

A.2 CPU 212 DC Power Supply, DC Inputs, DC Outputs

Order Number: 6ES7 212-1AA01-0XB0

General Features		Output Points (continued)	
Physical size (L x W x D)	160 x 80 x 62 mm (6.3 x 3.15 x 2.44 in.)	Switching delay	25 µs ON, 120 µs OFF
Weight	0.3 kg (0.7 lbs.)	Surge current	4 A, 100 ms
Power dissipation	5 W at 1.75 A load	Voltage drop	1.8 V maximum at maximum current
User program size/storage	512 words/EEPROM	Optical isolation	500 VAC, 1 min
User data size/storage	512 words/RAM	Short circuit protection	None
Data retention	50 hr typical (8 hr minimum at 40° C)	Input Points	
Local I/O ¹	8 inputs/6 outputs	Input type (IEC 1131-2)	Type 1 sinking
Maximum number of expansion modules	2	ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge
Digital I/O supported	64 inputs/64 outputs	ON state nominal	24 VDC, 7 mA
Analog I/O supported	16 inputs/16 outputs	OFF state maximum	5 VDC, 1 mA
Boolean execution speed	1.2 µs/instruction	Response time I0.0 to I0.7	0.3 ms maximum
Internal memory bits	128	Optical isolation	500 VAC, 1 min
Timers	64 timers	Power Supply	
Counters	64 counters	Voltage range	20.4 to 28.8 VDC
High-speed counters	1 software (2 KHz max.)	Input current	60 mA typical, CPU only 500 mA maximum load
Analog adjustments	1	UL/CSA rating	50 VA
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	Holdup time	10 ms minimum from 24 VDC
Output Points		Inrush current	10 A peak at 28.8 VDC
Output type	Sourcing transistor	Fusing (non-replaceable)	1 A, 125 V, slow blow
Voltage range	20.4 VDC to 28.8 VDC	5 VDC current	260 mA for CPU 340 mA for expansion I/O
Maximum load current	0 to 40° C $\frac{55^\circ \text{C}^2}{2}$	Isolated	No
Per single point	0.75 A	DC Sensor Supply	
Per 2 adjacent points	1.00 A	Voltage range	16.4 to 28.8 VDC
All points total	2.25 A	Ripple/noise (<10MHz)	Same as supplied voltage
Inductive load clamping	(per common)	24 VDC available current	180 mA
Single pulse	2A L/R = 10 ms 1A L/R = 100 ms	Short-circuit current limit	< 600 mA
Repetitive	1 W energy dissipation (1/2 Li ² x switch rate < 1 W)	Isolated	No
Leakage current	100 µA		

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

² Linear derate 40 to 55° C Vertical mount derate 10° C.

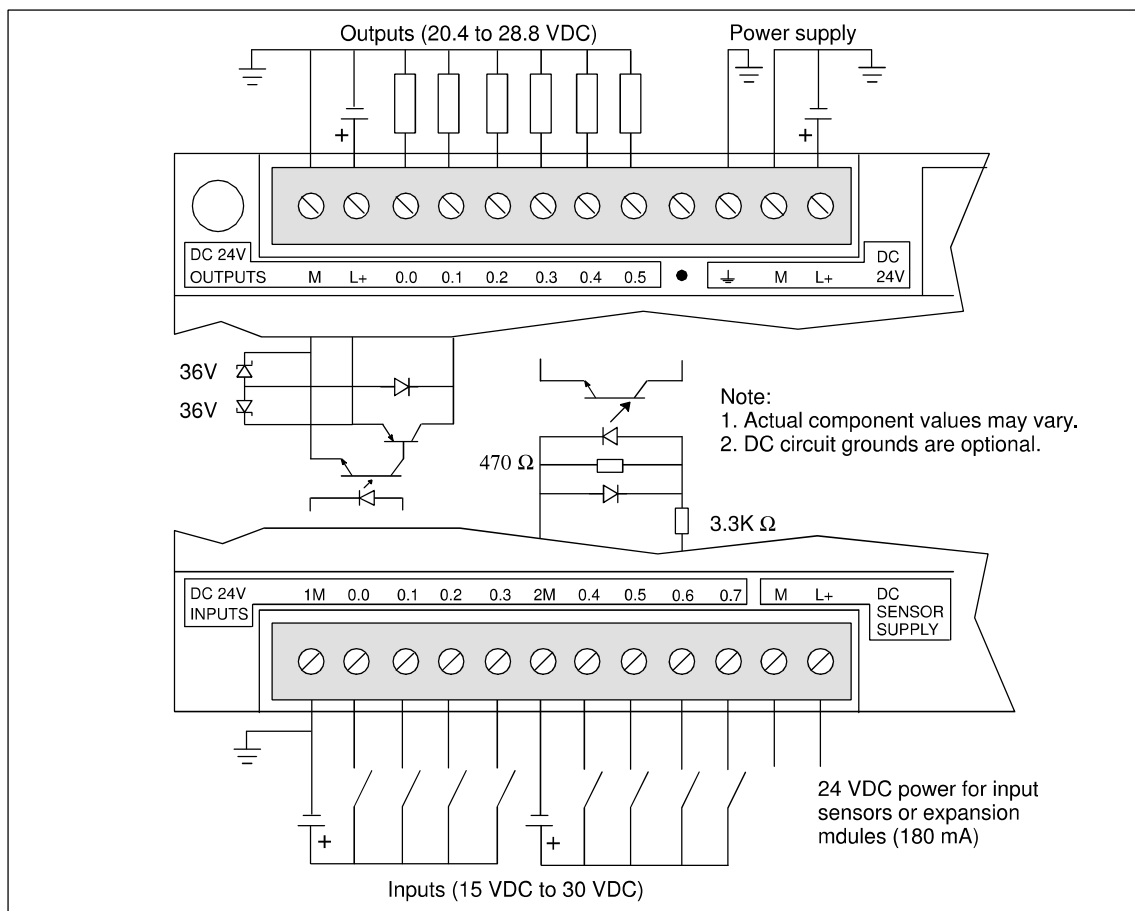


Figure A-2 Connector Terminal Identification for CPU 212 DC/DC/DC