

**Model:PR-14AC-R**

## GENERAL SPECIFICATIONS

Timers : 512

Counters : 512

Function Blocks: 512

Operation temp.: -20°C-55°C

Storage:-40°C-70°C

Protection: IP20(Non-waterproof)

RTC accuracy : MAX ±2S/day

RTC Backup at 25 °C: 20 days

Program and settings Backup :10 years

Data Power-off retentivity: 10 years

Modify parameters via keypad LCD: yes

Dimensions: 95\*90\*55 (Unit: mm)

Certificate: CE

Installation: 35-DIN rail or screw for installation

Expansion capacity: 16 modules (PR-E-16)

Password protection : 4-digit number password protection or disable program upload function

Communication interface : 1 RS232 port & 1 RS485 port

Communication protocol : Modbus RTU/ASCII

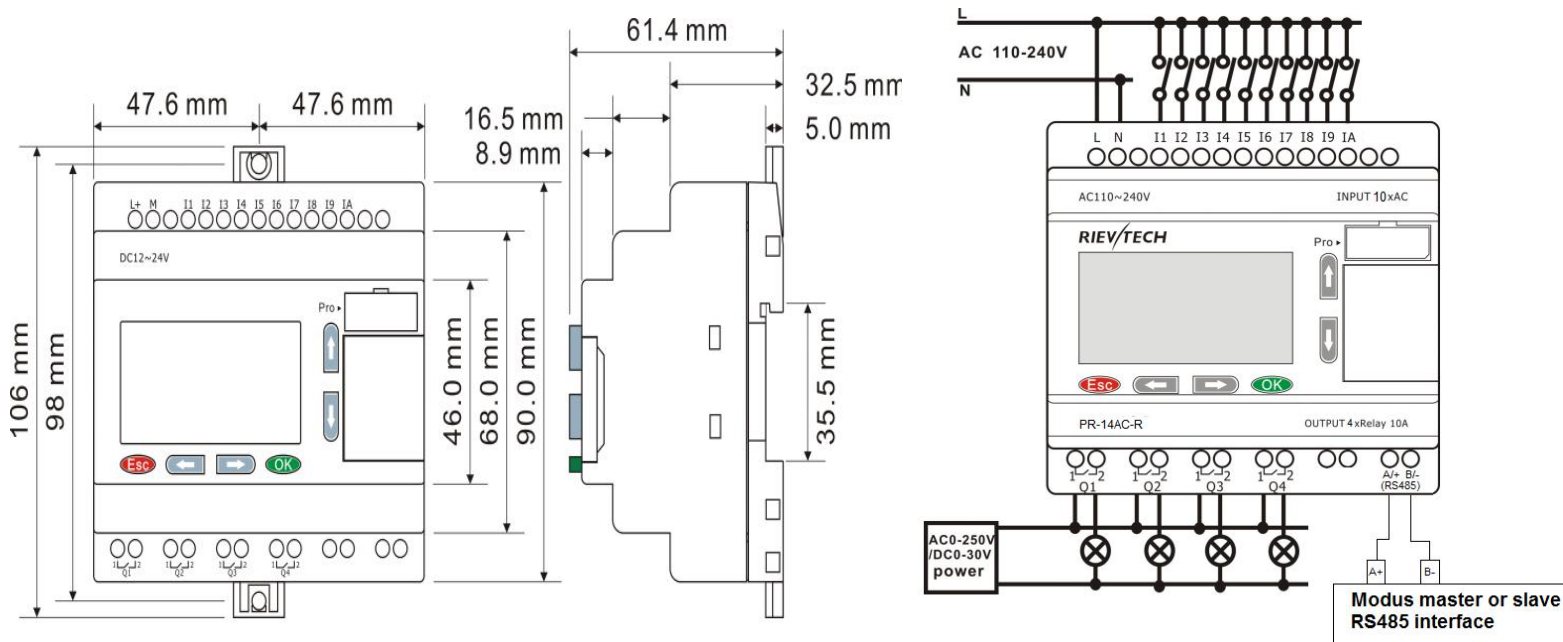


## Technical Index

<b>Power supply:</b>	
Nominal voltage	AC110V-240V
Operating limits	AC85 - 265 V
The main frequency range	47-63Hz
Max. absorbed power	49mA (85V ac) ; 37mA (265V ac)
Isolation voltage	1780V AC
Protection against polarity inversions	Yes
<b>Input parameters:</b>	
Input No	10 ( I1-IA)
Digital input	10 ( I1-IA)
Analogue input	None
Input voltage	AC110-240V
Input signal0	AC0-40V; <0.03mA
Input signal1	AC79-240V; >0.06mA
Input Response Time	Delay time at 0 to 1: 120V AC : Typ. 50 ms 240V AC : Typ. 30 ms Delay time at 1 to 0: 120V AC : Typ. 90 ms 240V AC : Typ.100 ms
Maximum counting frequency	Typ. 4Hz

Sensor type	Contact or 3-wire PNP
Isolation between power supply and inputs	None
Isolation between inputs	None
Protection against polarity inversions	Yes
<b>Output parameters:</b>	
Output No.	4 (Q1-Q4)
Output type	Relay output
Continuous current	Resistive load 10A/Inductive load 2A
Max. breaking voltage	AC 250 V DC 110 V
Max. Allowable Power Force	1250VA 300W
Electrical durability Expectancy	10 <sup>5</sup> Operations at Rated Resistive Load
Mechanical life	10 <sup>7</sup> Operations at No Load condition
Response time	Operate Time : 15 mSec. Max. Release Time : 10 mSec. Max.
Built-in protections	Against short-circuits: None Against overvoltages and overloads: None
<b>Switch frequency:</b>	
Mechanism	10Hz
Resistor/light load	2Hz
Sensitive load	0.5Hz
<b>Other parameters:</b>	
Weight	Approx.400g

## Installation Dimensions & Wiring Diagram



SYSTEM				Operating System requirements		Windows /2000/XP/WIN7/WIN8		Programming languages		Function block		Program Memory		512		Execution Speed		<0.1ms per function		LCD Display		4 lines x 16 characters		Functions		Up to 70 function blocks			
BASIC	Timers																								<ul style="list-style-type: none"> <li>a.On-delay;</li> <li>b.Off-delay etc.</li> </ul> Up to 12 kind Timers				
	Maximum Number		512																										
	Timing Ranges		10ms--99 h59m																										
	Counters																										<ul style="list-style-type: none"> <li>a.Up/down Counter</li> <li>b.Hours Counter</li> <li>c.Frequency Threshold Trigger</li> </ul>		
	Maximum Number		512																										
	Highest Count		99999999																										
	Resolution		1																										
	RTC																										<ul style="list-style-type: none"> <li>a.Weekly Timer</li> <li>b.Yearly Timer</li> </ul>		
	Number available		512																										
	Resolution		1 min																										
	Time span available		Week/year-month-day-hour-min																										
	Flags																										<ul style="list-style-type: none"> <li>a.Digital Flag</li> <li>b.Analog Flag</li> </ul>		
	Digital flags		256																										
	Analog flags		256																										
	PI Functions																										a.PI Controller		
	Number available		30																										
	Parameter Ranges		1-32767																										
	Analog Math																										<ul style="list-style-type: none"> <li>a.Analog Math</li> <li>b.Analog Math Error detection</li> </ul>		
Number available		1024																											
Function		ADD, Subtract,Multiply, Divide																											
Analog Ramp Function																										a. Analog Ramp			
Number available		55																											
Compare Function																										<ul style="list-style-type: none"> <li>a.Analog compactor</li> <li>b.Comparison of 2 values</li> </ul>			
Number available		512																											
Special Functions	HMI Screens																								a.Message texts				
	Number available		128																										
	Display/Edit		Preset Current value and Free text																										
	PWM Functions																										a.PWM		
	Number available		No fast output																										
	Communication Functions																										<ul style="list-style-type: none"> <li>a.Modbus write</li> <li>b.Modbus read</li> </ul>		
	Number available		512(Only CPU works as Master need these 2 blocks, slave does not need)																										
	Word/bit data Conversion		Square Boot		Sin/Cos		RS latch relay																						
	Data-logger Function		Analog watchdog		Analog filter		Average value																						
	Pumps Management		Defrost function		Multiplexer		Pulse Relay																						
Cam Control		Astronomical clock		Stop watch		Boolean function																							
Note: 1.Not all program functions are listed in this table i.e. AND,NAND,OR,NOT,NOR,XOR,SHIFT REGISTER,DATA LATCHING RELAY, COMPORT STATUS etc.																													