PR100

PR100 is a compact Mini-PLC designed to solve basic automation tasks in, for example, lighting control, pumping control, ventilation and heating control, and other simple control systems.
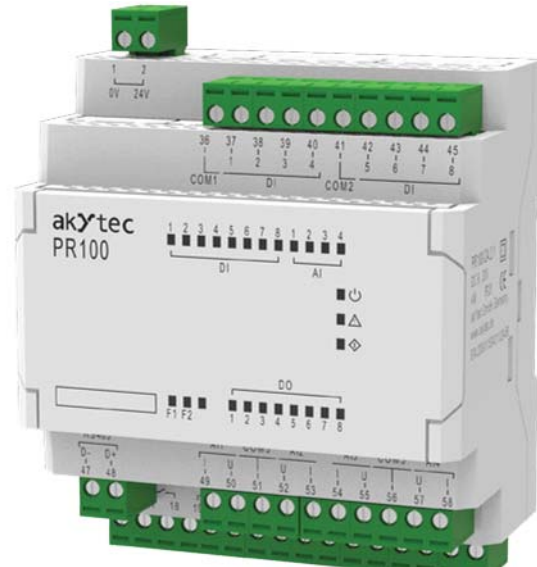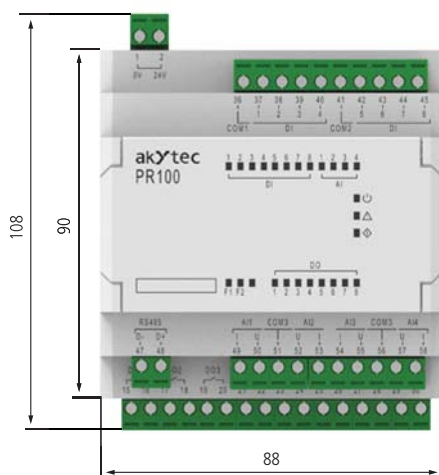
With its minimum width, which measures as narrow as five standard MCBs placed inline, and dedicated enclosure form, the PR100 Mini-PLC allows for space-saving installation even in smaller consumer units , not to mention control cabinets. This device can operate in non-heated environments down to -40°C as well as in heated ones in temperatures up to +55°C.

An application program is written in function block format in the akYtec ALP programming software available free of charge. The control algorithm is uploaded to the device memory through a micro USB cable.

Functions and features:

- Built-in 8DI + 8DO + 4AI + 1xRS485 in one device
- A total of 20 I/Os
- Configurable inputs for 4-20mA, 0-10V
- RS485 interface with Modbus RTU / ASCII | Master/Slave
- USB-powered in the programming mode
- Real-time clock
- Software-based features include: retain variables, day timer, week timer, PID control, etc.

Dimensions:

8 digital inputs	**8 DI**
8 digital outputs	**8 DO**
4 analog inputs	**4 AI**
Protocol Modbus RTU/ASCII	**Modbus**
RS485 interface	**RS485**
USB interface	
Built-in real-time clock	
DIN rail mounting	**DIN**
Software at no charge	
Ambient temperature	+55°C / -40°C

Technical Data:

General	
Power supply	24 (9...30) V DC
Power consumption, max.	4 W
Real Time Clock	Backup 5 years (CR2032)
Real Time Clock accuracy	± 3 s/day
Extension modules	none
Programming	
Programming environment	akYtec ALP
Programming language	FBD
Programming interface	Mini-USB
Memory	
ROM	128 kB
RAM	16 kB
Retain memory	1 kB
Network variables	128 Byte
Communication	
Interface	RS485
Protocols	Modbus RTU / ASCII (Master / Slave)
Baud rate	9.6...115.2 kBit/s
Digital inputs	
Quantity	8
Type	Switch contact
Logical states	
1	8.5...30 V DC (2...5 mA)
0	-3...+5 V DC (0...15 mA)
Galvanic isolation	in groups of 4
Universal inputs	
Quantity	4
Mode	Analog / Digital
Galvanic isolation	none
Analog input	4-20 mA, 0-10 V
ADC resolution	12 bit
Digital outputs	
Quantity	8
Type	relay, NO
Galvanic isolation	individual
Switching capacity	
AC	5 A, 250 V (resistive load)
DC	3 A, 30 V
Minimum load current	10 mA (at 5 V DC)
Environment	
Ambient temperature	-40...+55 °C
Storage temperature	-25...+55 °C
Humidity	up to 80 % (at +25 °C, non-condencing)
IP Code	IP20
Enclosure	
Dimensions	88 × 108 × 58 mm
Weight	approx. 250 g
Material	plastic

The Mini-PLC PR100 cannot be expanded with PRM extension modules.

akYtec

We will be glad to assist you! Tel.: +49 (0) 511 16 59 672-0