
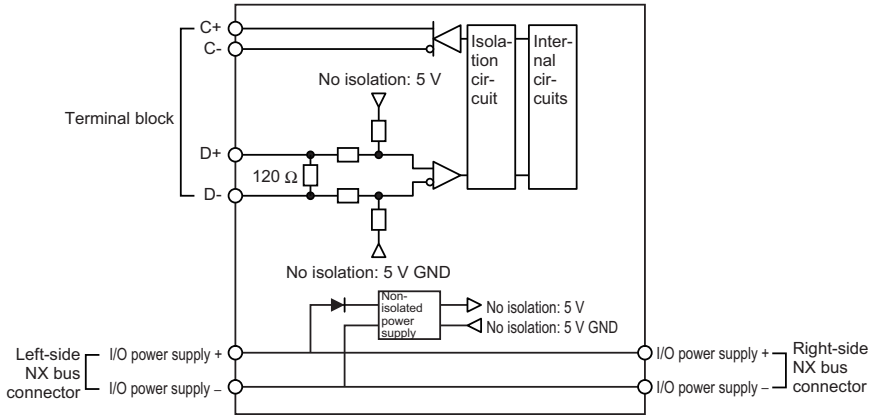
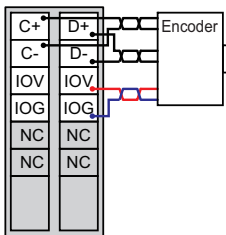


# Specification

## SSI Input Units 1 channel NX-ECS112

<b>Unit name</b>	SSI Input Units		<b>Model</b>	NX-ECS112
<b>Number of channels</b>	1 channel	<b>Type of external connections</b>	Screwless clamping terminal block (12 terminals)	
<b>I/O refreshing method</b>	Free-Run refreshing or synchronous I/O refreshing *1			
<b>Indicators</b>		<b>Input signals</b>	External inputs: 2 Data input (D+, D-) External outputs: 2 Clock output (C+, C-)	
<b>I/O interface</b>	Synchronized serial interface (SSI)			
<b>Clock output</b>	EIA standard RS-422-A line driver levels			
<b>Data input</b>	EIA standard RS-422-A line receiver levels			
<b>Maximum data length</b>	32 bits (The single-turn, multi-turn, and status data length can be set.)			
<b>Coding method</b>	No conversion, binary code, or gray code			
<b>Baud Rate</b>	100 kHz, 200 kHz, 300 kHz, 400 kHz, 500 kHz, 1.0 MHz, 1.5 MHz, or 2.0 MHz			
<b>Dimensions</b>	12 × 100 × 71 mm (W×H×D)	<b>Isolation method</b>	Digital isolator	
<b>Insulation resistance</b>	20 MΩ min. between isolated circuits (at 100 VDC)	<b>Dielectric strength</b>	510 VAC between isolated circuits for 1 minute with leakage current of 5 mA max.	
<b>I/O power supply source</b>	Supplied from the NX bus. 20.4 to 28.8 VDC (24 VDC +20%/−15%)	<b>Current capacity of I/O power supply terminals</b>	IOV: 0.3 A max. per terminal IOG: 0.3 A max. per terminal	
<b>NX Unit power consumption</b>	0.85 W	<b>Current consumption from I/O power supply</b>	20 mA	
<b>Maximum transmission distance</b> *2	<b>Baud Rate</b>	<b>Maximum transmission distance</b>		
	100 kHz	400 m		
	200 kHz	190 m		
	300 kHz	120 m		
	400 kHz	80 m		
	500 kHz	60 m		
	1.0 MHz	25 m		
	1.5 MHz	10 m		
2.0 MHz	5 m			
<b>Weight</b>	65 g			
<b>Circuit layout</b>	<p>SSI Clock Output and Data Input</p> 			
<b>Installation orientation and restrictions</b>	Installation orientation: 6 possible orientations Restrictions: There are no restrictions.			
<b>Terminal connection diagram</b>				
<b>Failure detection</b>	None	<b>Protection</b>	None	

\*1. The I/O refreshing method is automatically set according to the connected Communications Coupler Unit and CPU Unit.  
 \*2. The maximum transmission distance for an SSI Input Unit depends on the baud rate due to the delay that can result from the responsiveness of the connected encoder and cable impedance. The maximum transmission distance is only a guideline. Review the specifications for the cables and encoders in the system and evaluate the operation of the equipment before use.