

## ◆ Technical Data:

**Model:PR-12DC-DA-R-E**

### GENERAL SPECIFICATIONS

Timers : 64

Counters : 64

Function Blocks: 64

Operation temp. : -20°C-55°C

Storage:-40°C-70°C

Protection: IP20

RTC accuracy : MAX ±2S/day

RTC Backup at 25 °C : 20 days

Program and settings Backup :10 years

Data Power-off retentivity : No

Cycle time: typ. 0.6ms → 8.0ms

Dimensions: 72\*90\*58 (Unit, mm)

Certificate: CE,ROHS

Installation: 35mm-DIN rail or screw for installation

Expansion capacity: No

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

Communication interface : TTL interface , 1 Program/RS232 port

Communication protocol : Modbus RTU/ASCII , only can serve as slaves

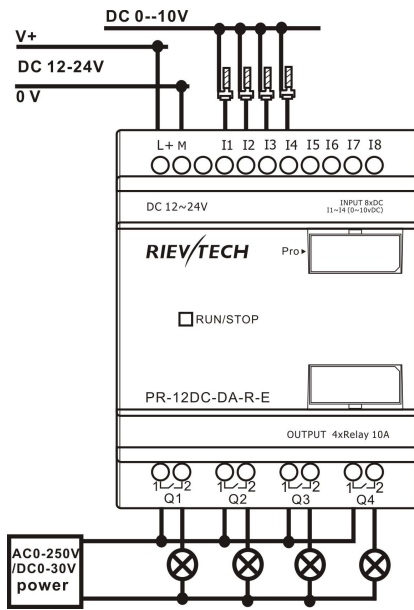
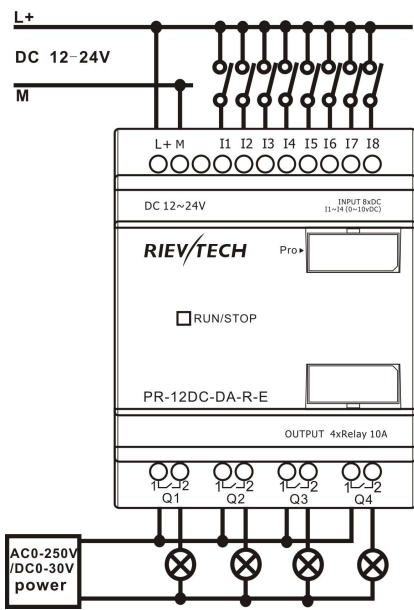
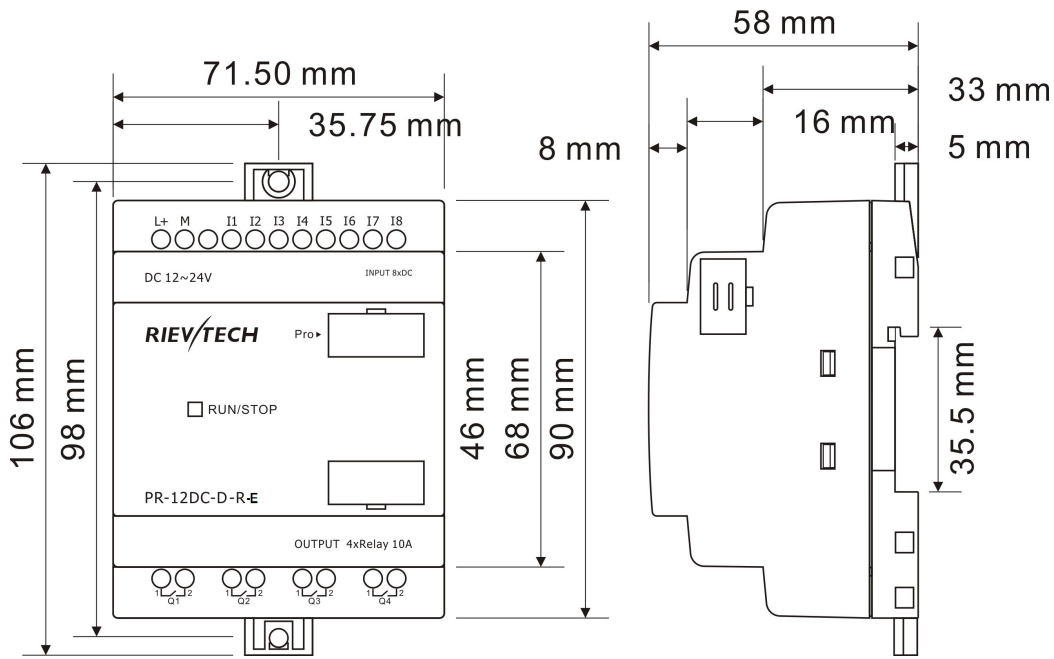


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Power supply:	
Nominal voltage	DC 12-24V
Operating limits	DC 10.8-28.8V
Immunity from micro power cuts	Typ.5 ms
Max. Startup current	Max. 0.25A
Max. absorbed power	3.2 W (10.8V dc) ; 3.8 W (28.8V dc)
Protection against polarity inversions	Yes
Input parameters:	
Input No	8 ( I1-I8 )
Digital input	8 ( I1-I8 )
Analogue input	4 ( I1-I4)(0..10V DC)
Digital inputs( I5-I8 )	
Input voltage	DC0-28.8V
Input signal0	< 5V DC; <1mA
Input signal1	> 8 V DC;>1.7mA
Input current	2.3mA @ 10.8V dc 2.6mA @ 12.0 V dc 5.2 mA @ 24 V dc 6.3 mA @ 28.8 V dc
Response time	0 to 1 : <1 ms ; 1 to 0 : <1 ms
Maximum counting frequency	Typ.: 4 HZ

Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
<b>Inputs used as digital inputs( I1-I4 )</b>	
Input voltage	DC0-28.8V
Input signal0	< 5V DC;<0.1mA
Input signal1	> 8 V DC;>0.3mA
Input current	0.4mA @ 10.8V dc 0.5mA @ 12.0 V dc 1.2mA @ 24 V dc 1.5mA @ 28.8 V dc
Response time	0 to 1 : Typ. 1.5 ms ; 1 to 0 : Typ. 1.5 ms
Maximum counting frequency	Typ.: 4 HZ
Sensor type	Contact or 3-wire PNP
Input type	Resistive
Isolation between power supply and inputs	None
Isolation between inputs	None
<b>Inputs used as analog inputs( I1-I4 )</b>	
Measurement range	DC 0---10V
Input impedance	Min, 24K $\Omega$ ; Max. 72K $\Omega$
Input voltage	28.8 V DC max
Resolution	9bit ,0.015V
Accuracy at 25 °C	$\pm$ (Max.0.03)V
Accuracy at 55 °C	$\pm$ (Max.0.06)V
Isolation between analog channel and power supply	None
Cable length	10 m max. shielded and twisted
<b>Output parameters:</b>	
Output No.	4 (Q1-Q4)
Output type	Relay output
Max. Allowable Power Force(Resistive)	CE: 10A,250V AC/DC30V UL/CUL: 10A,250V AC; 5A,DC28V
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.300g

## Installation Dimensions & Wiring Diagram



SYSTEM	Operating System requirements	Windows /2000/XP/WIN7/WIN8			
	Programming languages	Function block			
	Program Memory	64			
	Execution Speed	<0.1ms per function			
	LCD Display	No			
	Functions	Up to 70 function blocks			
BASIC	Timers				a.On-delay; b.Off-delay etc. Up to 12 kind Timers
	Maximum Number	64			
	Timing Ranges	10ms--99 h59m			
	Counters				a.Up/down Counter b.Hours Counter c.Frequency Threshold Trigger
	Maximum Number	64			
	Highest Count	99999999			
	Resolution	1			
	RTC				a.Weekly Timer b.Yearly Timer
	Number available	64			
	Resolution	1 min			
	Time span available	Week/year-month-day-hour-min			
	Flags				a.Digital Flag b.Analog Flag
	Digital flags	32			
	Analog flags	32			
	PI Functions				a.PI Controller
	Number available	Not available			
	Parameter Ranges	----			
	Analog Math				a.Analog Math b.Analog Math Error detection
	Number available	Not available			
	Function	---			
Analog Ramp Function				a. Analog Ramp	
Number available	Not available				
Compare Function				a.Analog compactor b.Comparison of 2 values	
Number available	64				
Special Functions	HMI Screens				a.Message texts
	Number available	Not available			
	Display/Edit	----			
	PWM Functions				a.PWM
	Number available	Not available			
	Communication Functions				a.Modbus write b.Modbus read
	Number available	Not available(it only can work as slave)			
	Analog threshold trigger	Analog amplifier			
	Analog differential trigger	Data Latching relay	Pulse Relay	Shift register	
	AND	NAND	OR	XOR	