIBUS         On-board         o         o           Distributed via Fieldline (IP67)           PROFIBUS         On-board         o         o           Distributed via IndraControl S67           PROFIBUS         On-board         o         o           PROFIBUS         On-board         o         o           Logic-Control           PLC runtime system           IndraLogic 1G kemel         Conforming with IEC 61131-3         •           Program organization         According to IEC 61131-3         •           Elevations of Color of Iuncinos using PLCopen function Blocks         •         •           Motion-control functions using PLCopen function Blocks         •         •           Task management         Freely projectable tasks (priority 0-31)         •         •           Synchronous processing of the I/O processing of the I/O processing of the I/O processing time for 1,000 instructions of the system cycle         •         •           PLC processing time for 1,000 instructions in μs         Command mix (Real, Integer, Bool etc.)         1         m      <	VEH	OPC		0
Local  Distributed via Inline (IP20)  PROFIBUS On-board o o o  Distributed via Fieldline (IP67)  PROFIBUS On-board o o o  Distributed via IndracControl S67  PROFIBUS On-board o o o  Logic-Control  PLC runtime system  Indrat.ogic 1G kernel of 131-3  Program organization of 131-3  Loading and executing of 1131-3  Loading and executing of 1131-3  Loading and executine of 1131-3  Loading and executine of 1131-3  Loading and executine of 1131-3  Cyclic, free-running, event-control lunctions using PLCopen function blocks  Task management  Freely projectable tasks (priority 0-31)  Synchronous processing of the I/O process image  Min. PLC cycle time Synchronous to the system cycle  PLC processing times  Typical processing times  Command mix (Real, Integer, Bool etc.) Integ	VPP, VSB/VDP, VPB/		0	•
Distributed via Inline (IP20)  PROFIBUS On-board ○ ○ ○ Distributed via Fieldline (IP67)  PROFIBUS On-board ○ ○ ○ Distributed via IndraControl S67  PROFIBUS On-board ○ ○ ○ Distributed via IndraControl S67  PROFIBUS On-board ○ ○ ○ ○  Logic-Control  PLC runtime system  IndraLogic 1G kernel 61131-3  Program organization According to IEC 61131-3  Program organization - Conforming with IEC 61131-3  Program organization According to IEC 61131-3  Program organization - Conforming with IE	Inputs/outputs			
PROFIBUS On-board o o On-board On-bo	Local			
Distributed via Fieldline (IP67) PROFIBUS On-board O O Distributed via IndraControl S67 PROFIBUS On-board O O Logic-Control PLC runtime system IndraLogic 1G kernel Conforming with IEC 61131-3 Program organization G1131-3 Program organization According to IEC 61131-3 Program organization G1131-3 Distributed via IndraControl G1131-3 Program organization According with IEC 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Distributed via Inline	(IP20)		
PROFIBUS	PROFIBUS	On-board	0	0
Distributed via IndraControl S67 PROFIBUS On-board O O  Logic-Control  PLC runtime system IndraLogic 1G kernel 61131-3 Program organization Loading and executing IEC 61131-3 Loading and executing IEC 61131-3 Loading and executing IEC 61131-3  Fregly projectable tasks (priority 0-31) Synchronous processing of the I/O process image Min. PLC cycle time Synchronous to the system cycle  PLC processing times  Typical processing times  Typical processing times  Typical processing times  Typical processing times  Conforming with IEC 61131-3	Distributed via Fieldli	ne (IP67)		
PROFIBUS On-board o o o  Logic-Control  PLC runtime system IndraLogic 1G kernel Conforming with IEC 61131-3  Program organization According to IEC 61131-3  Loading and executingIEC 61131-3 applications using PLCopen function blocks  Task management  Freely projectable tasks (priority 0-31)  Synchronous processing of the I/O process image  Min. PLC cycle time Synchronous to the system cycle  PLC processing times  Typical processing times  Typical processing times  Typical processing times  Conforming with IEC 61131-3  • • • • • • • • • • • • • • • • • • •	PROFIBUS	On-board	0	0
Description   PLC runtime system   IndraLogic 1G kernel   Conforming with IEC   61131-3	Distributed via IndraC	ontrol S67		
IndraLogic 1G kernel   Conforming with IEC   61131-3	PROFIBUS	On-board	0	0
IndraLogic 1G kernel Conforming with IEC 61131-3 Program organization According to IEC 61131-3 Loading and executin- gIEC 61131-3 appli- cations Motion-control func- tions using PLCopen function blocks  Task management Freely projectable tasks (priority 0-31) Synchronous pro- cessing of the I/O processing and Min. PLC cycle time Winn. PLC cycle time PLC processing times  Typical processing Typical processing Typical processing Time for 1,000 instruc- tions in μs  Conforming with IEC 61131-3  •  •  •  •  •  •  •  •  •  •  •  •  •	Logic-Control			
Program organization   According to IEC   61131-3	PLC runtime system			
Loading and executing IEC 61131-3  Motion-control functions using PLCopen function blocks  Task management  Freely projectable tasks (priority 0-31)  Synchronous processing of the I/O process image  Min. PLC cycle time  Typical processing times  Typical processing times  Tomman American Synchronous to the system cycle  PLC processing times  Typical proce	IndraLogic 1G kernel		•	•
gIEC 61131-3 applications  Motion-control functions using PLCopen function blocks  Task management  Freely projectable tasks (priority 0-31)  Synchronous processing of the I/O process image  Min. PLC cycle time  Typical processing times  Typical proces	Program organization		•	•
tions using PLCopen function blocks  Task management  Freely projectable tasks (priority 0-31)  Synchronous processing of the I/O process image  Min. PLC cycle time  Synchronous to the system cycle  PLC processing times  Typical processing time for 1,000 instructions in µs  Cyclic, free-running, event-controlled, externally event-controlled, externally event-controlled  1 for synchronous processing times  1 ms  1 ms  1 ms  5 mineger, Bool etc.)  Bool-Operation  10  5 mineger, Bool etc.)  Word-Operation  20  5	gIEC 61131-3 appli-		•	•
Freely projectable tasks (priority 0-31)  Cyclic, free-running, event-controlled, externally event-controlled  Synchronous processing of the I/O process image  Min. PLC cycle time  Synchronous to the system cycle  PLC processing times  Typical processing times  Typical processing times  Command mix (Real, Integer, Bool etc.)  Bool-Operation  10  Word-Operation  20  32  4  6  6  6  6  6  7  8  7  8  8  8  8  8  8  8  8  8  8	tions using PLCopen		•	•
tasks (priority 0-31) event-controlled, externally event-controlled  Synchronous processing of the I/O process image  Min. PLC cycle time Synchronous to the system cycle  PLC processing times  Typical processing times  Typical processing time for 1,000 instructions in µs  Command mix (Real, Integer, Bool etc.) Bool-Operation  10  5  Word-Operation 20  Synchronous to the system 2 1 ms 1 ms 5  5  5  6  Sol-Operation 10  Sol-Operation 20	Task management			
cessing of the I/O process image  Min. PLC cycle time Synchronous to the system cycle 1 ms 1 ms  PLC processing times  Typical processing time for 1,000 instructions in µs  Command mix (Real, I15 Integer, Bool etc.)  Bool-Operation 10 5  Word-Operation 20 5		event-controlled, externally event-	16	32
System cycle  PLC processing times  Typical processing time for 1,000 instructions in μs  Command mix (Real, I15 Integer, Bool etc.)  Bool-Operation I0 5  Word-Operation 20 5	cessing of the I/O		•	•
PLC processing times  Typical processing time for 1,000 instructions in μs  Command mix (Real, I15 Integer, Bool etc.)  Bool-Operation I0 5  Word-Operation 20 5		Synchronous to the system cycle	1 ms	1 ms
time for 1,000 instructions in µs  Integer, Bool etc.)  Bool-Operation  10  Word-Operation  20  5	PLC processing times			
Word-Operation 20 5	time for 1,000 instruc-		15	5
' '	tions in µs	Bool-Operation	10	5
Custom functions (sheirs)		Word-Operation	20	5
System functions (choice)	System functions (che	oice)		
PID controller • •	PID controller		•	•

### Bosch Rexroth AG | Electric Drives and Controls

PLC

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## IndraLogic V ■ PC-based

Temperature control-		•	•
ler			
Diagnostics			
Diagnosis(status, warning, error)	Function blocks(Software)	•	•
	SoftPanel	•	•
	Diagnostics memo- ry(64 kB, max. 999 messages)	•	•
Debugging monitor for IEC applications		•	•
Engineering and Ope	ration		
IndraWorks		0	0
Compatibility with all IndraLogic V systems		•	•

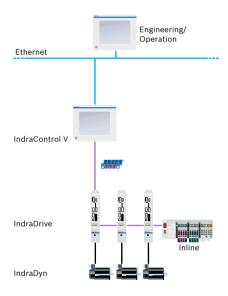
•

Default

0 .

Optional

### Components



Engineering and operating		
Description	Page	
Engineering and operating	Software tools	

Control hardware and interfaces

Description	Page	Details
НМІ	Embedded PC	IndraControl VEP
Industrial PCs	Box-PC / Displays	IndraControl VPB and VDP
Industrial PCs	Panel-PC	IndraControl VPP – PC solution for high-end industrial requirements

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PLC

# IndraLogic V ■ PC-based

0			
Description	Page	Details	
IP 20	Inline		
I/O	IP 67	Fieldline, IndraControl S67	

## Ordering information

Type code	Description	Part number:
FWA-VSXVPX-IL*-04VRS-D0-0048	IndraLogic V – Firmware	R911319872
SWL-VE**01-ILC-04VRS-NN-0024	IndraLogic VE - Runtime license	R911319873

# www.brberg.ru brberg@ya.ru Тел. (499) 703-31-61



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