

◆ 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

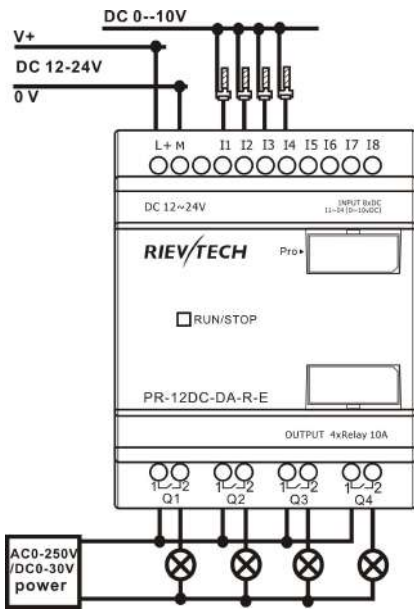
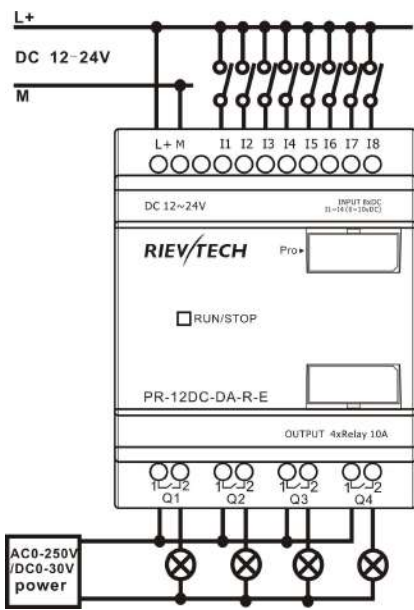
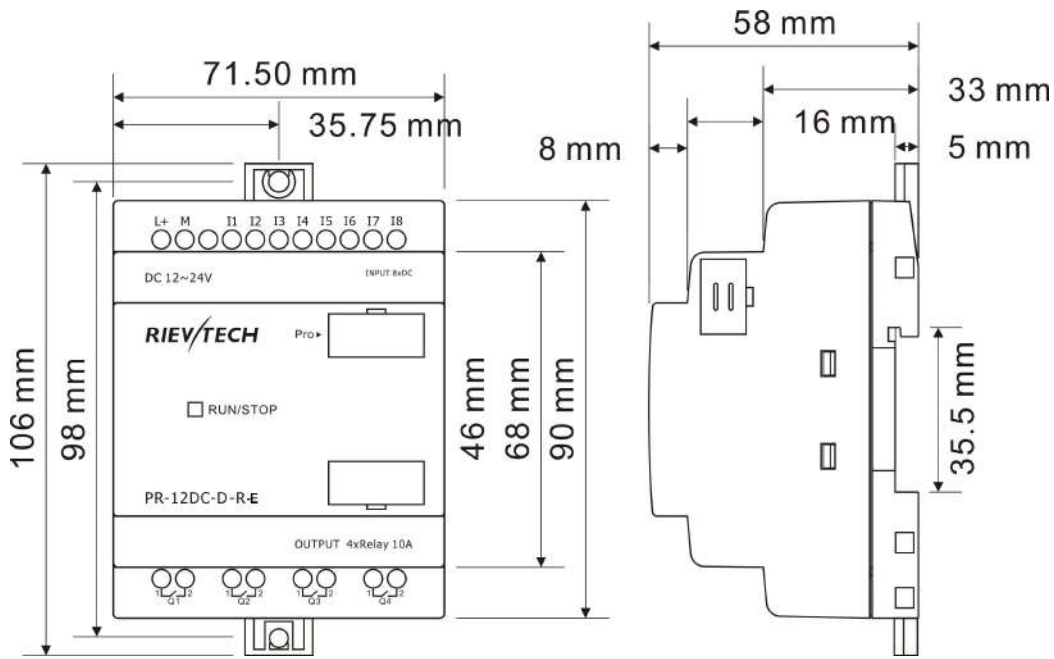


Technical Index

| 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 |
| Inputs used as digital inputs(I1-I4) | |
| 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 |
| Inputs used as analog inputs(I1-I4) | |
| Measurement range | DC 0---10V |
| Input impedance | Min, 24K Ω ; Max. 72K Ω |
| 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 |
| Output parameters: | |
| 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 ⁵ Operations at Rated Resistive Load |
| Mechanical life | 10 ⁷ 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 |
| Switch frequency: | |
| Mechanism | 10Hz |
| Resistor/light load | 2Hz |
| Sensitive load | 0.5Hz |
| Other parameters: | |
| 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 | | | RS latch relay |
| | Analog differential trigger | Data Latching relay | Pulse Relay | | Shift register |
| | AND | NAND | OR | | XOR |
| | | | | | |