

A.3 CPU 212 AC Power Supply, DC Inputs, Relay Outputs

Order Number: 6ES7 212-1BA01-0XB0

General Features		Input Points	
Physical size (L x W x D)	160 x 80 x 62 mm (6.3 x 3.15 x 2.44 in.)	Input type (IEC 1131-2)	Type 1 sinking
Weight	0.4 kg (0.9 lbs.)	ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge
Power dissipation	6 W	ON state nominal	24 VDC, 7 mA
User program size/storage	512 words/EEPROM	OFF state maximum	5 VDC, 1 mA
User data size/storage	512 words/RAM	Response time	
Data retention	50 hr typical (8 hr minimum at 40° C)	I0.0 to I0.7	0.3 ms maximum
Local I/O ¹	8 inputs/6 outputs	Optical isolation	500 VAC, 1 min
Maximum number of expansion modules	2	Power Supply	
Digital I/O supported	64 inputs/64 outputs	Voltage/frequency range	85 to 264 VAC at 47 to 63 Hz
Analog I/O supported	16 inputs/16 outputs	Input current	4 VA typical, CPU only 50 VA maximum load
Boolean execution speed	1.2 µs/instruction	Holdup time	20 ms minimum from 110 VAC
Internal memory bits	128	Inrush current	20 A peak at 264 VAC
Timers	64 timers	Fusing (non-replaceable)	2 A, 250 V, slow blow
Counters	64 counters	5 VDC current	260 mA for CPU 340 mA for expansion I/O
High-speed counters	1 software (2 KHz max.)	Isolated	Yes. Transformer, 1500 VAC, 1 min
Analog adjustments	1	DC Sensor Supply	
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	Voltage range	20.4 to 28.8 VDC
Output Points		Ripple/noise (<10MHz)	1 V peak-to-peak maximum
Output type	Relay, dry contact	24 VDC available current	180 mA
Voltage range	5 to 30 VDC/250 VAC	Short circuit current limit	< 600 mA
Maximum load current	2 A/point, 6 A/common	Isolated	No
Overcurrent surge	7 A with contacts closed		
Isolation resistance	100 MΩ minimum (new)		
Switching delay	10 ms maximum		
Lifetime	10,000,000 mechanical 100,000 with rated load		
Contact resistance	200 mΩ maximum (new)		
Isolation			
coil to contact	1500 VAC, 1 min		
contact to contact (between open contacts)	750 VAC, 1 min		
Short circuit protection	None		

1 The CPU reserves 8 process-image input and 8 process-image output image register points for local I/O.

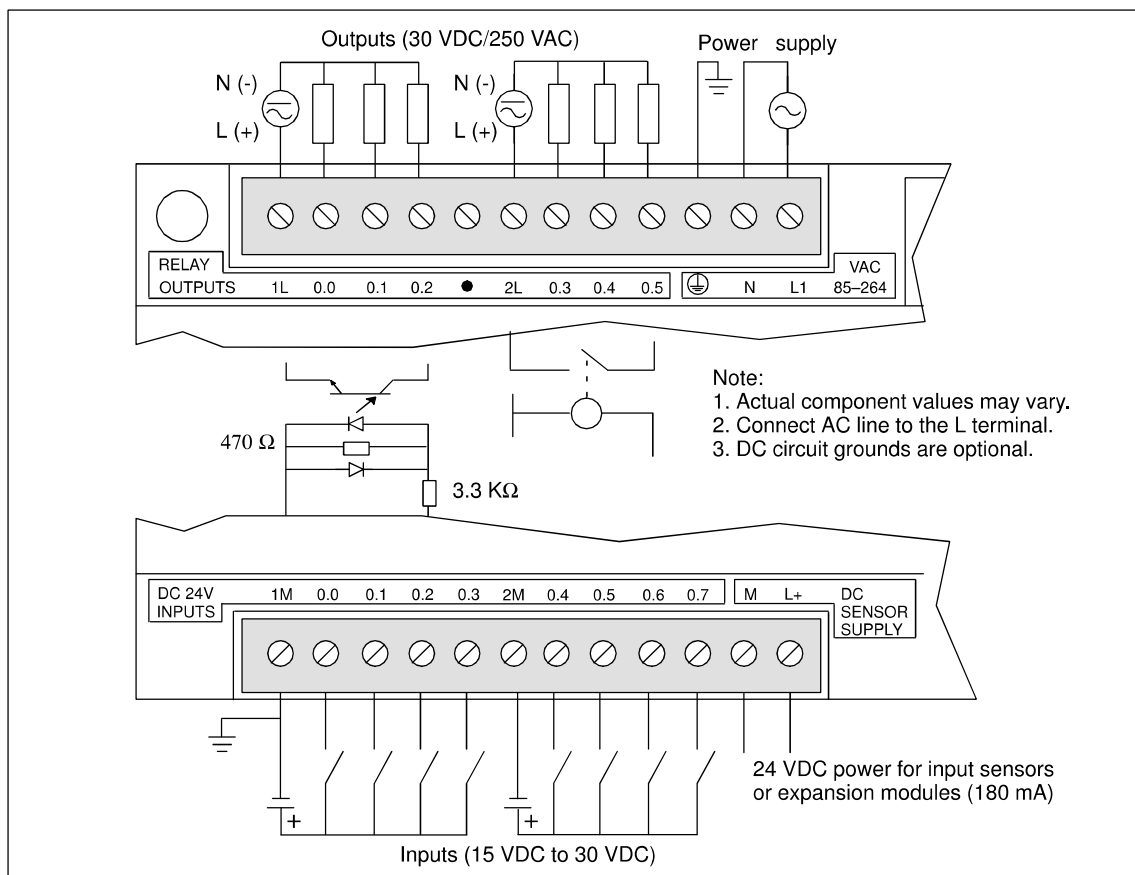


Figure A-3 Connector Terminal Identification for CPU 212 AC/DC/Relay