

# PR200

The programmable relay PR200 is a small PLC designed in a plastic enclosure for DIN rail mounting. The relay is available in several versions, for DC and AC voltage, equipped with only digital or a combination of digital and analog inputs and outputs. The device has a 2-line 32-character LCD display. A real-time clock and up to 2 RS485 interfaces for connection to Modbus networks are available. The relay can be expanded with additional I/O-Modules (for example, our modules of Mx110 series). User application is created as a function plan with the programming software 'akYtec ALP', included on the USB stick. The PR200 features a mini-USB port for transferring the user application from PC.

### Functions and features:

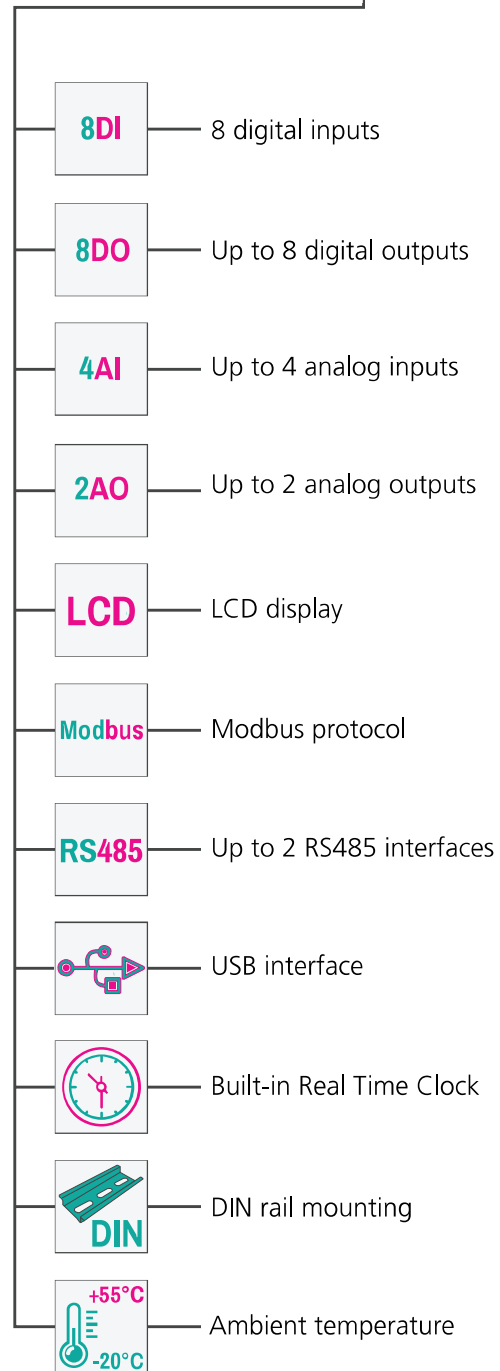
- Up to 8DI + 8DO + 4AI + 2AO + LCD + 2xRS485 in one device
- Connecting different sensors 4-20mA, 0-10V, resistance-type (PTC, KTY thermistors, Pt1000) and actuators
- Control of the outputs according to the input status and the logic of the user application
- Configuration with the function buttons or using ALP software
- Comprehensive programming of LCD display
- 2 programmable LEDs
- Master and / or Slave in a Modbus network
- Real-time clock
- Extension modules

### Areas of application:

- Building automation
- Indoor and outdoor lighting, shop window lighting, access systems
- Technical equipment such as pumps, fans, compressors, presses
- Conveyor and filling systems
- Lifting systems etc.



Free of charge software included



# PR200

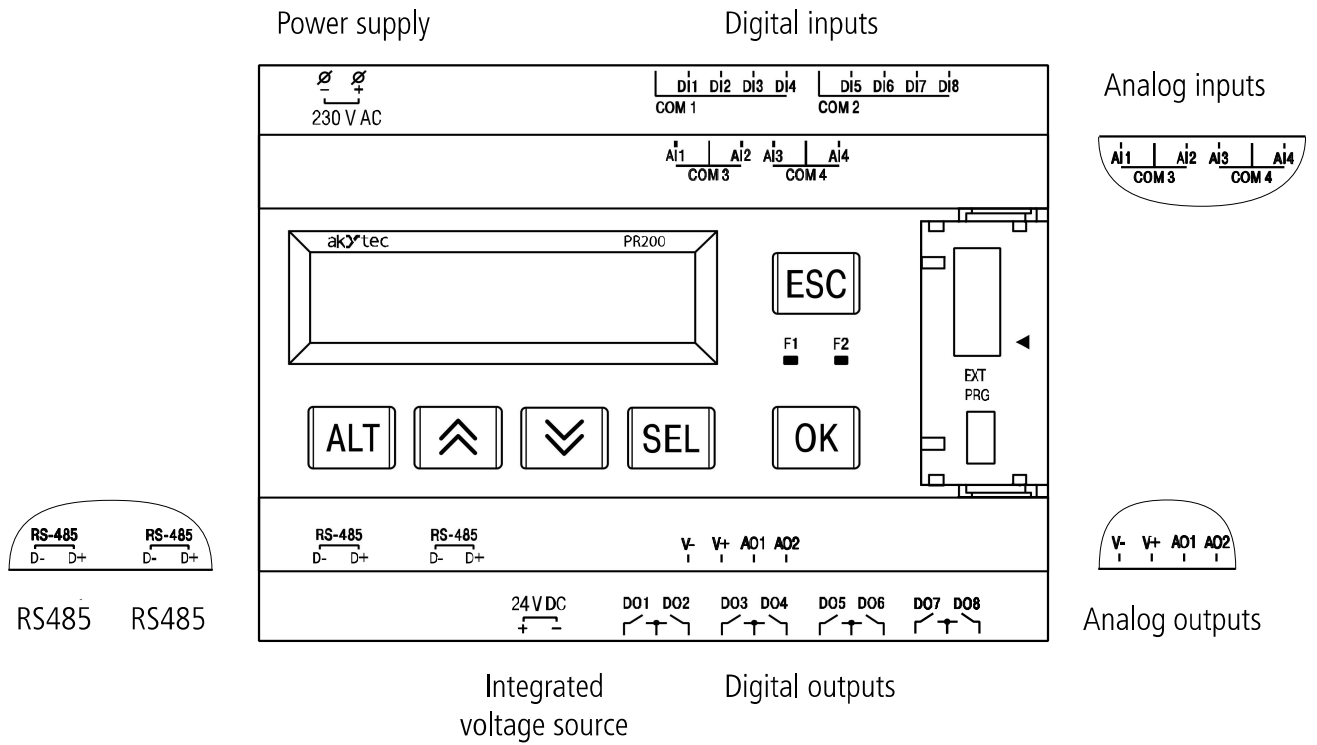
## Ordering code:

PR200 -	X	X	X
<b>Supply voltage</b>			
230 (94...264) V AC	230		
24 (19...30) V DC	24		
<b>I/O</b>			
8 DI, 6 DO		1	
8 DI, 4 AI, 8 DO, 2 AO (4-20 mA)		2	
8 DI, 4 AI, 8 DO, 2 AO (0-10 V)		4	
<b>Interface</b>			
none			0
RS485			1
2x RS485			2

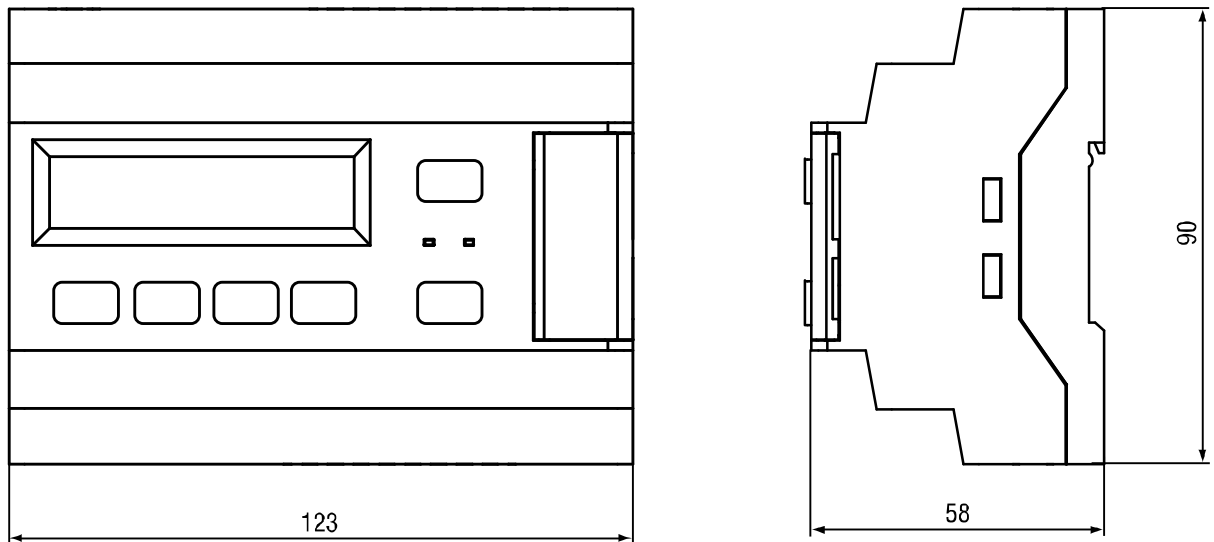
Standard variants	Description	Enclosure
PR200.24.1.1	24 V DC, 8DI + 6DO, LCD, 1x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail
PR200.24.2.0	24 V DC, 8DI + 8DO + 4AI + 2AO (4-20 mA), LCD	123 x 108 x 58 mm, DIN rail
PR200.24.2.2	24 V DC, 8DI + 8DO + 4AI + 2AO (4-20 mA), LCD, 2x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail
PR200.24.4.0	24 V DC, 8DI + 8DO + 4AI + 2AO (0-10 V), LCD	123 x 108 x 58 mm, DIN rail
PR200.24.4.2	24 V DC, 8DI + 8DO + 4AI + 2AO (0-10 V), LCD, 2x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail
PR200.230.1.1	230 V AC, 8DI + 6DO, LCD, 1x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail
PR200.230.2.0	230 V AC, 8DI + 8DO + 4AI + 2AO (4-20 mA), LCD	123 x 108 x 58 mm, DIN rail
PR200.230.2.2	230 V AC, 8DI + 8DO + 4AI + 2AO (4-20 mA), LCD, 2x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail
PR200.230.4.0	230 V AC, 8DI + 8DO + 4AI + 2AO (0-10 V), LCD	123 x 108 x 58 mm, DIN rail
PR200.230.4.2	230 V AC, 8DI + 8DO + 4AI + 2AO (0-10 V), LCD, 2x RS485 (Modbus RTU/ASCII)	123 x 108 x 58 mm, DIN rail

# PR200

## Terminal layouts PR200-230.2.2:



### Dimensions:



# PR200

## Technical Data:

		PR200.230.1	PR200.230.2		PR200.24.1	PR200.24.2
<b>General</b>						
Power supply		230 (90...264) V AC; 50 (47...63) Hz			24 (19...30) V DC	
Power consumption, max.		10 VA	17 VA		10 W	
Integrated voltage source		–	24±3 V DC, 100 mA		–	
Display		LCD with backlight, 2-line, 2x16-characters			LCD with backlight, 2 line, 2x16-characters	
Function keys		6			6	
Real Time Clock		Backup 8 years (CR2032)			Backup 8 years (CR2032)	
Mounting		DIN rail (switchboard / distribution box)			DIN rail (switchboard / distribution box)	
Ambient temperature		-20...+55 °C			-20...+55 °C	
IP code		IP20			IP20	
Dimensions		123 x 108 x 58 mm			123 x 108 x 58 mm	
Weight		approx. 350 g			approx. 350 g	
<b>Programming</b>						
Programming environment		akYtec ALP			akYtec ALP	
Programming language		FBD			FBD	
ROM		128 kB			128 kB	
Retain memory		1016 Byte			1016 Byte	
<b>Interfaces</b>						
RS485		optional, up to 2 x			optional, up to 2 x	
Protocols		Modbus RTU / ASCII (Master / Slave)			Modbus RTU / ASCII (Master / Slave)	
Baud rate		9.6...115.2 kbit/s			9.6...115.2 kbit/s	
Programming interface		Mini-USB			Mini-USB	
<b>Digital inputs</b>						
Quantity		8			8	
Type		Switch contact			Switch contact, PNP with open collector, Digital signals -3...+30 VDC	
Logical states	1	159...264 V AC (0.75...1.5 mA)		1	15...30 V DC (5 mA)	
	0	0...40 V AC (0...0.5 mA)		0	-3...+5 V DC (0...1 mA)	
Galvanic isolation		in groups of 4			in groups of 4	
<b>Universal inputs</b>						
Quantity		4			4	
Mode		Analog / Digital			Analog / Digital	
Galvanic isolation		none			none	
Analog input		0-10 V, 4-20 mA, 0...4 kohm			0-10 V, 4-20 mA, 0...4 kohm	
ADC resolution		12 bit			12 bit	
<b>Digital outputs</b>						
Quantity		6	8		6	8
Type		relay (NO)			relay (NO)	
Galvanic isolation		in groups of 2			in groups of 2	
Switching capacity	AC	5 A, 250 V (resistive load)		AC	5 A, 250 V (resistive load)	
	DC	3 A, 30 V		DC	3 A, 30 V	
Minimum load current		10 mA (at 5 V DC)			10 mA (at 5 V DC)	
<b>Analog outputs</b>						
Quantity		2			2	
Type		4-20 mA			4-20 mA	
Loading capacity		12...30 V, max. 1 kohm			12...30 V, max. 1 kohm	
DAC resolution		10 bit			10 bit	