



# IndraControl V – trend-setting human-machine interfaces (HMI) and industrial PCs

**Rexroth IndraControl V is the comprehensive HMI system range for individual control, operation and visualization in all industries. The program range covers controller-based devices, compact embedded PCs and high-performance industrial PCs. With its scalable hardware and software, IndraControl V can be precisely adapted to your machine-specific requirements.**

IndraControl V integrates all functions required for cost-effective automation – from convenient operation and clearly organized visualization to integrated controls and diagnosis. When combined with the proven system solutions from Rexroth, IndraControl V provides you with a complete automation solution for:

- ▶ Machine tools
- ▶ Transfer machines
- ▶ Printing presses and processing machines
- ▶ Food processing and packaging machines
- ▶ Forming machines

- ▶ Wood processing machines
- ▶ Textile machines
- ▶ Handling and assembly systems

IndraControl V is available in the following versions:

- ▶ Controller-based  
IndraControl VCP  
IndraControl VCH
- ▶ Embedded-PC-based  
IndraControl VEP  
IndraControl VEH
- ▶ PC-based  
IndraControl VPP  
IndraControl VPB  
IndraControl VDP
- ▶ Additional components  
IndraControl VAK  
IndraControl VAM



IndraControl V –  
the comprehensive product  
range for individual control,  
operation and visualization  
in all industries



### Versatile, sturdy, and modular

- ▶ Consistent range for control, operation and visualization
- ▶ Reliable system technology, even in hostile industrial environments
- ▶ Future-proof through modern PC technology



### IndraControl VCP – controller-based compact operator panels



These controller-based compact operator panels allow you to edit production data simply by pressing a key or touching the screen. The system versions cover a range from simple small graphics displays to touch screens with full graphics capabilities – with the number of function keys depending on the system design. The comprehensive interface range supports communication via Ethernet TCP/IP, fieldbus or serial.

- ▶ Inexpensive operation and visualization
- ▶ Compact dimensions
- ▶ Easy configuration of the system visualization
- ▶ Comprehensive functions with the visualization software VI-Composer
- ▶ Support of Asian character sets

### IndraControl VCH – compact manual operator panel for mobile use



Irrespective of the particular location – IndraControl VCH 08 allows operation, setup, parameterization and diagnosis via Ethernet TCP/IP. During connection and disconnection, the stop function is overridden automatically, thus ensuring smooth work. Together with the optimal design, the low weight allows fatigue-free work and high operator convenience. The integrated 3-step enabling button and 2-circuit stop button ensure maximum safety.

- ▶ Safety functions for man and machine
- ▶ Handles with integrated enabling and stop buttons
- ▶ Sturdy structure for industrial use
- ▶ Optimum ergonomics for reliable fatigue-free handling
- ▶ 9.7 cm (3.8") graphics display and universal-use touch panel

### IndraControl VEP – embedded-PC-based operator panels



These panels allow you to operate your machine easily and conveniently via a touch screen or a virtual keyboard. These “almost a PC” devices only use embedded components to maximize reliability. Through the multitude of interfaces and slots, the IndraControl VEP devices can be optimally adapted to comply with machine and system requirements. This allows you to use the devices for visualization or as control hardware. Expand your embedded PCs with our soft PLC solution IndraLogic.

- ▶ Compact system design for control cabinet mounting
- ▶ Hardware without hard disk or rotating media
- ▶ Control and visualization in a single device
- ▶ Integrated short-time UPS
- ▶ Visualization, operation and observation with the common WinStudio visualization software

**Bosch Rexroth AG**, 72 604 EN/2012-04



# IndraControl V – trend-setting human-machine interfaces (HMI) and industrial PCs

## IndraControl VEH – manual operator panel for mobile use



Irrespective of the particular location – IndraControl VEH 30 allows operation, setup, parameterization and diagnosis via Ethernet TCP/IP. The hot-plug principle facilitates trouble-free connection and disconnection during running operation, while the stop function is reliably overridden. The integrated 3-step enabling button and the 2-circuit stop button are looped in through the connection module V AC 30, thus ensuring maximum safety.

- ▶ Flexible use through hot-plug principle
- ▶ Safety functions for man and machine
- ▶ Handles with integrated enabling and stop buttons
- ▶ Sturdy structure for industrial use
- ▶ Optimum ergonomics for reliable fatigue-free handling
- ▶ Brilliant 21.3 cm (8.4") touch screen for convenient operation and visualization

## IndraControl VPP – compact panel PCs for industrial applications



The mechanical and electrical design of the IndraControl VPP compact PC operator terminals make them ideal for applications that involve confined spaces. SSD memory, an optimized cooling concept and temperature monitoring ensure excellent reliability. The long-term availability of the devices and software packages gives you maximum investment security when developing and duplicating your machines.

- ▶ Best industry compatibility through the use of reliable hardware components
- ▶ Vibration resistance during operation
- ▶ Shock loading capacity
- ▶ Low heat losses through optimized cooling system
- ▶ Components, such as processors, motherboards, etc., available over the long term
- ▶ Ensured service capability, at least 5 years

## IndraControl VPB and VDP – ideal PC solution for distributed architecture



IndraControl VPB and VDP provide a professional solution for applications where PC and control unit have to be separated. While the industrial PC is safely kept in the control cabinet, the sturdy and extremely thin operator display can be attached directly to the machine. To meet various industrial requirements, both the PCs and the displays are available in different versions.

- ▶ Compact cabinet PC (VPB) with special hardware for hostile industrial environments
- ▶ Thin displays (VDP), with optional keys or touch screen
- ▶ Individual solution for distributed operating and control designs
- ▶ Up to four displays at one industrial PC

**Bosch Rexroth AG**, 72 604 EN/2012-04



**IndraControl VEP and VDP – robust operator terminals with an ergonomic housing**



IndraControl V operator terminals combine flat operator displays or embedded PCs with industrial-strength housings to form a robust unit. The IP54-compliant terminals, with IP65 protection at the front, are operated via a TFT touch screen, three function buttons, and an emergency stop button. The single-piece metal housing, with ergonomically-shaped grips and holders to VESA standards, enables user- and service-friendly operation directly at the machine.

**Operator display IndraControl VDP**

- ▶ Hot plug-capable CDI interface
- ▶ Distance of up to 80 meters from the industrial PC

**Embedded PC IndraControl VEP**

- ▶ Hardware with no hard drive, no rotating media
- ▶ Control and visualization in a single device
- ▶ Integrated UPS for temporary power

**IndraControl VAK und VAM – ergonomic industrial keyboards and machine control panels**



The compact industrial keyboards and the comfortable machine control panels allow you to configure a perfect and individual control and visualization design of your machine. These additional components are precisely matched to our IndraControl V devices and, with the industry-compatible design, ensure reliable and safe operation.

**Slide-out keyboards**

**IndraControl VAK**

- ▶ Alphanumeric keyboard and integrated mouse
- ▶ Protection to IP65 both when closed and when open

**Touch panels IndraControl VAK**

- ▶ Robust complete keyboard with configurable keys and separate number pad
- ▶ Protection to IP65
- ▶ Low installation depth








**Machine control panels**

**IndraControl VAM**

- ▶ Optimized operator design for standard machine tools and automated production
- ▶ Protection to IP54



# IndraControl VCP – technical data

Technical data	VCP 02	VCP 05	VCP 08	VCP 11	VCP 20	VCP 25	VCP 35
							
Display	FSTN			FSTN-Touch/ TFT-Touch	FSTN	STN-color-Touch	TFT-Touch
	With graphics capability					With full graphics capability	With full graphics capability
	5 gray tones			5 gray tones/ 256 colors	5 gray tones	125 colors	256 colors
	7.6 cm (3")	7.6 cm (3")	9.7 cm (3.8")	9.7 cm (3.8")/ 8.9 cm (3.5")	14.5 cm (5.7")	14.5 cm (5.7")	25.4 cm (10.4")
Resolution	160 x 80	160 x 80	320 x 240	320 x 240/ 320 x 240	320 x 240	320 x 240	640 x 480
Keyboard/touch	Foil keys			Touch screen	Foil keys	Touch screen	Touch screen
Function keys/ system keys	4/7 (2 with LED)	6/24 (3 with LED)	15 (12 with LED)/ 24 (3 with LED)	–	8/16 (8 with LED)	–	–
Application memory				3 MB			
Flash memory				32 MB			
Slot for extensions				1			
Supply voltage				24 V DC			
Interfaces	1 x Ethernet TCP/IP, 2 x USB host, optional: 1 module RS232/RS485						
Fieldbus				PROFIBUS slave			
Approvals				CE/UL/CSA			
Protection category				Front IP65			
Temperature				5 to 45°C			
Dimensions (W x H x D)	144 x 96 x 58 mm	120 x 168 x 55 mm	155 x 205 x 55 mm	130 x 96 x 55 mm/ 130 x 96 x 58 mm	300 x 160 x 55 mm	203 x 147 x 66 mm	328 x 249 x 60 mm
<b>Availability</b>							
Automation system	IndraMotion MLD, IndraMotion MLC, IndraMotion MTX, IndraLogic XLC, IndraLogic, SYNAX 200 (technical details on request)						

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VCP – ordering data

## Ordering data for hardware

Description	Type code
IndraControl VCP 02	VCP02.2DRN-003-NN-NN-PW
IndraControl VCP 02 with serial interfaces	VCP02.2DRN-003-SR-NN-PW
IndraControl VCP 02 PROFIBUS DP slave	VCP02.2DRN-003-PB-NN-PW
IndraControl VCP 05	VCP05.2DSN-003-NN-NN-PW
IndraControl VCP 05 with serial interfaces	VCP05.2DSN-003-SR-NN-PW
IndraControl VCP 05 PROFIBUS DP slave	VCP05.2DSN-003-PB-NN-PW
IndraControl VCP 08	VCP08.2DTN-003-NN-NN-PW
IndraControl VCP 08 with serial interfaces	VCP08.2DTN-003-SR-NN-PW
IndraControl VCP 08 PROFIBUS DP slave	VCP08.2DTN-003-PB-NN-PW
IndraControl VCP 11	VCP11.2DWN-003-NN-NN-PW
IndraControl VCP 11 with serial interfaces	VCP11.2DWN-003-SR-NN-PW
IndraControl VCP 11 PROFIBUS DP slave	VCP11.2DWN-003-PB-NN-PW
IndraControl VCP 11 (TFT display)	VCP11.2ECN-003-NN-NN-PW
IndraControl VCP 11 PROFIBUS DP slave (TFT display)	VCP11.2ECN-003-PB-NN-PW
IndraControl VCP 20	VCP20.2DUN-003-NN-NN-PW
IndraControl VCP 20 with serial interfaces	VCP20.2DUN-003-SR-NN-PW
IndraControl VCP 20 PROFIBUS DP slave	VCP20.2DUN-003-PB-NN-PW
IndraControl VCP 25	VCP25.2DVN-003-NN-NN-PW
IndraControl VCP 25 with serial interfaces	VCP25.2DVN-003-SR-NN-PW
IndraControl VCP 25 PROFIBUS DP slave	VCP25.2DVN-003-PB-NN-PW
IndraControl VCP 35	VCP35.2ECN-003-NN-NN-PW
IndraControl VCP 35 with serial interfaces	VCP35.2ECN-003-SR-NN-PW
IndraControl VCP 35 PROFIBUS DP slave	VCP35.2ECN-003-PB-NN-PW

## Ordering data for accessories

Description	Type code
Battery kit	VAS04.1-001-002-NN

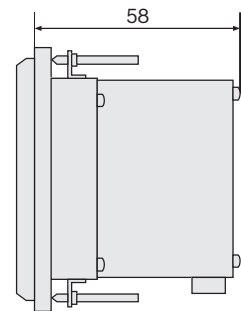
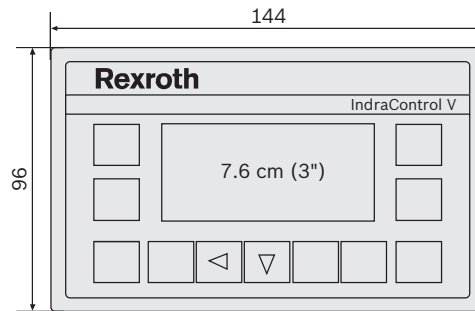
## Ordering data for documentation

Description	Type code
IndraControl VCP 02 project planning manual in German	DOK-SUPPL*VCP*02.2***-PRxx-DE-P
IndraControl VCP 02 project planning manual in English	DOK-SUPPL*VCP*02.2***-PRxx-EN-P
IndraControl VCP 05 project planning manual in German	DOK-SUPPL*VCP*05.2***-PRxx-DE-P
IndraControl VCP 05 project planning manual in English	DOK-SUPPL*VCP*05.2***-PRxx-EN-P
IndraControl VCP 08 project planning manual in German	DOK-SUPPL*VCP*08.2***-PRxx-DE-P
IndraControl VCP 08 project planning manual in English	DOK-SUPPL*VCP*08.2***-PRxx-EN-P
IndraControl VCP 11 project planning manual in German	DOK-SUPPL*VCP*11.2***-PRxx-DE-P
IndraControl VCP 11 project planning manual in English	DOK-SUPPL*VCP*11.2***-PRxx-EN-P
IndraControl VCP 20 project planning manual in German	DOK-SUPPL*VCP*20.2***-PRxx-DE-P
IndraControl VCP 20 project planning manual in English	DOK-SUPPL*VCP*20.2***-PRxx-EN-P
IndraControl VCP 25 project planning manual in German	DOK-SUPPL*VCP*25.2***-PRxx-DE-P
IndraControl VCP 25 project planning manual in English	DOK-SUPPL*VCP*25.2***-PRxx-EN-P
IndraControl VCP 35 project planning manual in German	DOK-SUPPL*VCP*35.2***-PRxx-DE-P
IndraControl VCP 35 project planning manual in English	DOK-SUPPL*VCP*35.2***-PRxx-EN-P
IndraControl VCP xx. operator design in German	DOK-SUPPL*-VIC*BED*02*Awxx-DE-P
IndraControl VCP xx. operator design in English	DOK-SUPPL*-VIC*BED*02*Awxx-EN-P

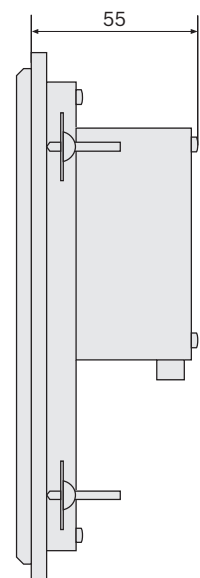
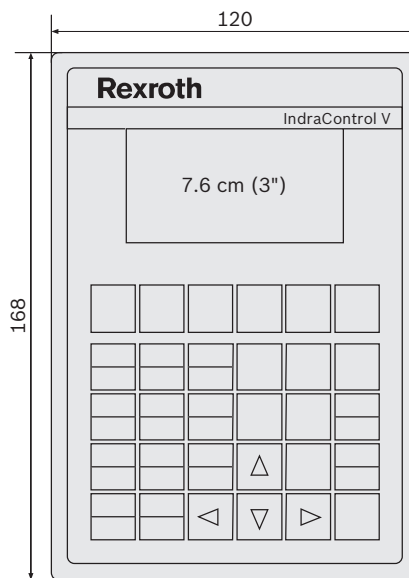
xx = software/firmware version

# IndraControl VCP 02 and VCP 05

**IndraControl VCP 02**

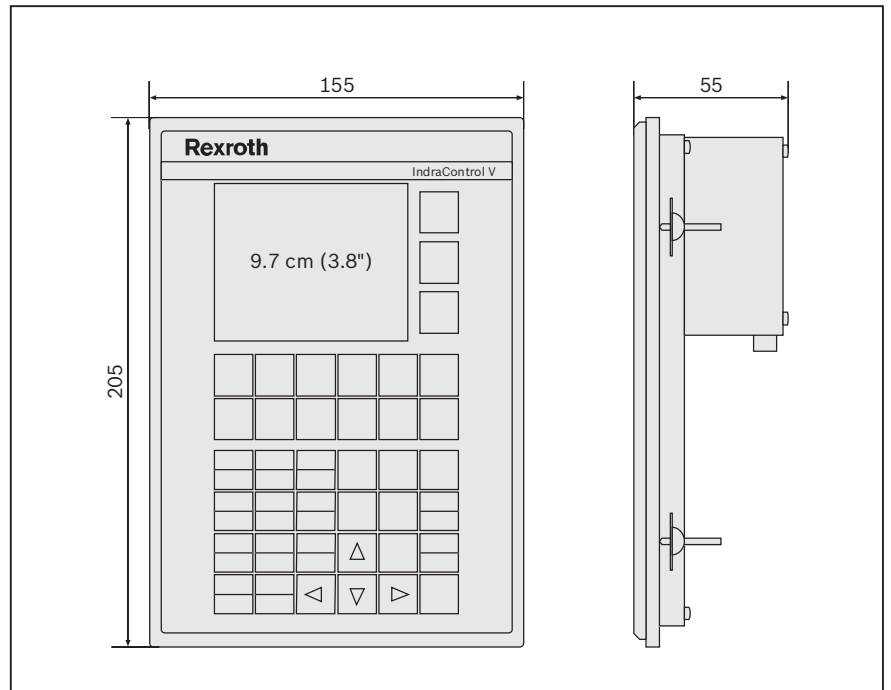


**IndraControl VCP 05**

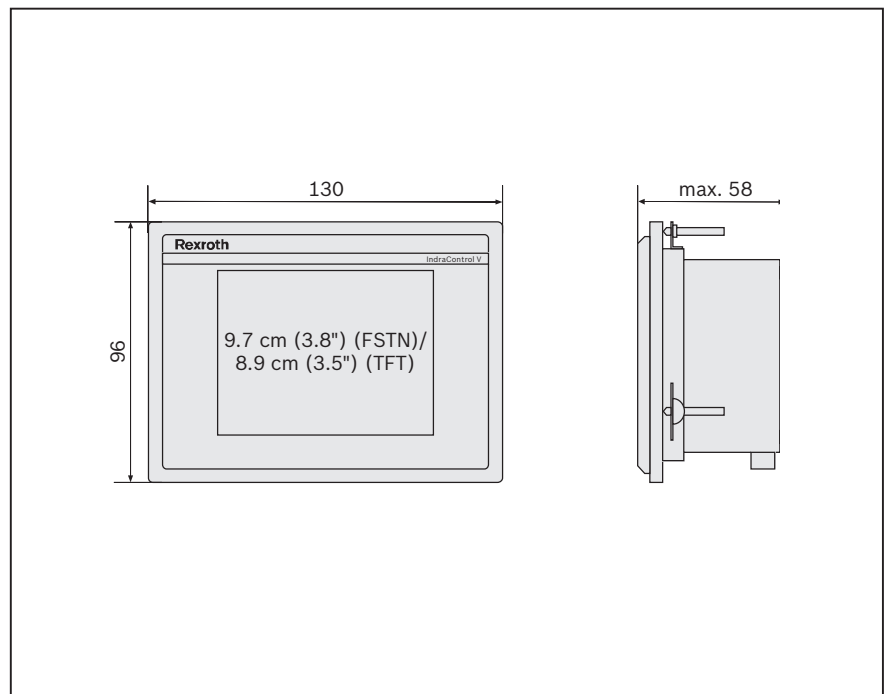


# IndraControl VCP 08 and VCP 11

**IndraControl VCP 08**



**IndraControl VCP 11**

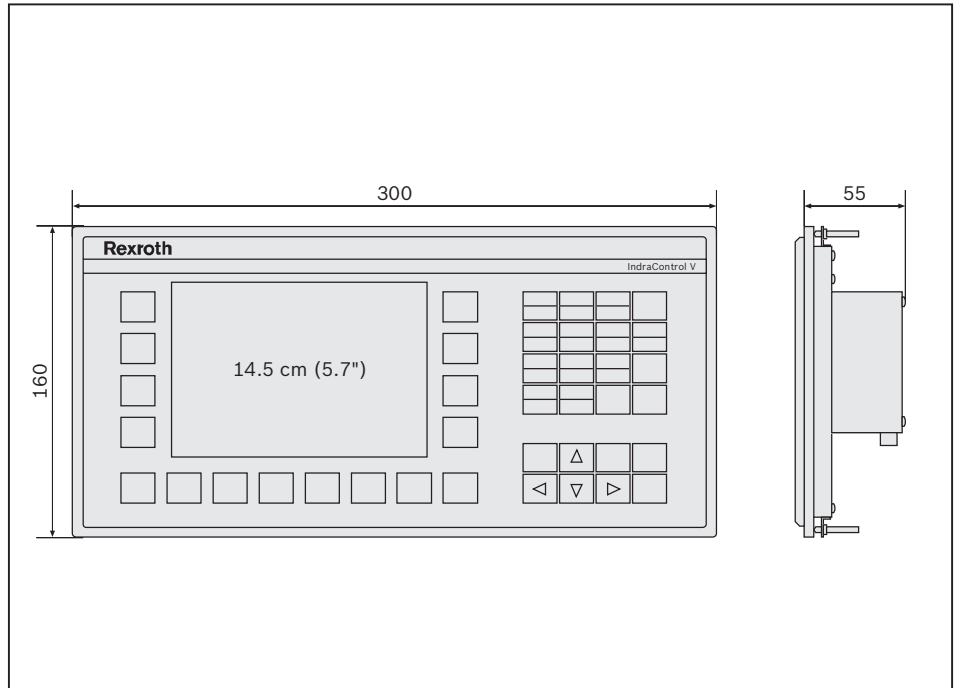




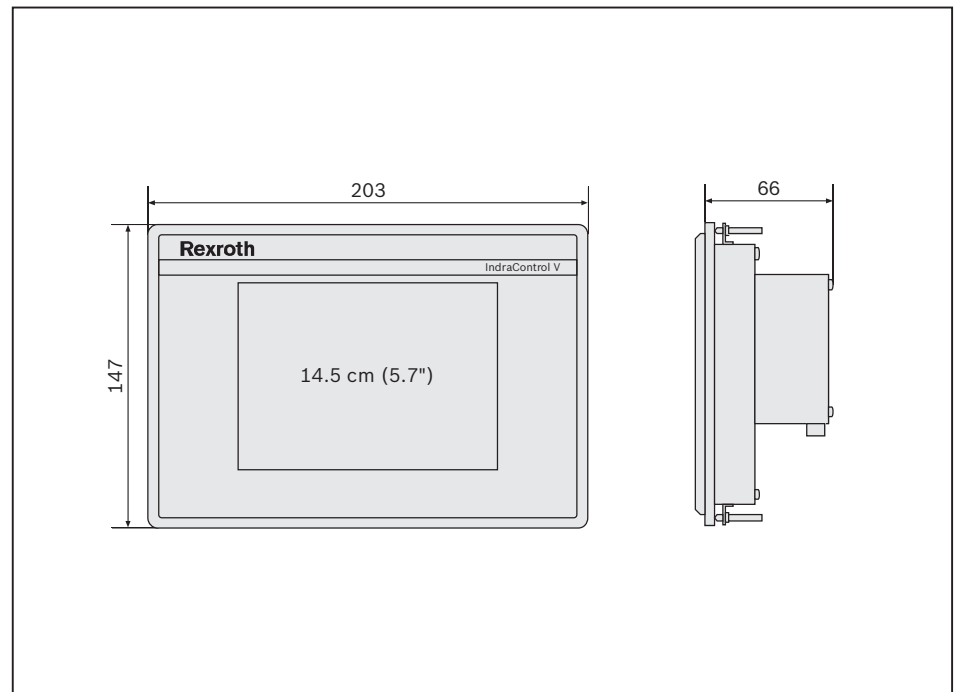


# IndraControl VCP 20 and VCP 25

**IndraControl VCP 20**



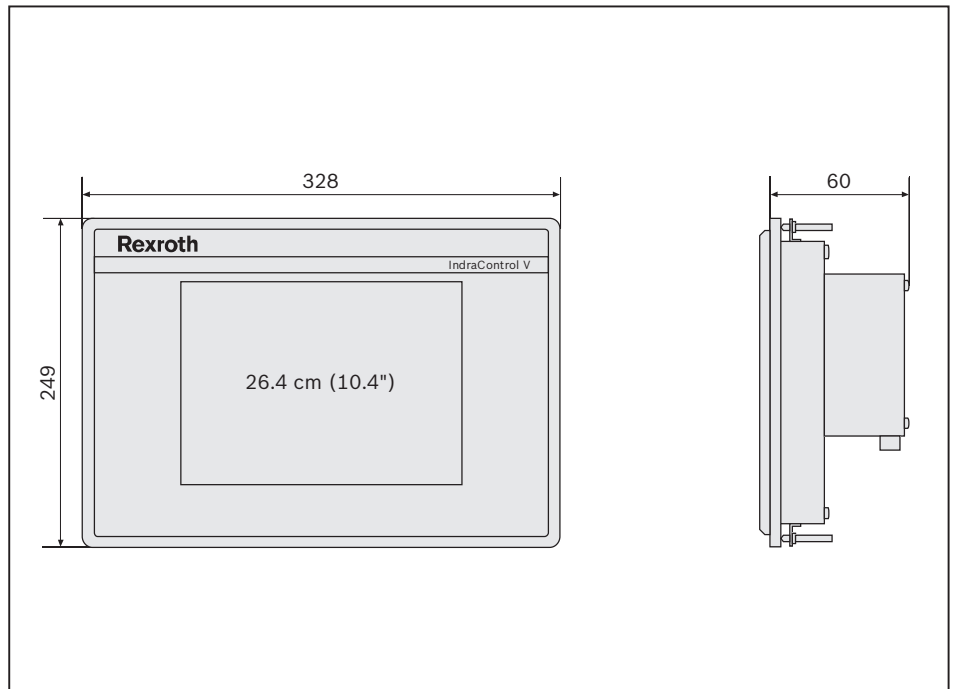
**IndraControl VCP 25**






# IndraControl VCP 35

**IndraControl VCP 35**





# IndraControl VCH – technical data/ordering data

Technical data	VCH 08
	
Display	9.7 cm (3.8") – gray tones
Resolution	320 x 240
Touch screen	–
Keyboard	40 foil keys
Function keys	18 user-configurable function keys
Stop/emergency-off button	●/○
2 enabling buttons (2-circuit, 3-step)	●
Override potentiometer	●
Handwheel	○
Processor	PXA 270/416 MHz
RAM	64 MB
CompactFlash	64 MB
Supply voltage	24 V DC
Visualization	VI-Composer
Approvals	UL 508, UL 1740, SIBE, CSA
Protection category	IP65
Temperature	5 – 45°C
Dimensions (W x H x D)	Diameter 250 x 55 mm + 37 mm handle + 22 mm stop button
Weight	1.1 kg
Max. height of fall	1.5 m
Cable length	0.5/8 m
Availability	
Automation system	IndraMotion MLD, IndraMotion MLC, IndraMotion MTX, IndraLogic (technical details on request)

### Ordering data for hardware

Description	Type code
IndraControl VCH 08 with stop button (8 m Ethernet control cable)	VCH08.1EAB-064ET-A1D-064-CS-E4-PW
IndraControl VCH 08 with stop button, handwheel (8 m Ethernet)	VCH08.1EAB-064ET-A1D-064-DS-E4-PW
IndraControl VCH 08 with stop button (0.5 m Ethernet control cable)	VCH08.1EAB-064ET-A1D-064-CS-E2-PW
IndraControl VCH 08 with emergency-off button (0.5 m Ethernet)	VCH08.1EAB-064ET-A1D-064-FS-B2-PW

### Ordering data for accessories

Description	Type code
Connection module for VCH08.1 with stop button	VAC30.2N-NN
Connection module for VCH08.1 with emergency-off button	VAC31.1C-NN
Wall-mounted holder for VCH08.1	VAS01.1-002
Extension cable for VCH08.1 with stop button	RKS0011/16.0
Extension cable for VCH08.1 with emergency-off button	RKS0012/016.0

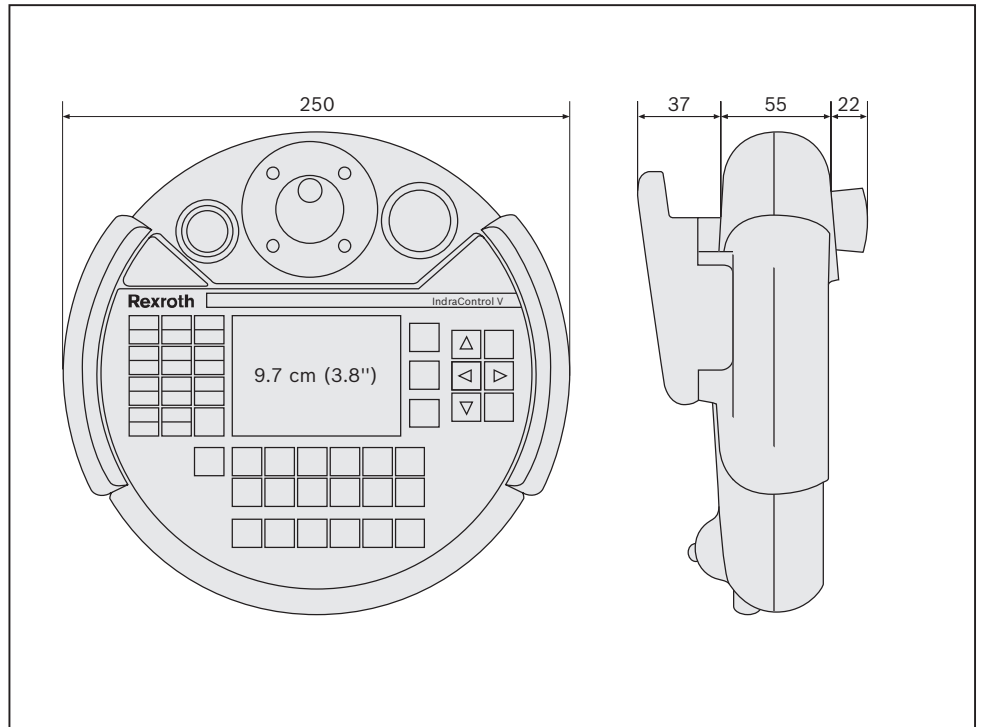
### Ordering data for documentation

Description	Type code
IndraControl VCH08.1 project planning manual in German	DOK-SUPPL*-VCH*08.1***-PR02-DE-P
IndraControl VCH08.1 project planning manual in English	DOK-SUPPL*-VCH*08.1***-PR02-EN-P

● Standard ▼ In preparation ○ Optional – Not available xx = software/firmware version







**IndraControl VCH 08**





# IndraControl VEP (series 3) – technical data

Technical data	VEP 30.3	VEP 40.3	VEP 50.3	VEP 30.3 DK
				
Display	21.3 cm (8.4") – TFT	30.7 cm (12.1") – TFT	38.1 cm (15") – TFT	21.3 cm (8.4") – TFT
Resolution	800 x 600, SVGA	800 x 600, SVGA	1,024 x 768, XGA	800 x 600, SVGA
Touch screen	●			
Keyboard	Via virtual keyboard			
	–	–	–	3 function buttons/ 1 emergency-off button
Processor	Celeron 600 MHz			
RAM	512 MB			
CompactFlash	2 CF sockets, 1 x 1 GB CF card fitted			
Module slots	1			
Supply voltage	24 V DC			
Interfaces	RS232, 2 x USB, 2 x Ethernet			
Fieldbus	○ Fieldbus module (PROFIBUS master) occupies 1 slot			
UPS	○ Short-time UPS for data backup (512 kB) to CF card			
Operating system	Windows CE 4.2			
Approvals	CE/UL/CSA			
Protection category	Front IP65			Overall IP54
Temperature	5 to 45°C			
Dimensions (W x H x D)	296 x 200 x 75 mm	350 x 290 x 73 mm	407 x 370 x 75 mm	246 x 280 x 85 mm
<b>Availability</b>				
Automation system	IndraLogic (technical details on request)			

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VEP (series 3) – ordering data

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**Ordering data for hardware**

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Description	Type code
IndraControl VEP30, PROFIBUS DP, control component	VEP30.3CCU-256NA-MAD-128-NN-FW
IndraControl VEP30, operator terminal, PROFIBUS DP, control component	VEP30.3DKU-256NA-MAD-128-CG-FW
IndraControl VEP40, PROFIBUS DP, control component	VEP40.3CEU-256NA-MAD-128-NN-FW
IndraControl VEP50, PROFIBUS DP, control component	VEP50.3CHU-256NA-MAD-128-NN-FW

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**Ordering data for firmware**

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Description	Type code
Firmware for IndraControl VEP xx.3 with support of Asian characters	FWA-VEP*03-CWL-xxVRS-D0

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**Ordering data for documentation**

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Description	Type code
IndraControl VEPxx.3 project planning manual in German	DOK-SUPPL*-VEP**_3****-PRxx-DE-P
IndraControl VEPxx.3 project planning manual in English	DOK-SUPPL*-VEP**_3****-PRxx-EN-P

xx = software/firmware version



# IndraControl VEP (series 4) – technical data

Technical data	VEP30.4		VEP40.4		VEP50.4	
Display	21.3 cm (8.4") – TFT		30.7 cm (12.1") – TFT		38.1 cm (15") – TFT	
Resolution	800 x 600, SVGA				1024 x 768, XGA	
Touch screen	Yes		No		Yes	No
Machine/function/additional keys	–	–	Yes		–	Yes
Processor	Intel Atom processor 1.1 GHz.					
RAM	1 GB					
CompactFlash	2 CF sockets, ● 1 GB CF card fitted, ○ 4 GB CF card fitted					
Module slots	–					
Supply voltage	24 V DC					
Interfaces						
USB	3 (1 x front)					
Ethernet TCP/IP	1					
Operating system	Windows CE 6.0/Windows Xpe					
Approvals	CE/UL/CSA					
Protection category	Front IP65					
Temperature	5 to 45°C					
Dimensions (W x H x D)	296x200x53 mm	350x290x51 mm	350x290x51 mm	407x370x53 mm	407x370x53 mm	
<b>Availability</b>						
Automation system	IndraMotion MLC, IndraMotion MTX, IndraLogic XLC, IndraLogic (technical details on request)					

● Standard ▼ In preparation ○ Optional



# IndraControl VEP (series 4) – ordering data

## Ordering data for hardware

Description	Type code
IndraControl VEP30, visualization	VEP30.4EFN-512NN-A2D-NNN-NN-FW
IndraControl VEP40, visualization	VEP40.4DBN-512NN-A2D-NNN-NN-FW
IndraControl VEP40, keys, visualization	VEP40.4BKN-512NN-A2D-NNN-NN-FW
IndraControl VEP50, visualization	VEP50.4DEN-512NN-A2D-NNN-NN-FW
IndraControl VEP50, keys, visualization	VEP50.4BIN-512NN-A2D-NNN-NN-FW

## Ordering data for firmware

Description	Type code
Firmware for IndraControl VEP xx.4-Atom (Windows CE 6.0)	FWA-VEP*04-CWN-10VRS-D0-A*
Firmware for IndraControl VEP xx.4-Atom (Windows Xpe)	FWA-VEP*04-XPE-01VRS-D0-A*

## Ordering data for documentation

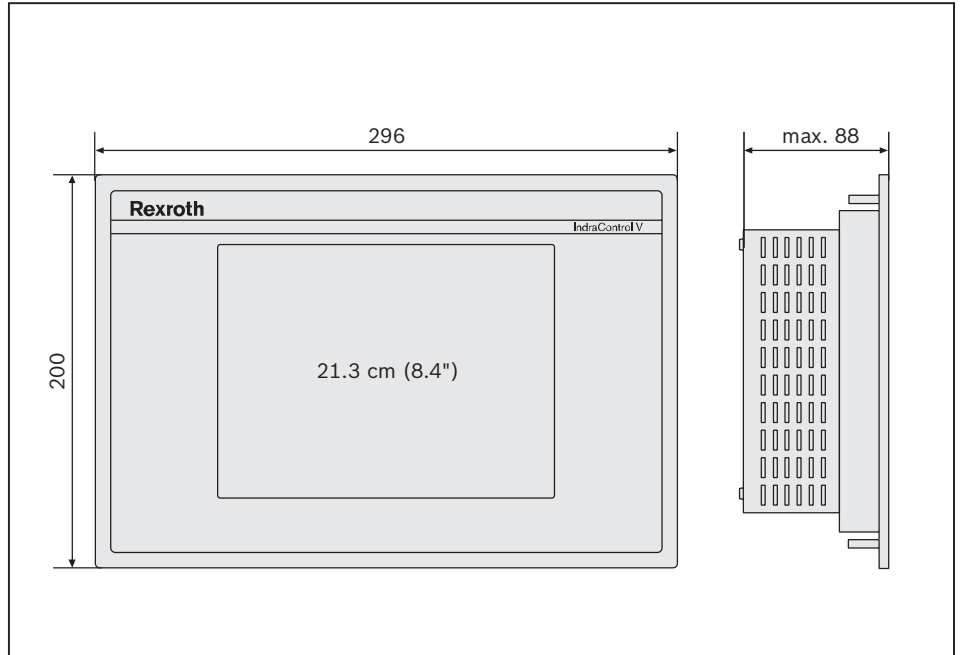
Description	Type code
IndraControl VEPxx.4 project planning manual in German	DOK-SUPPL *-VEP*XX.4***-PRxx-DE-P
IndraControl VEPxx.4 project planning manual in English	DOK-SUPPL *-VEP*XX.4***-PRxx-EN-P

xx = software/firmware version

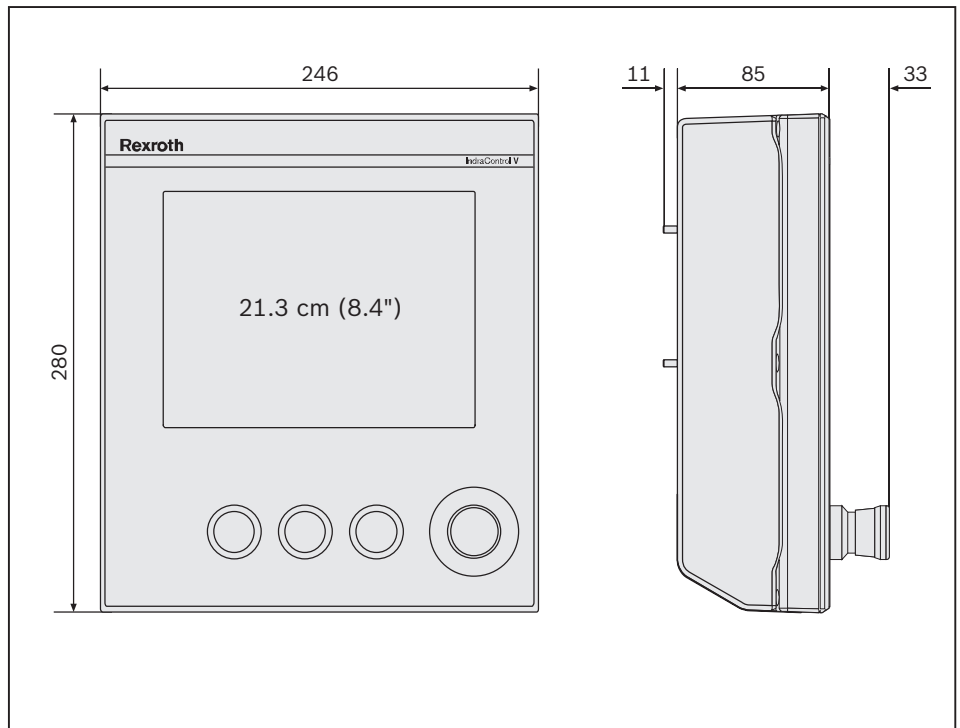


# IndraControl VEP 30

**IndraControl VEP 30**



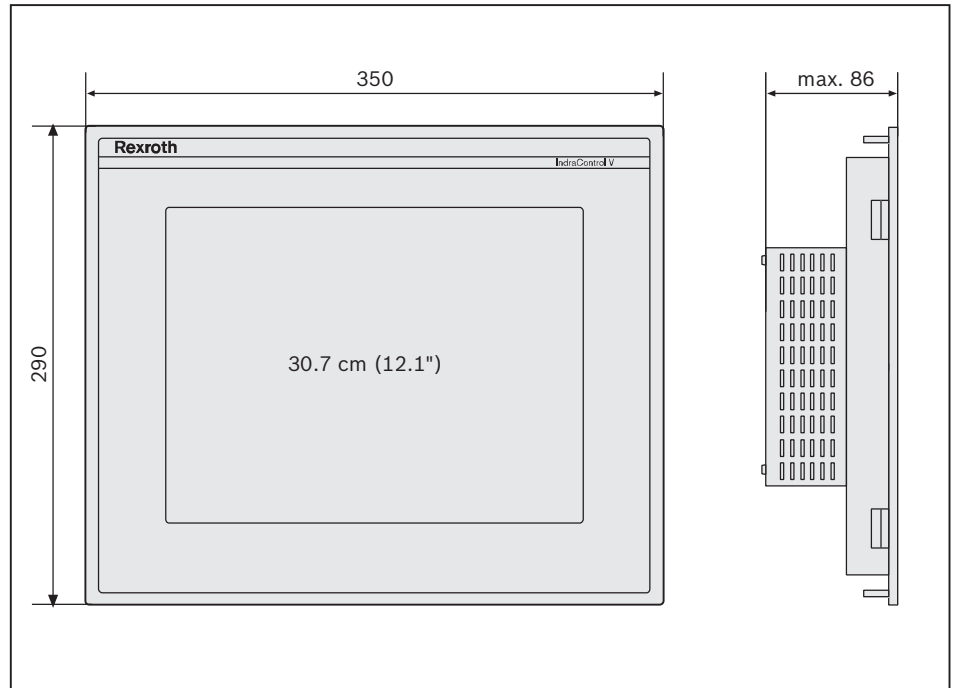
**IndraControl VEP 30 DP**



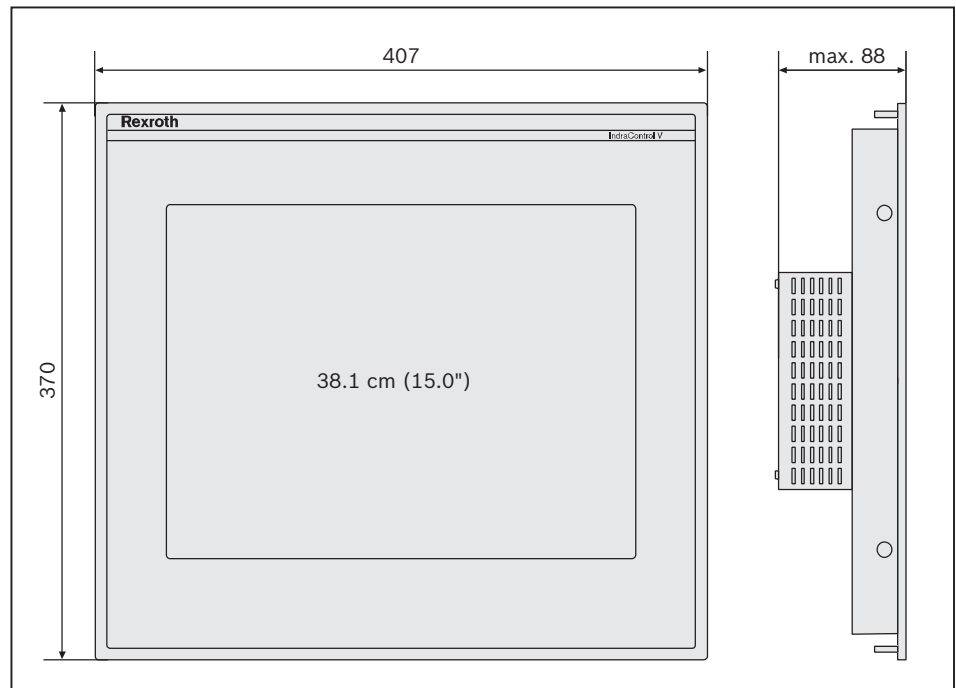
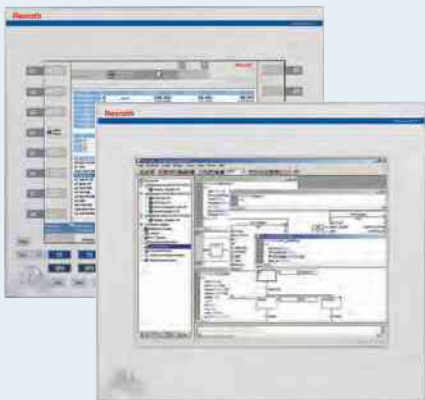


# IndraControl VEP 40 and VEP 50

**IndraControl VEP 40**




**IndraControl VEP 50**





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# IndraControl VEH – technical data/ordering data

Technical data	VEH 30
	
Display	21.3 cm (8.4") – TFT
Resolution	1024 x 768, XGA/800 x 600, SVGA
Touch screen	•
Keyboard	Via virtual keyboard
Function keys	36 foil keys: 2 x 6 jog keys, 2 x 8 user-configurable keys, 8 navigation keys
Stop/emerg.-off button (2-circuit)	●/○
2 enabl. buttons (2-circuit, 3-step)	•
Override potentiometer	○
Handwheel	○
Processor	Intel Atom 1.1 GHz
RAM	512 MB
Flash memory	4 GB
Supply voltage	24 V DC
Operating system	Windows Xpe
Approvals	CE/UL/CSA/BG
Protection category	IP65
Temperature	5–45°C
Dimensions (W x H x D)	270 x 290 x 76 mm + 58 mm handle + 22 mm stop/emergency-off button
Weight	2.6 kg
Max. height of fall	1.5 m
Cable length	0.5 m/8 m

### Availability

Automation system IndraMotion MLD, IndraMotion MLC, IndraMotion MTX, IndraLogic XLC (technical details on request)

● Standard ▼ In preparation ○ Optional – Not available

### Ordering data for hardware

Description	Type code
IndraControl VEH 30, stop button, 8 m connection cable	VEH30.2BNN-512ET-A2D-4G0-BS-E4-FW
IndraControl VEH 30, stop button, 0.5 m connection cable	VEH30.2BNN-512ET-A2D-4G0-BS-E2-FW
IndraControl VEH 30, stop button, handwheel, override, 0.5 m conn. cable	VEH30.2BNN-512ET-A2D-4G0-DS-E2-FW
IndraControl VEH 30, stop button, handwheel, override, 8 m conn. cable	VEH30.2BNN-512ET-A2D-4G0-DS-E4-FW

### Ordering data for accessories

Description	Type code
Connection module for VEH 30.2 with stop button	VAC30.2N-NN
Connection module for VEH 30.2 with emergency-off button	VAC31.1C-NN
Wall-mounted holder	VAS01.1-001-NNN-NN
Extension cable for VEH 30.2 with stop button	RKS0011/16.0
Extension cable for VEH 30.2 with emergency-off button	RKS0012/016.0

### Ordering data for firmware

Description	Type code
Firmware for IndraControl VEH30.2 with Windows XP	FWA-VEH*02-XPE-01VRS-D0-A

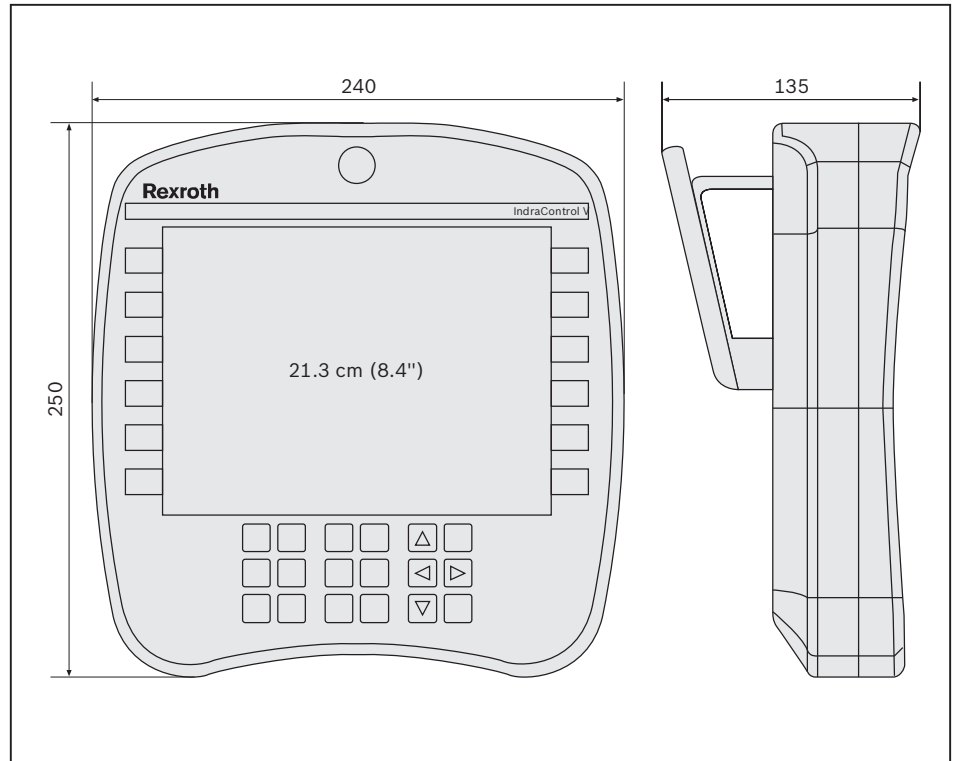
### Ordering data for documentation

Description	Type code
IndraControl VEH30.2 project planning manual in German	DOK-SUPPL*-VEH*30.2***-PR02-DE-P
IndraControl VEH30.2 project planning manual in English	DOK-SUPPL*-VEH*30.2***-PR02-EN-P

Bosch Rexroth AG, 72 604 EN/2012-04



**IndraControl VEH**





100 Automation systems and control components | IndraControl V

# IndraControl VPP – technical data

Technical data	VPP 16.3	VPP 16.3	VPP 40.3	VPP 40.3	VPP 60.3
Display	30.5 cm (12") – TFT		38.1 cm (15") – TFT		48.3 cm (19") – TFT
Resolution	800 x 600, SVGA		1,024 x 768, XGA		1,280 x 1,024, SXGA
Colors	256,000		16 mil.		
Touch screen	–	●	–	●	●
Machine/function/additional keys	16/16/14	–	16/16/14	–	–
Alphanumeric keyboard	Additional component VAK				
Processor	Celeron P4500 1.86 GHz/Core i5 i5-520M 2.4 GHz/Core i7-620M 2.66 GHz				
RAM	2 GB/4 GB				
Operating system	Windows XP/Windows 7				
PCI/PCIe slots	1/0 2/0 1/1 4/0 2/2				
Approvals	CE/UL/CSA				
160 GB hard disk	●				
2 x 160 GB hard disk (RAID 1)	○				
100 GB solid state disk SSD	○				
DVD-ROM/DVD-RW	○				
GBit Ethernet	2				
USB 2.0 on PC	6				
USB on front	1				
External service monitor	VGA				
Supply voltage	24 V DC				
UPS	External				
Status LED	Voltage, HDD, UPS, temperature				
Monitoring software	Voltage, temperature, fan				
Protection category	Front IP65				
Vibrations/shock carrying capacity	1 g/15 g				
Ambient temperature during operation	5 – 45°				
1 slot (W x H x D)	350 x 290 x 115 mm		407 x 370 x 109 mm		–
2 slots (W x H x D)	–		407 x 370 x 135 mm		–
4 slots (W x H x D)	350 x 290 x 123 mm		407 x 370 x 117 mm		483 x 400 x 137 mm
<b>Availability</b>					
Automation system	IndraMotion MLC, IndraMotion MLD, IndraMotion MTX, IndraLogic XLC, IndraLogic (technical details on request)				

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VPP – ordering data

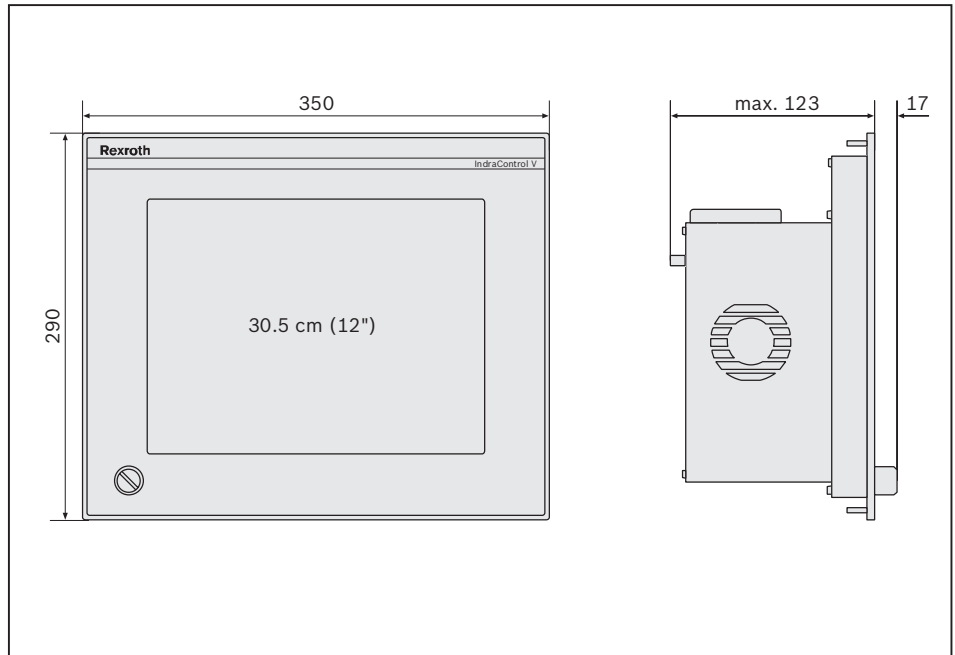
<b>Ordering data for hardware</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VPP 40, 38.1 cm (15") display, touch screen, 1 x PCI slot, 160 GB HDD, Celeron P4500, 2 GB RAM	VPP40.3DEK-2G0NN-C3D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys, 1 x PCI slot, 160 GB HDD, Celeron P4500, 2 GB RAM	VPP40.3BIK-2G0NN-C3D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys, 4 x PCI slots, 160 GB HDD, Core i5-520M, 2 GB RAM	VPP40.3BIM-2G0NN-D4D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, touch screen, 4 x PCI slots, 160 GB HDD, Core i5-520M, 2 GB RAM	VPP40.3DEM-2G0NN-D4D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys, 4 x PCI slots, 100 GB SSD, Core i5-520M, 2 GB RAM	VPP40.3BIM-2G0NN-D4D-HN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, touch screen, 4 x PCI slots, 100 GB SSD, Core i5-520M, 2 GB RAM	VPP40.3DEM-2G0NN-D4D-HN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys and touch screen, 4 x PCI slots, 160 GB HDD, Core i5-520M, 2 GB RAM	VPP40.3DFM-2G0NN-D4D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys, 4 x PCI slot, 160 GB HDD, Core i7-620M, 4 GB RAM	VPP40.3BIM-4G0NN-D5D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, touch screen, 4 x PCI slots, 160 GB HDD, Core i7-620M, 4 GB RAM	VPP40.3DEM-4G0NN-D5D-DN-NN-FW
IndraControl VPP 40, 38.1 cm (15") display, foil keys, 1 x PCI slot, 100 GB SSD, Core i7-620M, 4 GB RAM	VPP40.3BIK-4G0NN-D5D-HN-NN-FW
<b>Ordering data for accessories</b>	
<b>Description</b>	<b>Type code</b>
Uninterrupted power supply UPS, 24 V DC, 240 watts	VAU01.1U-024-024-240-NN
24 V DC power supply unit, 100-120/200-240 V AC Auto Select	VAP01.1H-W32-024-010-NN
<b>Ordering data for firmware</b>	
<b>Description</b>	<b>Type code</b>
Firmware Windows XP Pro with multi-lingual interface (EN, DE, FR, IT, ES, PT, SV)	FWA-VS3VP3-WXP-xxVRS-A0-OEM
Firmware Windows XP Pro with multi-lingual interface (EN, DE, FR, IT, ES, PT, SV) and Acronis data backup software	FWA-VS3VP3-WXP-xxVRS-A0-OEM A1
Firmware Windows 7 with language support for EN, DE, FR, IT, ES, PT, SV	FWA-VP3***-W7*-xxVRS-A0-OEM
Firmware Windows 7 with language support for EN, DE, FR, IT, ES, PT, SV and Acronis data backup software	FWA-VP3***-W7*-xxVRS-A0-OEM A1
<b>Ordering data for documentation</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VPP project planning manual	DOK-SUPPL*-VPP*16/40**PRxx-DE-P

xx = software/firmware version, device version

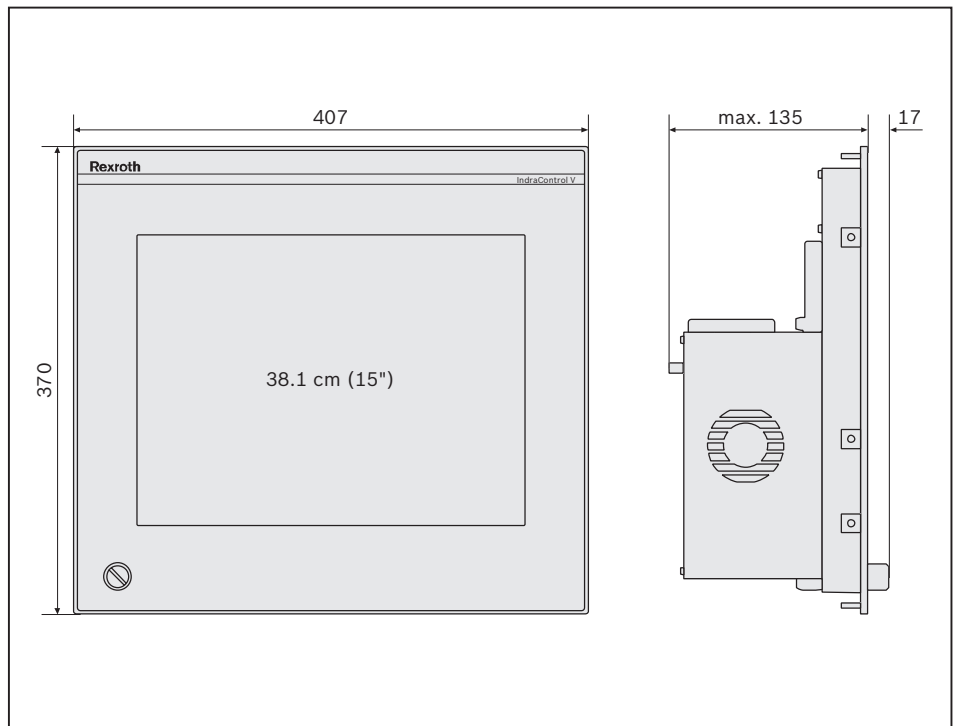


# IndraControl VPP 16 and VPP 40

**IndraControl VPP 16**

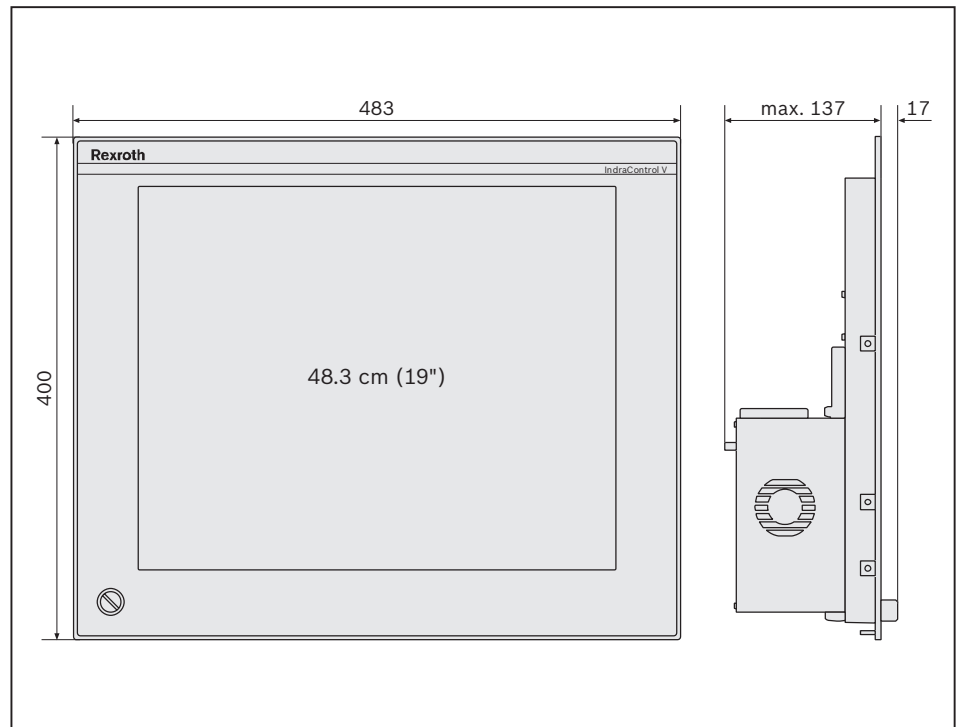


**IndraControl VPP 40**








# IndraControl VPP 60







# IndraControl VPB – technical data

Technical data	VPB 40.3	VPB 40.3	VPB 40.3
			
Processor	Celeron P4500 1.86 GHz/Core i5 i5-520M 2.4 GHz/Core i7-620M 2.66 GHz		
RAM	2 GB/4 GB		
PCI/PCIe slots	1/0	2/0 or 1/1	4/0 or 2/2
Operating system	Windows XP/Windows 7		
Approvals	CE/UL/CSA		
160 GB hard disk	●		
2 x 160 GB hard disk (RAID 1)	○		
100 GB solid state disk SSD	○		
DVD-ROM/DVD-RW	○		
GBit Ethernet	2		
USB 2.0	6		
External service monitor	DVI		
Connection to VDP	CDI		
Supply voltage	24 V DC		
UPS	External		
Status LED	Voltage, HDD, UPS, temperature		
Monitoring software	Voltage, temperature, fan		
Protection category	IP20		
Vibrations/shock carrying capacity	1 g/15 g		
Ambient temperature during operation	5 – 45°C		
Dimensions (W x H x D)	84 x 205 x 181 mm	110 x 205 x 181 mm	92 x 321 x 181 mm
<b>Availability</b>			
Automation system	IndraMotion MLC, IndraMotion MLD, IndraMotion MTX, IndraLogic XLC, IndraLogic (technical details on request)		

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VPB – ordering data

## Ordering data for hardware

Description	Type code
IndraControl VPB 40, 2x PCI slots, 160 GB HDD, Celeron P4500, 2 GB RAM	VPB40.3D1L-2G0NN-C3D-DN-NN-FW
IndraControl VPB 40, 4x PCI slots, 160 GB HDD, DVD burner, Celeron P4500, 2 GB RAM	VPB40.3D1M-2G0NN-C3D-DE-NN-FW
IndraControl VPB 40, 1x PCI, 1x PCIe slot, 160 GB HDD, Celeron P4500, 2 GB RAM	VPB40.3D1N-2G0NN-C3D-DN-NN-FW
IndraControl VPB 40, 2x PCI slots, 160 GB HDD, Core i5-520M, 2 GB RAM	VPB40.3D1L-2G0NN-D4D-DN-NN-FW
IndraControl VPB 40, 2x PCI slots, 100 GB SSD, Core i5-520M, 2 GB RAM	VPB40.3D1L-2G0NN-D4D-HN-NN-FW
IndraControl VPB 40, 4x PCI slots, 160 GB HDD, DVD burner, Core i5-520M, 2 GB RAM	VPB40.3D1M-2G0NN-D4D-DE-NN-FW
IndraControl VPB 40, 4x PCI slots, 2x 160 GB HDD, DVD burner, Core i5-520M, 2 GB RAM	VPB40.3D1M-2G0NN-D4D-EE-NN-FW
IndraControl VPB 40, 1x PCI, 1x PCIe slot, 160 GB HDD, Core i5-520M, 2 GB RAM	VPB40.3D1N-2G0NN-D4D-DN-NN-FW
IndraControl VPB 40, 2x PCI slots, 160 GB HDD, Core i7-620M, 4 GB RAM	VPB40.3D1L-4G0NN-D5D-DN-NN-FW
IndraControl VPB 40, 2x PCI slots, 100 GB SSD, Core i7-620M, 4 GB RAM	VPB40.3D1L-4G0NN-D5D-HN-NN-FW
IndraControl VPB 40, 4x PCI slots, 160 GB HDD, DVD burner, Core i7-620M, 4 GB RAM	VPB40.3D1M-4G0NN-D5D-DE-NN-FW
IndraControl VPB 40, 4x PCI slots, 2x 160 GB HDD, DVD burner, Core i7-620M, 4 GB RAM	VPB40.3D1M-4G0NN-D5D-EE-NN-FW
IndraControl VPB 40, 2x PCI, 2x PCIe slots, 160 GB HDD, Core i7-620M, 4 GB RAM	VPB40.3D1Q-4G0NN-D5D-DN-NN-FW
IndraControl VPB 40, 4x PCI slots, 100 GB SSD, Core i7-620M, 4 GB RAM	VPB40.3D1M-4G0NN-D5D-HN-NN-FW
IndraControl VPB 40, 2x PCI slots, 2x 160 GB HDD, DVD burner, Core i7-620M, 4 GB RAM	VPB40.3D1L-4G0NN-D5D-EE-NN-FW
IndraControl VPB 40, 2x PCI slots, 2x 160 GB HDD, Core i7-620M, 4 GB RAM	VPB40.3D1L-4G0NN-D5D-EN-NN-FW

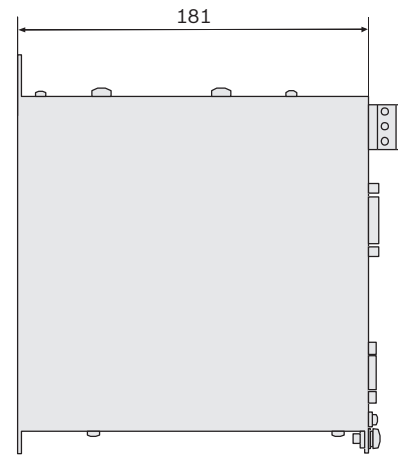
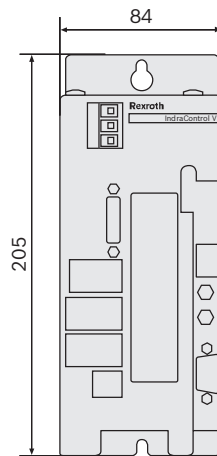
## Ordering data for firmware

Description	Type code
Firmware Windows XP Pro with multi-lingual interface (EN, DE, FR, IT, ES, PT, SV)	FWA-VS3VP3-WXP-xxVRS-A0-OEM
Firmware Windows XP Pro with multi-lingual interface (EN, DE, FR, IT, ES, PT, SV) and Acronis data backup software	FWA-VS3VP3-WXP-xxVRS-A0-OEM A1
Firmware Windows 7 with language support for EN, DE, FR, IT, ES, PT, SV	FWA-VP3***-W7*-xxVRS-A0-OEM
Firmware Windows 7 with language support for EN, DE, FR, IT, ES, PT, SV and Acronis data backup software	FWA-VP3***-W7*-xxVRS-A0-OEM A1

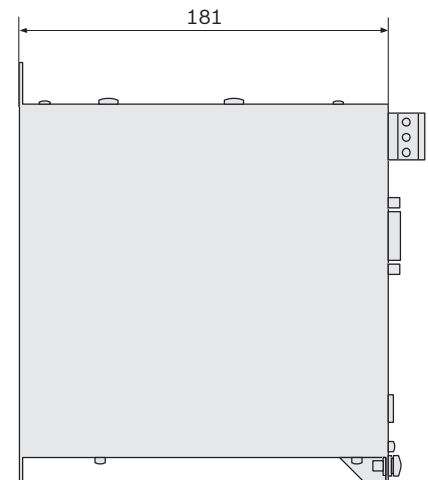
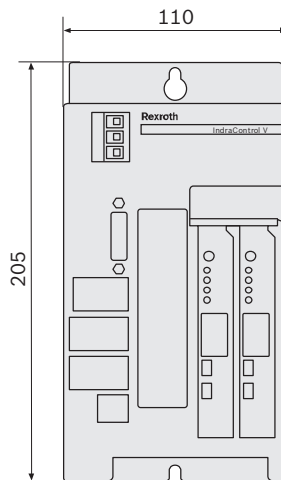
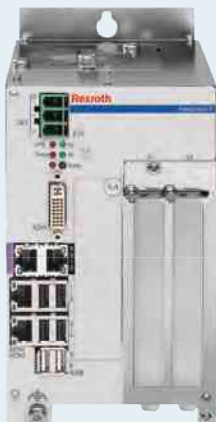
xx = software/firmware version, device version

# IndraControl VPB

**IndraControl VPB 40.3**  
(1 slot)



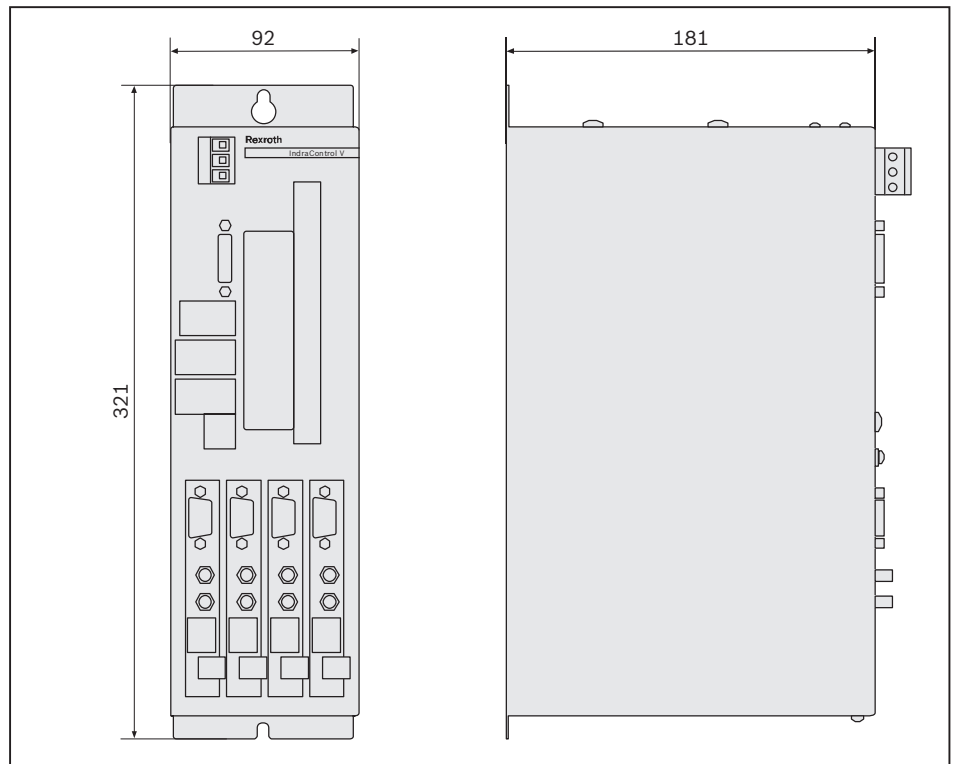
**IndraControl VPB 40.3**  
(2 slots)










# IndraControl VPB

**IndraControl VPB 40.3**  
(4 slots)





# IndraControl VDP operator display – technical data

Technical data	VDP 16.3	VDP 16.3	VDP 40.3	VDP 40.3	VDP 60.3
					
Display	30.5 cm (12") – TFT		38.1 cm (15") – TFT		48.3 cm (19") – TFT
Resolution	800 x 600, SVGA		1,024 x 768, XGA		1,280 x 1,024, SXGA
Colors	256,000				16 mil.
Touch screen	–	●	●	●	●
Machine/function/additional keys	16/16/14	–	16/16/14	–	–
Alphanumeric keyboard	Additional component VAK				
Approvals	CE/UL/CSA				
USB	4				
USB on front	1				
Supply voltage	24 V DC				
UPS	External				
Status LED	Voltage, HDD, UPS, temperature				
Protection category	Front IP65				
Vibrations/shock carrying capacity	1 g/15 g				
Ambient temperature during operation	5 – 45°C				
Dimensions (W x H x D)	350 x 290 x 46 mm		407 x 370 x 46 mm		483 x 400 x 62 mm
<b>Availability</b>					
Automation system	IndraMotion MLC, IndraMotion MLD, IndraMotion MTX, IndraLogic XLC, IndraLogic (technical details on request)				

● Standard ▼ In preparation ○ Optional – Not available





# IndraControl VDP operator display – ordering data

<b>Ordering data for hardware</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VDP 16 with 30.5 cm (12") display, touch screen	VDP16.3DBN-D1-NN-NN
IndraControl VDP 16 with 30.5 cm (12") display, foil keys	VDP16.3BKN-D1-NN-MX
IndraControl VDP 40 with 38.1 cm (15") display, touch screen	VDP40.3DEN-D1-NN-NN
IndraControl VDP 40 with 38.1 cm (15") display, foil keys	VDP40.3BIN-D1-NN-MX
IndraControl VDP 40 with 38.1 cm (15") display, touch screen, foil keys	VDP40.3DFN-D1-NN-MX
IndraControl VDP 60 with 48.3 cm (19") display, touch screen	VDP60.3FEN-D1-NN-NN
<b>Ordering data for documentation</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VDP project planning manual	DOK-SUPPL*-VDP*xx.3**PRxx-DE-P

xx = software/firmware version, device version



# IndraControl VDP operator terminals – technical data

Technical data	VDP 40.3	VDP 40.3
		
Display	38.1 cm (15") – TFT	
Resolution	1,024 x 768 pixels, XGA	
Colors	256,000	
Touch screen	●	●
Machine/function/additional keys	16/16/14	–
Additional keys	–	3 function buttons and 1 emergency-stop pushbutton
Approvals	CE/CSA	
Connection to IPC	CDI	
USB	4	
USB on front	1	
Supply voltage	24 V DC	
Status LED	Voltage, HDD, UPS, temperature	
Protection category	Front IP65, overall IP54	
Vibrations/shock carrying capacity	1 g/15 g	
Ambient temperature during operation	5 – 45°C	
Mounting	VESA bracket	
Dimensions (W x H x D)	407 x 370 x 60 mm	
<b>Availability</b>		
Automation system	IndraMotion MLC, IndraMotion MLD, IndraMotion MTX, IndraLogic XLC, IndraLogic (technical details on request)	

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VDP operator terminals – ordering data

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## Ordering data for hardware

Description	Type code
IndraControl VDP 40 operator terminal with 38.1 cm (15") display, foil keys and touch screen, in a housing	VDP40.3DFN-D1-NN-CG
IndraControl VDP 40 operator terminal with 15" display, touch screen, in a housing with switching elements	VDP40.3DIN-D1-NN-CG

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## Ordering data for documentation

Description	Type code
IndraControl VDP operator terminal project planning manual	DOK-SUPPL*-VDP16/40/60-PRxx-DE-P

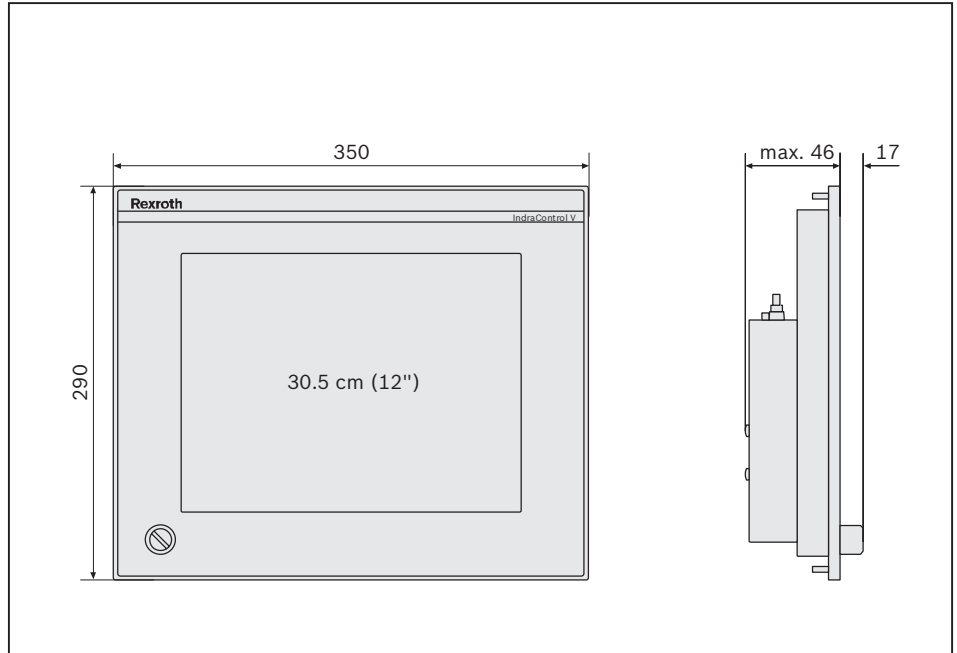
xx = software/firmware version, device version



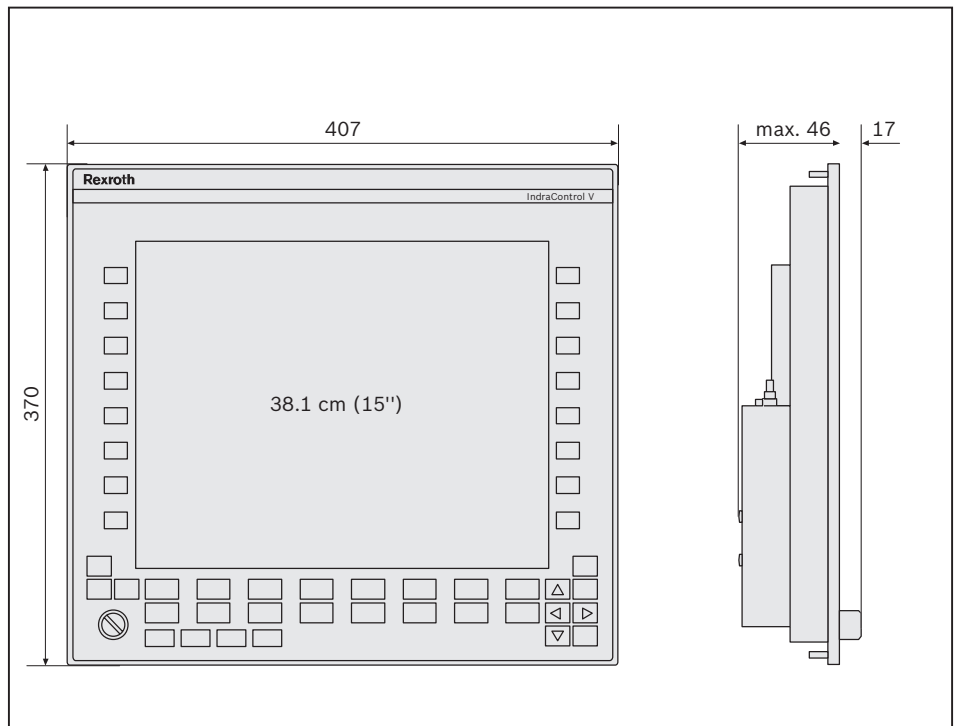


# IndraControl VDP 16 and VDP 40 operator display

## IndraControl VDP 16



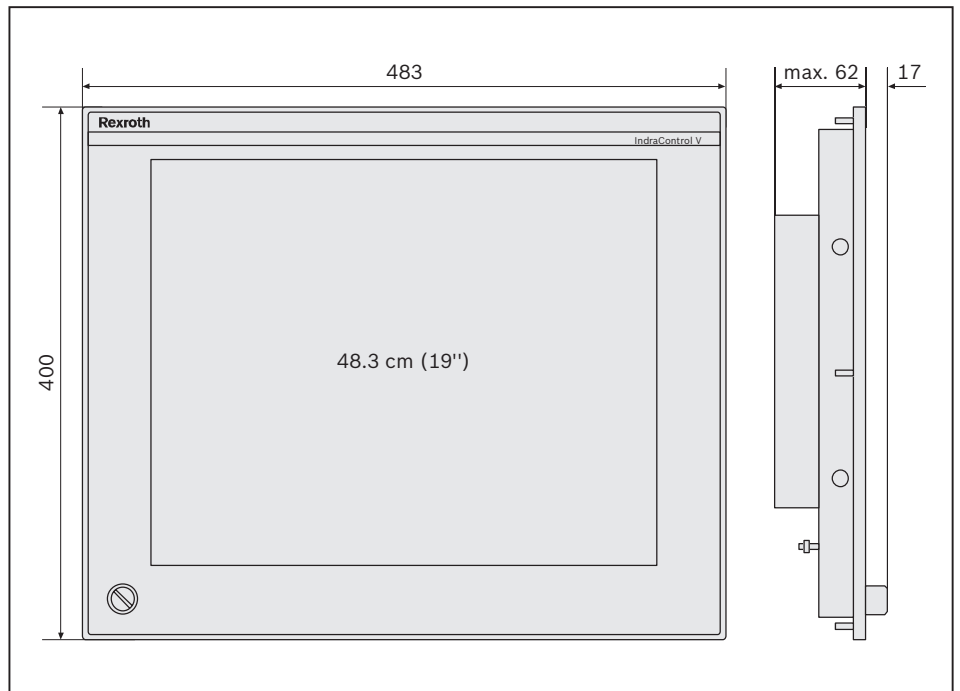
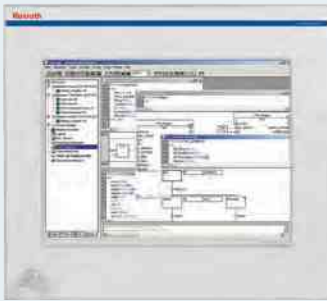
## IndraControl VDP 40





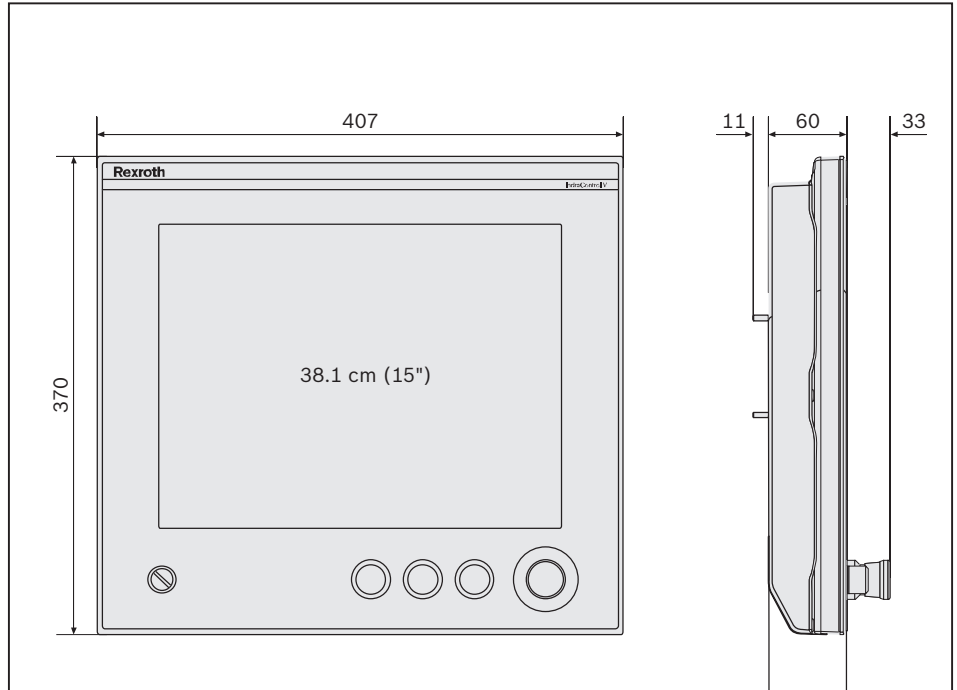
# IndraControl VDP 60 operator display

**IndraControl VDP 60**

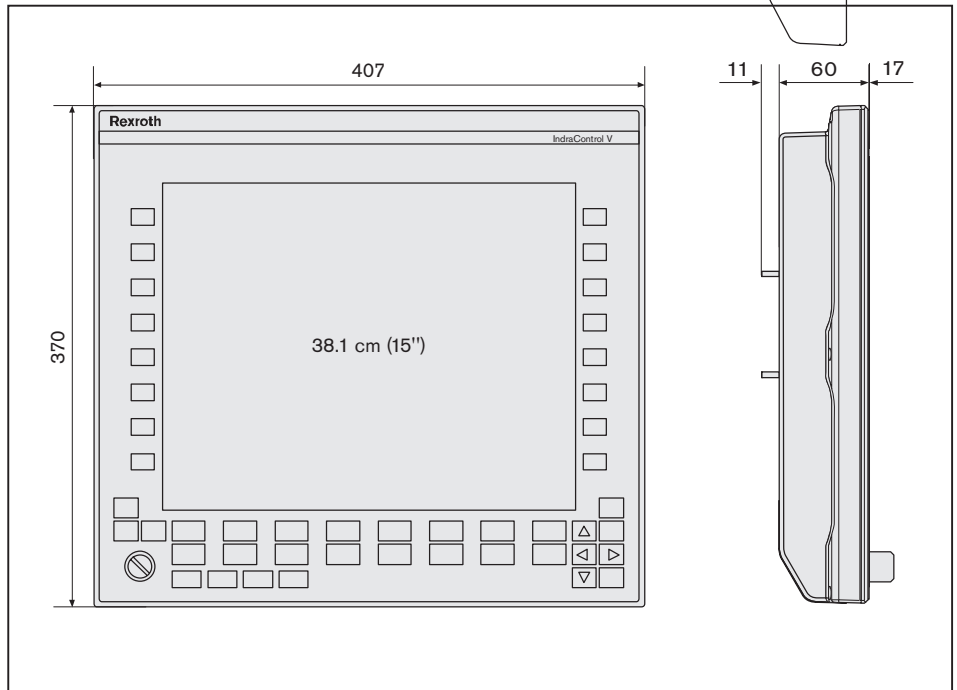


# IndraControl VDP 40 operator terminal

**IndraControl VDP 40**





**IndraControl VDP 40**





# IndraControl VAK – technical data/ordering data

Technical data	VAK 10/40	VAK 11/41
		
Type	Slide-out keyboard (full keyboard)	Touch panel (full keyboard)
Keyboard	Short-stroke keys	
Function and additional keys	86 keys, alphanumeric block, integrated mouse pointer	106 keys, alphanumeric block, 4 variable keys, keyboard mouse
Power consumption	0.01 A	
Supply voltage	5 V DC (via PS/2, USB)	
Interface	PS/2, USB	
Approvals	CE/UL/CSA	
Protection category on front	IP65	
Temperature	5 – 45°C	
Dimensions (W x H x D)	350/407 x 88 x 200 mm	350/407 x 140 x 40 mm
Panel cutout (W x H)	324 x 58/376 x 58 mm	318 x 108/375 x 108 mm
Connecting cable	1 m	
Weight in kg	Typ. 2.5/2.6 kg	Typ. 1.3/1.4 kg
Color	Light gray RAL 7035	
<b>Availability</b>		
Automation system	IndraMotion MLC, IndraMotion MTX, IndraLogic (technical details on request)	

● Standard ▼ In preparation ○ Optional – Not available

## Ordering data for hardware

Description	Type code
IndraControl VAK 10, slide-out keyboard, DE	VAK10.1E-DE-P-MPNN
IndraControl VAK 10, slide-out keyboard, EN	VAK10.1E-EN-P-MPNN
IndraControl VAK 40, slide-out keyboard, DE	VAK40.1E-DE-P-MPNN
IndraControl VAK 40, slide-out keyboard, EN	VAK40.1E-EN-P-MPNN
IndraControl VAK 11, touch panel, DE	VAK11.2F-DE-P-NNNN
IndraControl VAK 41, touch panel, EN	VAK41.2F-EN-P-NNNN

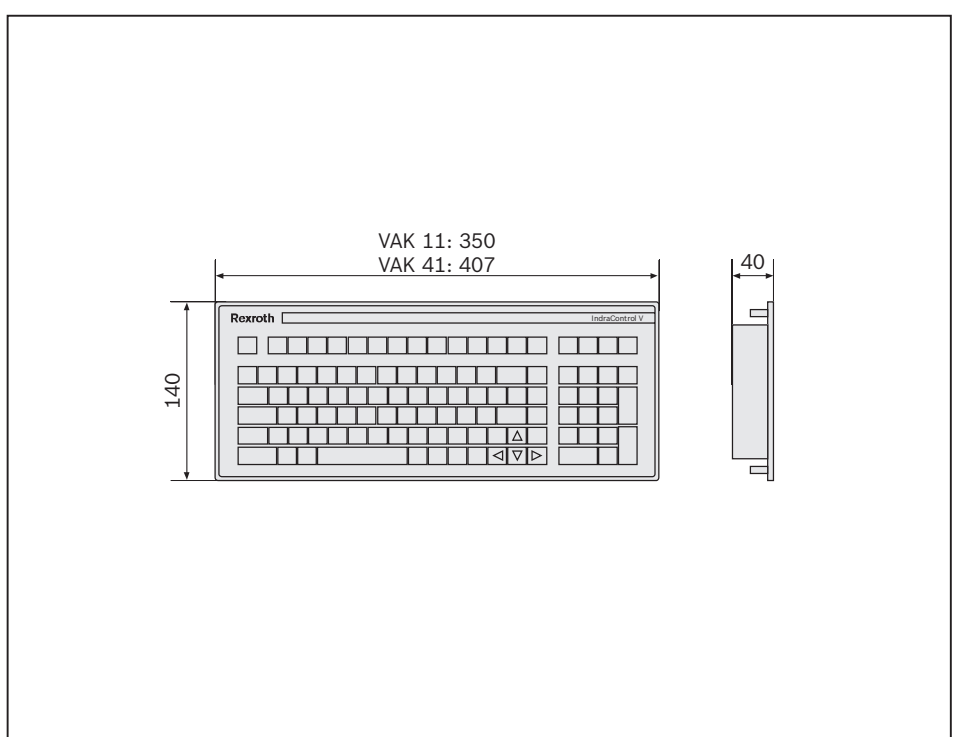
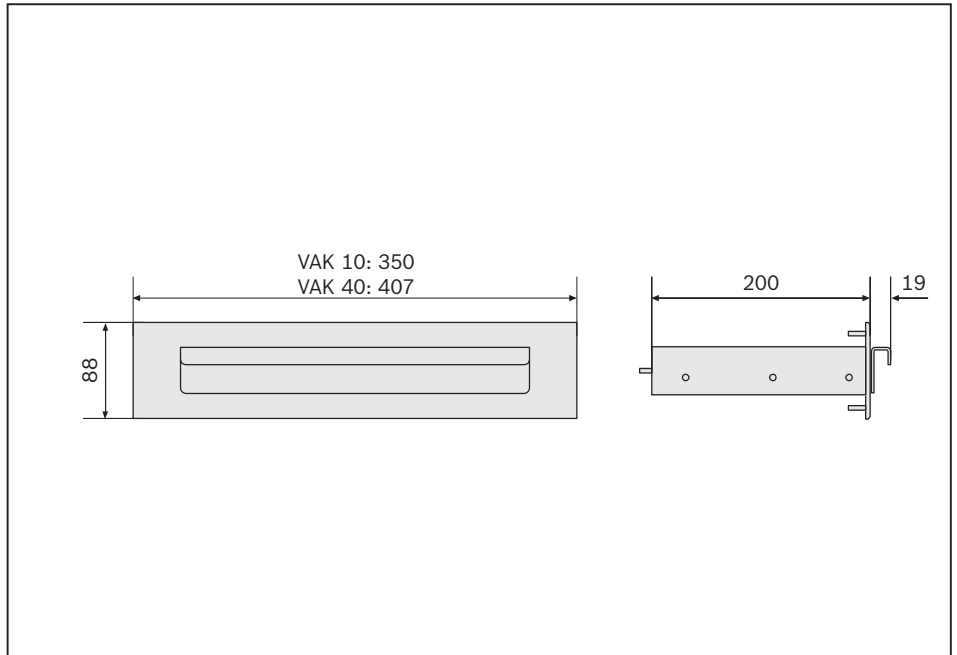
## Ordering data for documentation

Description	Type code
IndraControl VAK 10 and VAK 40 project planning manual	DOK-SUPPL*-VAK*40.1***-PRxx-DE-P

xx = software/firmware version, device version







# IndraControl VAK 10, VAK 11, VAK 40 and VAK 41



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# IndraControl VAM – technical data

Technical data	VAM 04/05	VAM 10/40.2	VAM10/40.3	VAM 12/42
				
Type	Individual machine control panel with 7 or 8 cut-outs	Machine control panel for standard machine tools	Machine control panel for standard machine tools	Machine control panel for automated production
Illuminated pushbutton	–	–	–	4/6 long-stroke buttons
Foil pushbutton	–	–	2 x 15 short-stroke buttons	–
Emergency-off button	–	–	2 NC contacts, 1 NO contact	–
Override	–	–	Feed and spindle	–
Key switch	–	4-level key-operated authorization	–	–
Fieldbus	–	PROFIBUS slave	sercos III	PROFIBUS slave
Logic supply U <sub>L</sub>	–	–	24 V DC (19.2 to 30 V), PELV	–
Power consumption from U <sub>L</sub>	–	–	Max. 0.5 A	–
Input/output supply U <sub>O</sub>	–	–	24 V DC (19.2 to 30 V), PELV	–
Power consumption	–	–	Max. 1.7 A	–
Supply voltage	–	–	24 V DC	–
Interface	–	Interface for external handwheel, 16/8 or 16/16 digital I/O, 24 V DC		
Approvals	CE/UL	CE/UL/CSA		CE/UL
Protection category on front	IP54			
Temperature	5–55°C	5 – 45°C		
Dimensions (W x H x D)	350/407x110x27 mm	350/407 x 169 x 102 mm	350/407 x 169 x 102 mm	350/407 x 240 x 102 mm
Panel cutout (W x H)	320x82/378x82 mm	318 x 137/375 x 137 mm	318 x 137/375 x 137 mm	318 x 208/375 x 208 mm
Weight in kg	Typ. 0.3/0.4 kg	Typ. 1.17/1.38 kg	Typ. 1.17/1.38 kg	Typ. 1.17/1.38 kg
Color	Light gray RAL 7035			
<b>Availability</b>				
Automation system	IndraMotion MLC, IndraMotion MTX, IndraLogic (technical details on request)			

● Standard ▼ In preparation ○ Optional – Not available



# IndraControl VAM – ordering data

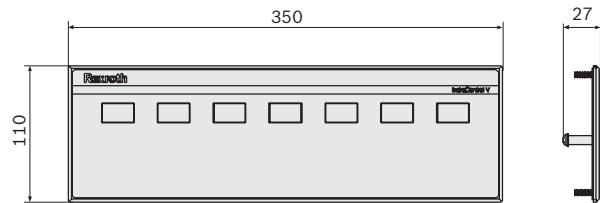
<b>Ordering data for hardware</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VAM 04, machine control panel	VAM04.1-NN
IndraControl VAM 05, machine control panel	VAM05.1-NN
IndraControl VAM 10, machine control panel	VAM10.2-PB-NA-TA-TA-VB-1608-NN
IndraControl VAM 10, machine control panel	VAM10.3-S3-NF-TA-TA-VD-1616-NN
IndraControl VAM 40, machine control panel	VAM40.3-S3-NF-TA-TA-VD-MA-1616-NN
IndraControl VAM 40, machine control panel	VAM40.2-PB-NA-TA-TA-VB-MA-1608-NN
IndraControl VAM 40, machine control panel with handwheel	VAM40.2-PB-NA-TA-TA-VB-HA-1608-NN
IndraControl VAM 12, machine control panel	VAM12.1-PB-NF-NN-TB-VD-NN-1608-NN
IndraControl VAM 42, machine control panel	VAM42.1-PB-NF-NN-TB-VD-NN-1608-NN
<b>Ordering data for documentation</b>	
<b>Description</b>	<b>Type code</b>
IndraControl VAM 10.2 and VAM 40.2 project planning manual	DOK-SUPPL*-VAM*xx.2***-PRxx-DE-P
IndraControl VAM 10.3 and VAM 40.3 project planning manual	DOK-SUPPL*-VAM*xx.3***-PRxx-DE-P
IndraControl VAM 12.1 and VAM 42.1 project planning manual	DOK-SUPPL*-VAM*xx.1***-PRxx-DE-P

xx = software/firmware version, device version

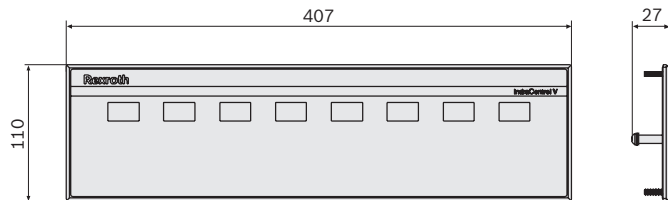


# IndraControl VAM 04, VAM 05, and VAM 10

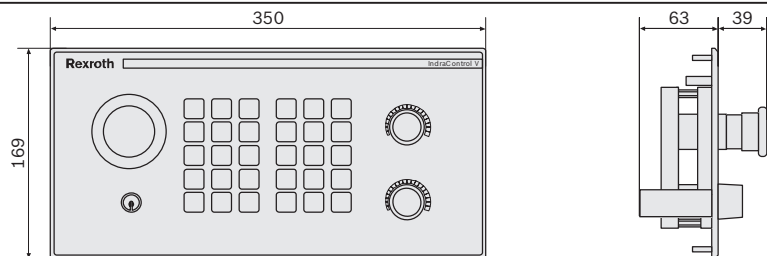
**IndraControl VAM 04**



**IndraControl VAM 05**



**IndraControl VAM 10**



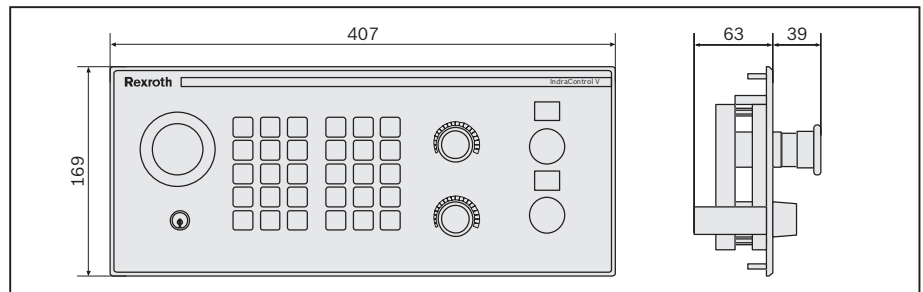
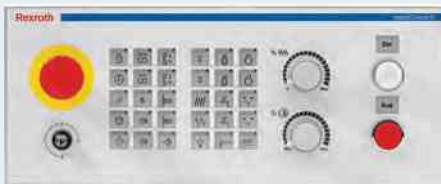




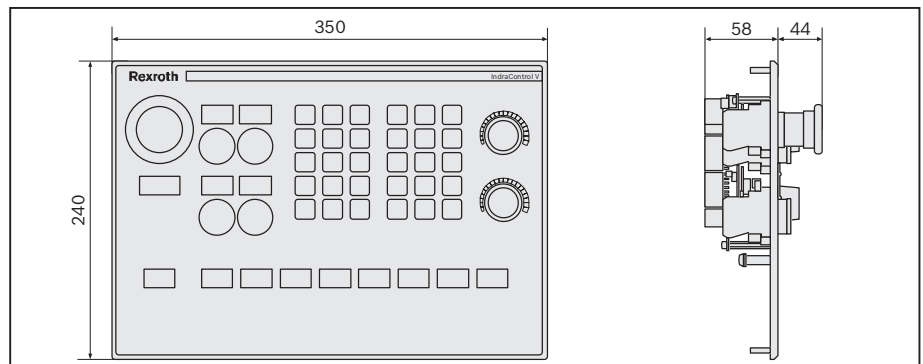
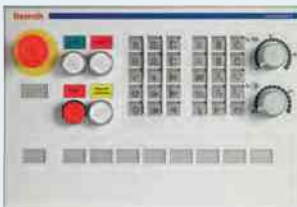
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# IndraControl VAM 12, VAM 40, and VAM 42

**IndraControl VAM 40**



**IndraControl VAM 12**



**IndraControl VAM 42**

