A.9 CPU 214 DC Power Supply, DC Inputs, DC Outputs

Order Number: 6ES7 214-1AC01-0XB0

General Features	
Physical size (L x W x D)	197 x 80 x 62 mm (7.76 x 3.15 x 2.44 in.)
Weight	0.4 kg (0.9 lbs.)
Power dissipation	8 W at 3 A load
User program size/storage	2 Kwords/EEPROM
User data size/storage	2 Kwords/RAM
Data and TOD retention	
Supercap	190 hr typ. (120 hr minimum at 40° C)
Optional battery	200 days continuous usage
Local I/O[1]	14 inputs/10 outputs
Max. I/O expansion modules	7
Digital I/O supported	64 inputs/64 outputs
Analog I/O supported	16 inputs/16 outputs
Boolean execution speed	0.8 µs/instruction
Internal memory bits	256
Timers	128 timers
Counters	128 counters
High-speed counters	1 software (2 KHz max.) 2 hardware (7 KHz max. ea.)
TOD clock tolerance	6 minutes per month
Pulse outputs	2 (4 KHz max. each)
Analog adjustments	2
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant

Input Points	
Input type (IEC 1131-2)	Type 1 sinking
ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge
ON state nominal	24 VDC, 7 mA
OFF state maximum	5 VDC, 1 mA
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 µs typical / 70 µs max.
Optical isolation	500 VAC, 1 min

Output Points		
Output type	Sourcing Transistor	
Voltage range	20.4 to 28.8 VDC	
Maximum load current	0 to 40° C	55° C[2]
per single point	0.75 A	0.50 A
per 2 adjacent points	1.00 A	0.75 A
all points total	4.00 A	3.00 A
Inductive load clamping	(per common)	
Single pulse	2A L/R = 10 ms 1A L/R = 100 ms	
Repetitive	1 W energy dissipation (1/2 Li^2 x switch rate < 1 W)	
Leakage current	100 µA	
Switching delay	25 µs ON, 120 µs OFF	
Surge current	4 A, 100 ms	
Voltage drop	1.8 V maximum at maximum current	
Optical isolation	500 VAC, 1 min	
Short circuit protection	None	

Power Supply	
Voltage range	20.4 to 28.8 VDC
Input current	85 mA typical, CPU only 900 mA, maximum load
UL/CSA rating	50VA
Holdup time	10 ms min. from 24 VDC
Inrush current	10 A peak at 28.8 VDC
Fusing (non-replaceable)	1 A, 125 V, slow blow
5 VDC current	340 mA for CPU 660 mA for expansion I/O
Isolated	No

DC Sensor Supply	
Voltage range	16.4 to 28.8 VDC
Ripple/noise (<10MHz)	Same as supplied voltage
24 VDC available current	280 mA
Short circuit current limit	< 600 mA
Isolated	No

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

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

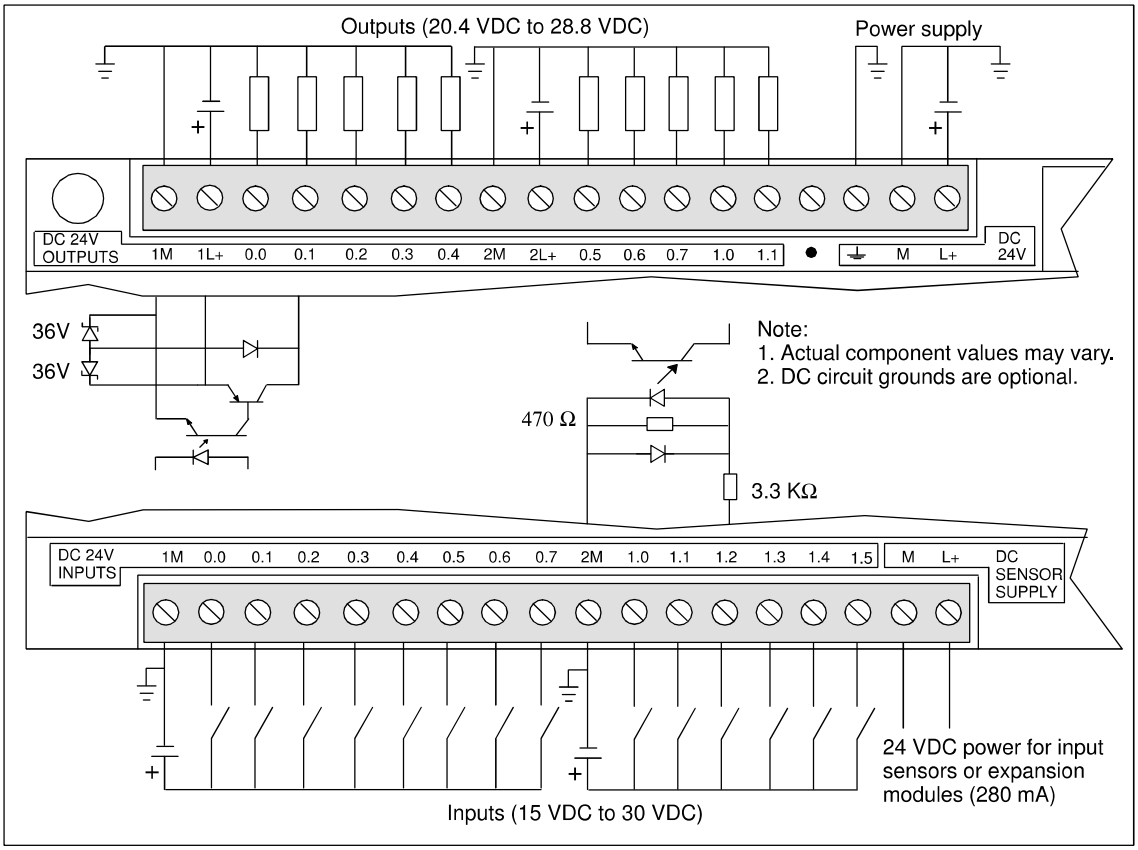

Figure A-9 Connector Terminal Identification for CPU 214 DC/DC/DC