

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	750 VAC, 1 min
Analog I/O supported	16 inputs/16 outputs	(between open contacts)	
Boolean execution speed	0.8 μ s/instruction	Short circuit protection	none
Internal memory bits	256	Power Supply	
Timers	128 timers	Voltage/frequency range	85 to 264 VAC at 47 to 63 Hz
Counters	128 counters	Input current	4.5 VA typical, CPU only 50 VA max. load
High-speed counters	1 software (2 KHz max.) 2 hardware (7 KHz max. ea.)	Holdup time	20 ms min. from 110 VAC
TOD clock tolerance	6 minutes per month	Inrush current	20 A peak at 264 VAC
Pulse outputs	Not recommended	Fusing (non-replaceable)	2 A, 250 V, slow blow
Analog adjustments	2	5 VDC current	340 mA for CPU 660 mA for expansion I/O
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	Isolated	Yes. Transformer, 1500 VAC, 1 min
Input Points		DC Sensor Supply	
Input type (IEC 1131-2)	Type 1 sinking	Voltage range	20.4 to 28.8 VDC
ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge	Ripple/noise (<10MHz)	1 V peak-to-peak maximum
ON state nominal	24 VDC, 7 mA	24 VDC available current	280 mA
OFF state maximum	5 VDC, 1 mA	Short circuit current limit	< 600 mA
Maximum response time		Isolated	No
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.

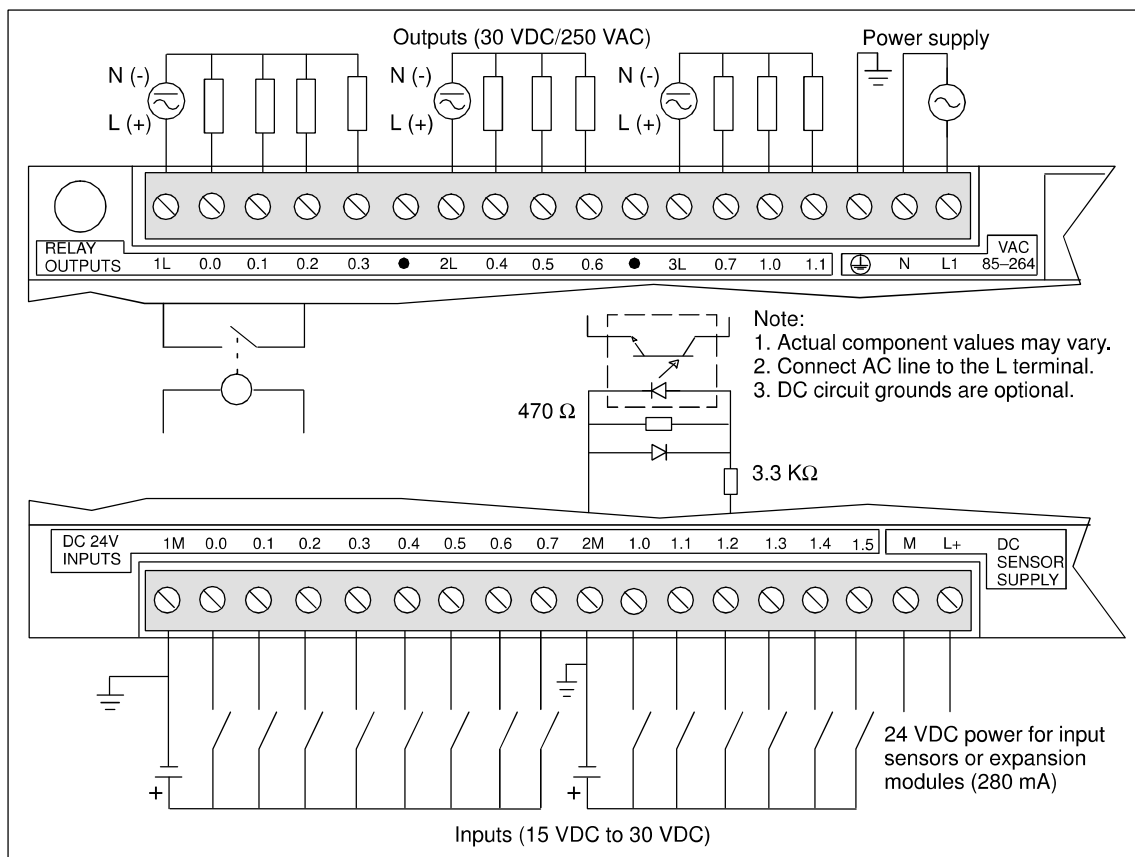


Figure A-10 Connector Terminal Identification for CPU 214 AC/DC/Relay