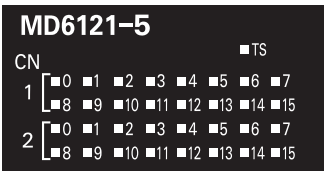
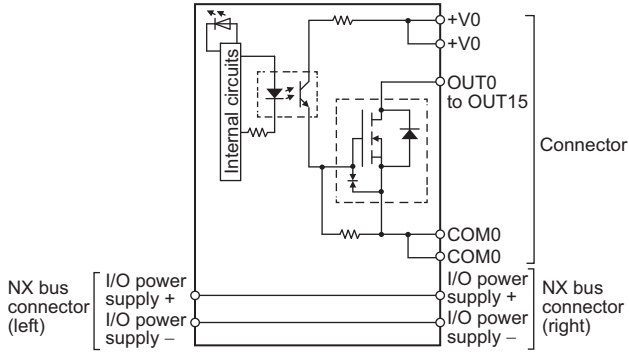
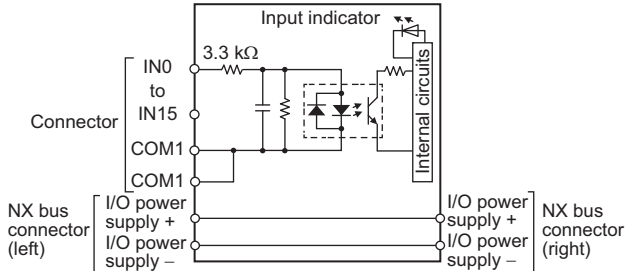


Digital Mixed I/O Unit Specifications

● DC Input/Transistor Output Units (MIL Connector, 30 mm Width) NX-MD6121-5

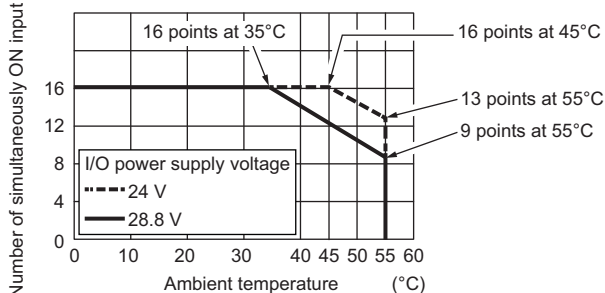
Unit name		DC Input/Transistor Output Unit	Model	NX-MD6121-5	
Number of points		16 inputs/16 outputs	External connection terminals	2 MIL connectors (20 terminals)	
I/O refreshing method		Switching Synchronous I/O refreshing and Free-Run refreshing			
Output section (CN1)	Internal I/O common	NPN	Input section (CN2)	Internal I/O common	For both NPN/PNP
	Rated voltage	12 to 24 VDC		Rated input voltage	24 VDC (15 to 28.8 VDC)
	Operating load voltage range	10.2 to 28.8 VDC		Input current	7 mA typical (at 24 VDC)
	Maximum value of load current	0.5 A/point, 2 A/Unit		ON voltage/ON current	15 VDC min./3 mA min. (between COM and each signal)
	Maximum inrush current	4.0 A/point, 10 ms max.		OFF voltage/OFF current	5 VDC max./1 mA max. (between COM and each signal)
	Leakage current	0.1 mA max.		ON/OFF response time	20 μs max./400 μs max.
	Residual voltage	1.5 V max.		Input filter time	No filter, 0.25 ms, 0.5 ms, 1 ms (default), 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms, 256 ms
Indicators	TS indicator, I/O indicators		Dimensions	30 (W) x 100 (H) x 71 (D)	
			Isolation method	Photocoupler isolation	
			Insulation resistance	20 MΩ min. between isolated circuits (at 100 VDC)	
			Dielectric strength	510 VAC between isolated circuits for 1 minute at a leakage current of 5 mA max.	
			I/O power supply method	Supply from external source	
			Current capacity of I/O power supply terminal	Without I/O power supply terminals	
			NX Unit power consumption	0.70 W max.	
			Current consumption from I/O power supply	30 mA max.	
			Weight	105 g max.	
	Circuit layout	CN1 (left) output circuit			
					
CN2 (right) input circuit					
					

Installation orientation and restrictions

Installation orientation: Possible in 6 orientations.
Restrictions: As shown in the following.

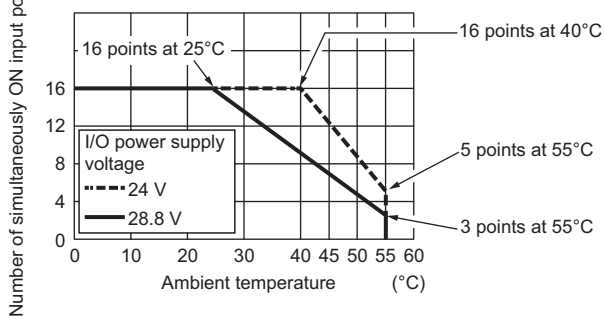
• For upright installation

Number of simultaneously ON input points vs. Ambient temperature characteristic



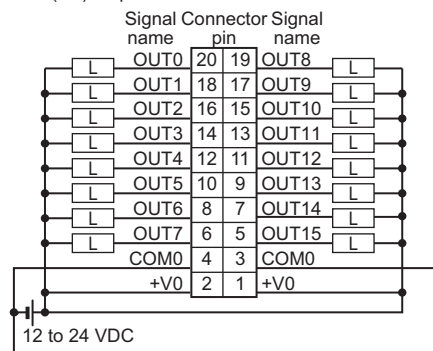
• For any installation other than upright

Number of simultaneously ON input points vs. Ambient temperature characteristic



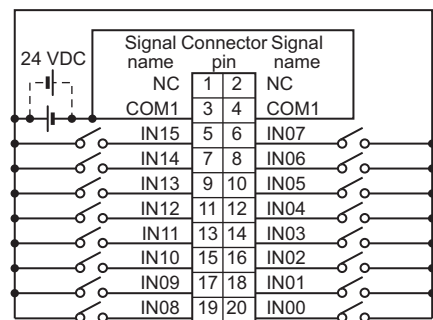
Terminal connection diagram

CN1 (left) output terminal



- Be sure to wire both pins 3 and 4 (COM0) of CN1.
- Be sure to wire both pins 1 and 2 (+V0) of CN1.

CN2 (right) input terminal



- The polarity of the input power supply of CN2 can be connected in either direction.
- Be sure to wire both pins 3 and 4 (COM1) of CN2, and set the same polarity for both pins.

Disconnection/Short-circuit detection

Not supported.

Protective function

Not supported.