

A.15 CPU 215 DC Power Supply, DC Inputs, DC Outputs

Order Number: 6ES7 215-2AD00-0XB0

General Features		Output Points	
Physical size (L x W x D)	217.3 x 80 x 62 mm (8.56 x 3.15 x 2.44 in.)	Output type	Sourcing MOSFET
Weight	0.5 kg (1.1 lbs.)	Voltage range	20.4 to 28.8 VDC
Power dissipation	8 W	Maximum load current	0 to 55° C
User program size/storage	4 Kwords/EEPROM	Q0.0 to Q0.7	0.5A/Point
User sata size/storage	2.5 Kwords/RAM	Q1.0, Q1.1	1.0A/Point
Data and TOD retention		Outputs may be connected parallel for higher current	
Supercap	190 hr typ. (120 hr minimum at 40° C)	Leakage current	
Optional battery	200 days continuous usage	Q0.0 to Q0.7	200 µA
Local I/O ¹	14 inputs/10 outputs	Q1.0, Q1.1	400 µA
Max. I/O expansion modules	7	Switching delay	
Digital I/O supported	64 inputs/64 outputs	Q0.0, 0.1	100 µs, ON/OFF
Analog I/O supported	16 inputs/16 outputs	All others	150 µs ON, 400 µs OFF
Boolean execution speed	0.8 µs/instruction	On resistance	400 mΩ max.
Internal memory bits	256	Short circuit protection	
Timers	256 timers	Q0.0 to Q0.7	0.7 to 1.5 A/channel
Counters	256 counters	Q1.0, Q1.1	1.5 to 3A/channel
High-speed counters	1 software (2 KHz max.) 2 hardware (20 KHz max. ea.)	Optical isolation	500 VAC, 1 min
TOD clock tolerance	6 minutes per month	Power Supply	
Pulse outputs	2 (4 KHz max. each)	Voltage range	20.4 to 28.8 VDC
Analog adjustments	2	Input current	120 mA typical, CPU only 1.3 A maximum load
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	UL/CSA rating	50VA
Input Points		Holdup time	10 ms min. from 24 VDC
Input type	Sink/Source IEC Type 1 in sink mode	Inrush current	10 A peak at 28.8 VDC
ON state range	15 to 30 VDC, 4 mA min. 35 VDC, 500 ms surge	Fusing (non-replaceable)	2 A, slow blow
ON state nominal	24 VDC, 7 mA	5 VDC current	1000 mA for expansion I/O
OFF state maximum	5 VDC, 1 mA	Isolated	No
Maximum response time		DC Sensor Supply	
I0.0 to I1.5	0.2 ms to 8.7 ms selectable 0.2 ms default	Voltage range	16.4 VDC to 28.8 VDC
I0.6 to I1.5 as used by HSC1 and HSC2	6 µs ON, 30 µs OFF	Ripple/noise (<10MHz)	Same as supplied Voltage
Optical isolation	500 VAC, 1 min	24 VDC available current	400 mA
		Short circuit current limit	< 600 mA
		Isolated	No
		5-V DP Communication Supply	
		5 VDC current:	90 mA, available at DP Port, pins 6-5, for DP Repeater
		Isolation	Transformer, 500 VAC, 1 min

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

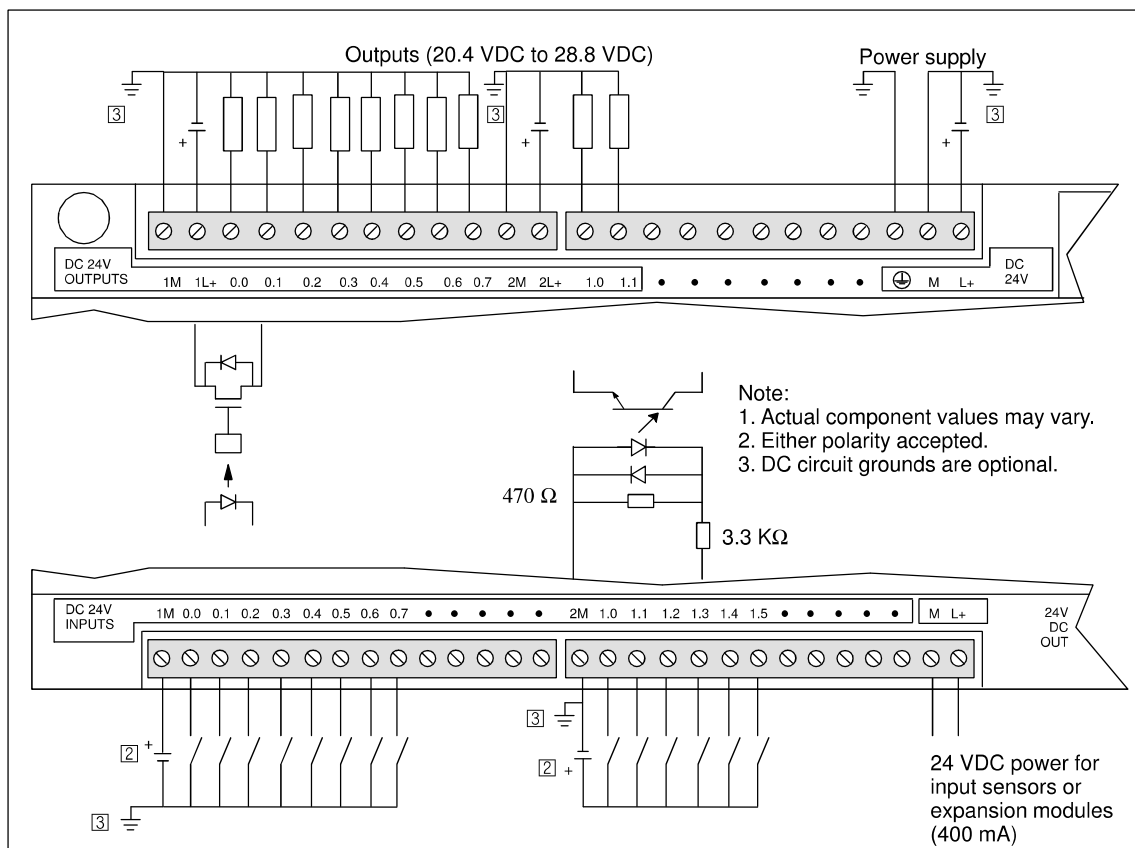


Figure A-15 Connector Terminal Identification for CPU 215 DC/DC/DC