

A.26 Expansion Module EM223 Digital Combination

4 x 24 VDC Input/4 x 24 VDC Output

Order Number: 6ES7 223-1BF00-0XA0

General Features		Output Points (continued)	
Physical size (L x W x D)	90 x 80 x 62 mm (3.54 x 3.15 x 2.44 in.)	Leakage current	1 μ A maximum
Weight	0.2 kg (0.4 lbs.)	Switching delay	25 μ s ON, 120 μ s OFF max.
Power dissipation	3.5 W at 3 A load	Surge current	7 A, 100 ms
Points ¹	4 digital inputs 4 digital outputs	Optical isolation	500 VAC, 1 min
Standards compliance	UL 508 CSA C22.2 142 FM Class I, Division 2 VDE 0160 compliant CE compliant	Short circuit protection	None
Output Points		Input Points	
Output type	Sourcing transistor (P-Channel MOSFET)	Input type	Type 1 Sinking per IEC 1131-2
Voltage range	20.4 to 28.8 VDC	ON state range	15-30 VDC, 4 mA minimum 35 VDC, 500 ms surge
ON state resistance	400 m Ω maximum	ON state nominal	24 VDC, 7 mA
Maximum load current	0 to 40° C 55° C*	OFF state maximum	5 VDC, 1 mA
per single point	2.50 A 2.00 A	Response time	3.5 ms typical/4.5 ms maximum
all points total	4.00 A 3.00 A	Optical isolation	500 VAC, 1 min
*Linear derate 40 to 55° C Vertical mount derate 10° C (Two points can be connected in parallel to serve a high current load.)		Current Requirements	
Inductive load clamping	(per common)	5 VDC logic current	80 mA from base unit
Single Pulse	2A L/R = 10 ms 1A L/R = 100 ms	24 VDC sensor current	30 mA from base unit or external power supply
Repetitive	1 W energy dissipation (1/2 I ² x switch rate < 1 W)	Output point current	Supplied by user at module common

¹ The CPU reserves 8 process-image input and 8 process-image output register points for this module.

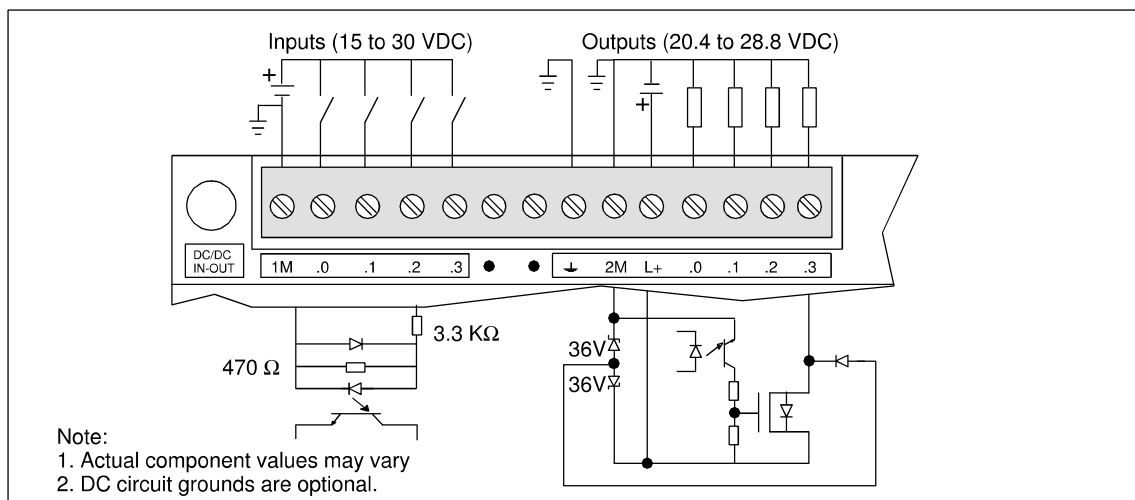


Figure A-26 Connector Terminal Identification for EM223 Digital Combination 4 x 24 VDC Input/4 x 24 VDC Output