

14 I/O Expandable



PR-14

Model: PR-14AC-R AC

Model: PR-14DC-DA-R DC

Specifications

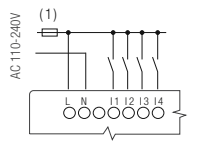
Item	PR-14AC-R	PR-14DC-DA-R
Nominal voltage	AC 110V-240V	DC 12-24V
Operating limits	AC 85 - 265V	DC 10.8-28.8V
The main frequency range	47-63Hz	-
Immunity from micro power	-	Typ 5 ms
Max startup current	-	Max 0.25A
Isolation voltage	1780V AC	-
Max absorbed power	49 mA (85V AC) 37 mA (265V AC)	3.5 W (10.8V DC) 4W (28.8V DC)
Protection against polarity inversions	Yes	
Input No	10 (I1-IA)	
Digital input	10 (I1-IA)	
Analogue input	-	6 (I1-I6) (0..10V DC)
Input voltage	AC 110-240V	DC 0-28.8V
Input signal 0	AC 0-40V <0.03mA	(I1-I6) <0.1mA / (I7-IA) <1mA @ < 5V DC
Input signal 1	AC 79-240V >0.06mA	(I1-I6) >0.3mA / (I7-IA) >1.7mA @ > 8V DC
Input current	-	(I1-I6) 0.4mA / (I7-IA) 2.3mA @ 10.8V DC (I1-I6) 0.5mA / (I7-IA) 2.6mA @ 12.0 V DC (I1-I6) 1.2mA / (I7-IA) 5.2mA @ 24 V DC (I1-I6) 1.5mA / (I7-IA) 6.3mA @ 28.8 V DC
Response time	0 to 1: 120V AC : Typ. 50 ms 240V AC : Typ. 30 ms 1 to 0: 120V AC : Typ. 90 ms 240V AC : Typ.100 ms	(I1-I6): 0 to 1: Typ. 1.5 ms 1 to 0: Typ. 1.5 ms (I7-IA): 0 to 1: Typ. <1 ms 1 to 0: Typ. <1 ms
Maximum counting frequency	Typ: 4 Hz	I1-I6: 4 Hz I7-IA: 60 kHz
Sensor type	Contact or 3-wire PNP	
Input type	-	Resistive
Isolation between power supply and inputs	-	
Isolation between inputs	-	
Protection against polarity inversions	Yes	-
Measurement range	-	DC 0-10V
Input impedance	-	Min 24KΩ Max 72KΩ
Input voltage	-	28.8 V DC max
Resolution	-	10bit 0.01V
Accuracy at 25 °C	-	± (Max 0.02)V
Accuracy at 55 °C	-	± (Max 0.04)V
Isolation between analog inputs and power supply	-	
Cable length	-	10 m max shielded & twisted

Item	PR-14
Memory	512 Functional Blocks / 5K Steps
Data Retentivity	10 years
Program Backup	10 years
RTC	Backup at 25 °C: 20 days, RTC accuracy : MAX ±2S/day
Cycle time	0.6ms - 8.0ms
Expansion	16 modules (PR-E-16)
Communication	1 RS232 port & 2 RS485 port (1 built-in) Modbus RTU/ASCII Master or Slave
Certificate	
Operation Temp	-20 °C .. +55 °C
Storage Temp	-40 °C .. +70 °C
Protection	IP20
Dimensions	95*90*55 (Unit, mm) 6DIN
Installation	35mm-DIN rail or screw for installation
Weight	Approx. 400g

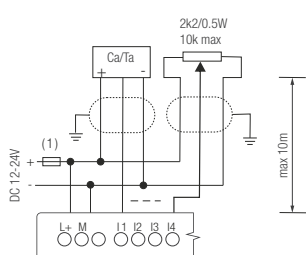
Item	PR-14AC-R	PR-14DC-DA-R
Output No	4 (Q1-Q4)	
Output type	Relay output	
Continuous current	Resistive load 10A/Inductive load 2A	
Max breaking voltage	AC 250 V DC 110 V	
Max allowable power force	1250VA 300W	
Electrical durability expectancy	105 Operations at Rated Resistive Load	
Mechanical life	107 Operations at No Load condition	
Built-in protections	Against short-circuits: None Against overvoltages and overloads: None	
Response time	Operate Time : 15 ms max Release Time : 10 ms max	
Mechanism	10Hz	
Resistor/light load	2Hz	
Sensitive load	0.5Hz	

I/O circuit diagrams

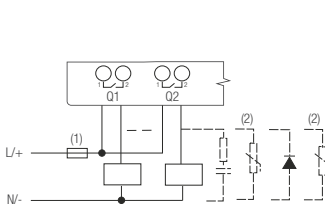
[Digital Input - Power AC]



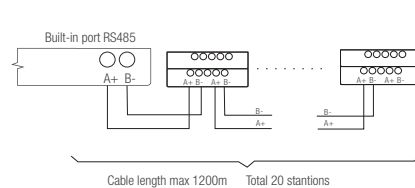
[DC analog inputs 0-10V - Power DC]



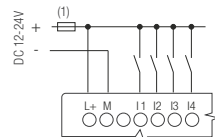
[Relay Outputs]



[RS485 Connection]



[Digital Input - Power DC]



(1) - Fuse, circuit-breaker or circuit protector
(2) - Inductive load;