

A.10 CPU 214 AC Power Supply, DC Inputs, Relay Outputs

Order Number: 6ES7 214-1BC01-0XB0

General Features		Output Points	
Physical size (L x W x D)	197 x 80 x 62 mm (7.76 x 3.15 x 2.44 in.)	Output type	Relay, dry contact
Weight	0.5 kg (1.0 lbs.)	Voltage range	5 to 30 VDC/250 VAC
Power dissipation	9 W	Maximum load current	2 A/point, 8 A/common
User program size/Storage	2 Kwords/EEPROM	Overcurrent surge	7 A with contacts closed
User data size/storage	2 Kwords/RAM	Isolation resistance	100 M Ω minimum (new)
Data and TOD retention Supercap	190 hr typ. (120 hr minimum at 40° C)	Switching delay	10 ms maximum
Optional battery	200 days continuous usage	Lifetime	10,000,000 mechanical 100,000 with rated load
Local I/O ¹	14 inputs/10 outputs	Contact resistance	200 m Ω maximum (new)
Max. I/O expansion modules	7	Isolation coil to contact	1500 VAC, 1 min
Digital I/O supported	64 inputs/64 outputs	contact to contact (between open contacts)	750 VAC, 1 min
Analog I/O supported	16 inputs/16 outputs	Short circuit protection	none
Boolean execution speed	0.8 μ s/instruction	Power Supply	
Internal memory bits	256	Voltage/frequency range	85 to 264 VAC at 47 to 63 Hz
Timers	128 timers	Input current	4.5 VA typical, CPU only 50 VA max. load
Counters	128 counters	Holdup time	20 ms min. from 110 VAC
High-speed counters	1 software (2 KHz max.) 2 hardware (7 KHz max. ea.)	Inrush current	20 A peak at 264 VAC
TOD clock tolerance	6 minutes per month	Fusing (non-replaceable)	2 A, 250 V, slow blow
Pulse outputs	Not recommended	5 VDC current	340 mA for CPU 660 mA for expansion I/O
Analog adjustments	2	Isolated	Yes. Transformer, 1500 VAC, 1 min
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	DC Sensor Supply	
Input Points		Voltage range	20.4 to 28.8 VDC
Input type (IEC 1131-2)	Type 1 sinking	Ripple/noise (<10MHz)	1 V peak-to-peak maximum
ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge	24 VDC available current	280 mA
ON state nominal	24 VDC, 7 mA	Short circuit current limit	< 600 mA
OFF state maximum	5 VDC, 1 mA	Isolated	No
Maximum response time I0.0 to I1.5	0.2 ms to 8.7 ms selectable 0.2 ms default		
I0.6 to I1.5 as used by HSC1 and HSC2	30 μ s typical / 70 μ s max.		
Optical isolation	500 VAC, 1 min		

¹ The CPU reserves 16 process-image input and 16 process-image output register points for local I/O.

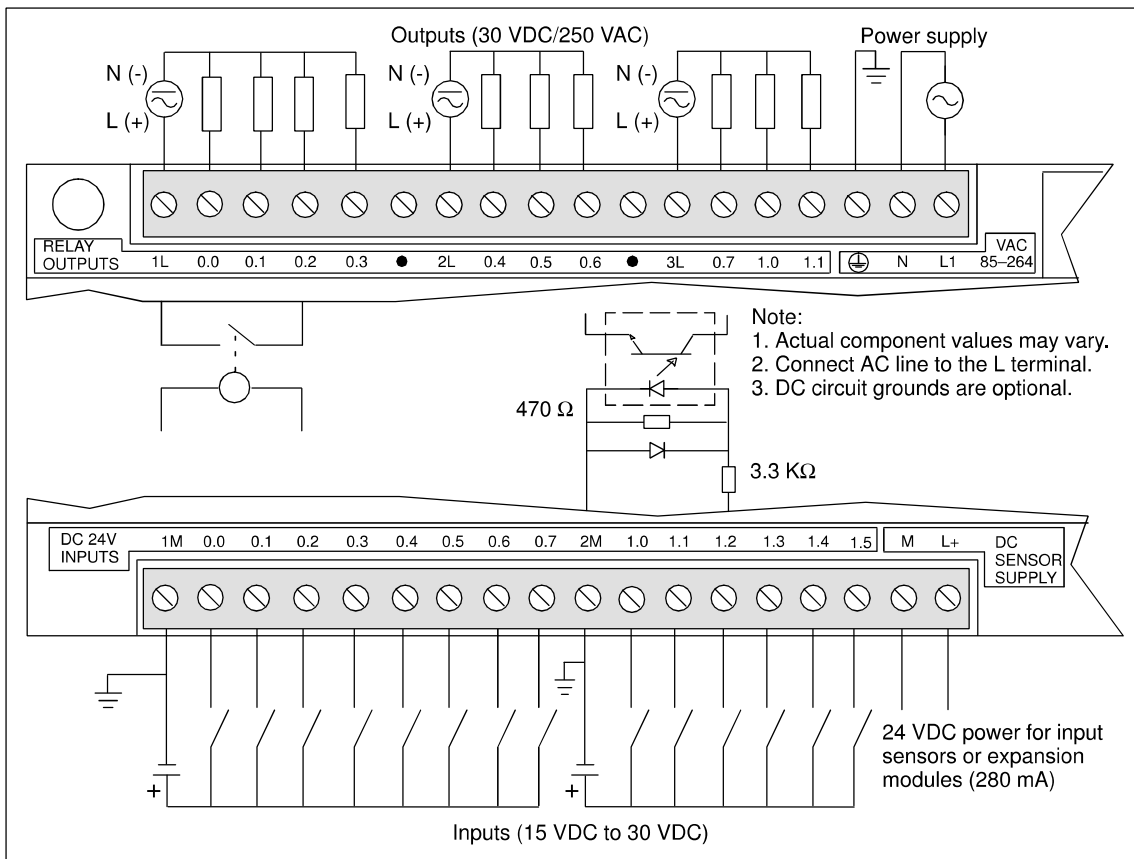


Figure A-10 Connector Terminal Identification for CPU 214 AC/DC/Relay