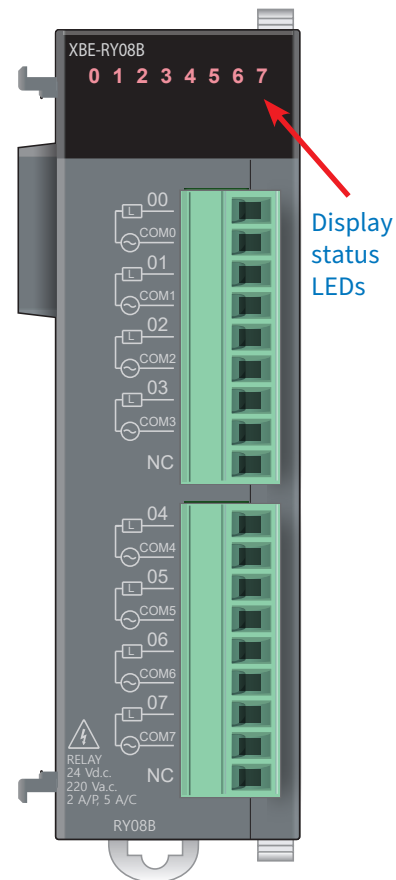


## XBE-RY08B Digital Output Module

Part Number	Price	Classification	Description	Drawing
<b>XBE-RY08B</b>	\$95.00	Digital Output	LS Electric XGB relay output module, 8-point, 125 VDC/250 VAC, (8) Form A, 8 isolated common(s), 1 point(s) per common, 2A/point. Removable terminal blocks included.	PDF

General Specifications		XBE-RY08B
<b>Output Point</b>		8 point
<b>Insulation Method</b>		Relay insulation
<b>Rated Load Voltage</b>		24VDC (resistive load) / 220VAC (COSΨ=1)
<b>Rated Load Current</b>		2A
<b>Minimum Load Voltage/Current</b>		5VDC / 1mA
<b>Maximum Load Voltage</b>		250VAC, 124VDC
<b>Off-leakage Current</b>		0.1 mA (220VAC, 60Hz)
<b>Maximum On/Off Frequency</b>		3,600 times/hour
<b>Over Voltage Protection</b>		None
<b>Service Life</b>	<b>Mechanical</b>	20 million times or more
	<b>Electrical</b>	Rated load voltage / current 100,000 times or more
		200VAC / 1.5 A, 240VAC / 1A (COSΨ=0.7) 100,000 times or more
		200VAC / 1A, 240VAC / 0.5 A (COSΨ=0.35) 100,000 times or more
<b>Response Time</b>	<b>Off → On</b>	10ms or less
	<b>On → Off</b>	12ms or less
<b>Common Method</b>		1 point / COM
<b>Proper Cable Size</b>		Standard cable 0.3–0.75 mm <sup>2</sup> (external diameter 2.8 mm or less)
<b>Current Consumption</b>		230mA (when all point ON)
<b>Operation Indicator</b>		Output ON, LED ON
<b>External Connection Method</b>		9 point terminal block connector x 2
<b>Weight</b>		81g



## XBE-RY08B - Digital I/O Module Configuration

### Direct Variables

The base rack slot number determines the Direct Variable name for the module. Each slot is automatically allocated 64 input points and 64 output points. See the chart below for the actual input direct variable assignments.

For Direct Variable nomenclature explanation, see [Direct Variable User Programming Memory](#).

Part Number	PLC Memory Allocation	Actual I/O Direct Variable
<b>XBE-RY08B</b>	Input: %IX0.z.0 – %IX0.z.63 Output: %QX0.z.0 – %QX0.z.63	%QX0.z.0 – %QX0.z.7

“z” denotes the module slot (2 to 8).

Follow the Quick start video to learn how to Register and Configure any Digital I/O Module.  
[Digital Module Setup](#)

## XBE-RY08B Digital Output Module Wiring

XBE-RY08B Circuit Configuration				
Circuit Configuration	Top TB Description	I/O Direct Variable	Terminal Block Image	
	00	%QX0.z.0		
	COM0	-		
	01	%QX0.z.1		
	COM1	-		
	02	%QX0.z.2		
	COM2	-		
	03	%QX0.z.3		
	COM3	-		
	NC	-		
	Bottom TB Description	I/O Direct Variable		
	04	%QX0.z.4		
	COM4	-		
	05	%QX0.z.5		
	COM5	-		
	06	%QX0.z.6		
	COM6	-		
07	%QX0.z.7			
COM7	-			
NC	-			

Note: In the I/O Direct Variable name, z=slot number.



# XGB Series PLC Family

## Environmental Specifications, all XGB Series Modules

Item		Specification	Reference	
Ambient Operating Temperature		0–55°C (32–131°F)	-	
Storage Temperature		-25–70°C (-13–158°F)		
Ambient Operating Humidity		5–95% relative humidity (non-condensing)		
Storage Humidity		5–95% relative humidity (non-condensing)		
Vibration <sup>1</sup>	Occasional Vibration	5 ≤ f < 8.4 Hz	IEC61131-3-2	
		8.4 ≤ f < 150Hz		
	Continuous Vibration	5 ≤ f < 8.4 Hz		
		8.4 ≤ f < 150Hz		
Shocks		Peak Acceleration	147 m/s <sup>2</sup> (15G)	
		Duration	11ms	
		Pulse Wave Type	Half-sine (3 times each direction per each axis)	
Noise Resistance	Square Wave Impulse Noise		1,500VAC 900VDC	LS Electric standard
	Electrostatic Discharge		Voltage: 4kV (contact discharge)	IEC61131-3-2 IEC61000-4-2
	Radiated Electromagnetic Field Noise		80–1,000 MHz, 10 V/m	IEC61131-3-2 IEC61000-4-3
	Fast Transient / Burst Noise	Classification	Voltage	IEC61131-3-2 IEC61000-4-4
		Power Supply	2kV	
Digital/Analog Input/Output Communication Interface		1kV		
Environment		Free from corrosive gases and excessive dust	-	
Attitude		Less than 2,000m		
Pollution Degree		Less than 2 (see note 2)		
Cooling Method		Air-cooling		

1 - Vibration of 10 times each direction (X, Y, and Z)

2 - Normally only nonconductive pollution occurs. Temporary conductivity caused by condensation is to be expected.



# XGB Series PLC Family

## Available I/O Modules

XGB Series I/O Modules								
Part Number	Price	Description	Digital Input	Digital Output	Analog Input	Analog Output	Motion	Smart Link Cable and Terminal Required
<b>Digital</b>								
<a href="#"><u>XBE-DC16A</u></a>	\$70.00	LS Electric XGB discrete input module, 16-point, 24 VDC, sinking/sourcing, 1 common(s), 16 point(s) per common. Removable terminal blocks included.	✓					
<a href="#"><u>XBE-DC16B</u></a>	\$78.00	LS Electric XGB discrete input module, 16-point, 12-24 VDC, sinking/sourcing, 1 common(s), 16 point(s) per common. Removable terminal blocks included.	✓					
<a href="#"><u>XBE-DC32A</u></a>	\$97.00	LS Electric XGB discrete input module, 32-point, 24 VDC, sinking/sourcing, 1 common(s), 32 point(s) per common. Requires XTB-40H terminal block and C40HH-xxSB-XBI cable.	✓					✓
<a href="#"><u>XBE-AC08A</u></a>	\$88.00	LS Electric XGB discrete input module, 8-point, 120 VAC, 2 common(s), 4 point(s) per common. Removable terminal blocks included.	✓					
<a href="#"><u>XBE-RY08B</u></a>	\$95.00	LS Electric XGB relay output module, 8-point, 125 VDC/250 VAC, (8) Form A, 8 isolated common(s), 1 point(s) per common, 2A/point. Removable terminal blocks included.		✓				
<a href="#"><u>XBE-RY16A</u></a>	\$110.00	LS Electric XGB relay output module, 16-point, 125 VDC/250 VAC, (16) Form A, 2 isolated common(s), 8 point(s) per common, 2A/point, 5A/common. Removable terminal blocks included.		✓				
<a href="#"><u>XBE-TN16A</u></a>	\$78.00	LS Electric XGB discrete output module, 16-point, 12-24 VDC, sinking, 1 common(s), 16 point(s) per common, 0.5A/point, 2A/common. Removable terminal blocks included.		✓				
<a href="#"><u>XBE-TN32A</u></a>	\$109.00	LS Electric XGB discrete output module, 32-point, 12-24 VDC, sinking, 1 common(s), 32 point(s) per common, 0.2A/point, 2A/common. Requires XTB-40H terminal block and C40HH-xxSB-XBI cable.		✓				✓
<a href="#"><u>XBE-TP16A</u></a>	\$88.00	LS Electric XGB discrete output module, 16-point, 12-24 VDC, sourcing, 1 common(s), 16 point(s) per common, 0.5A/point, 2A/common. Removable terminal blocks included.		✓				
<a href="#"><u>XBE-TP32A</u></a>	\$93.00	LS Electric XGB discrete output module, 32-point, 12-24 VDC, sourcing, 1 common(s), 32 point(s) per common, 0.2A/point, 2A/common. Requires XTB-40H terminal block and C40HH-xxSB-XBI cable.		✓				✓
<a href="#"><u>XBE-DN32A</u></a>	\$172.00	LS Electric XGB discrete combo module, Input: 16-point, 24 VDC, sinking/sourcing, Output: 16-point, 12-24 VDC, sinking, 0.2A/point, 2A/common. Requires XTB-40H terminal block and C40HH-xxSB-XBI cable.	✓	✓				✓
<b>Analog</b>								
<a href="#"><u>XBF-AD04A</u></a>	\$160.00	LS Electric XGB analog input module, 4-channel, current/voltage, 12-bit, input current signal range(s) of 0-20 mA, 4-20 mA, input voltage signal range(s) of 0-10 VDC, external 24 VDC required.			✓			
<a href="#"><u>XBF-AD08A</u></a>	\$242.00	LS Electric XGB analog input module, 8-channel, current/voltage, 12-bit, input current signal range(s) of 0-20 mA, 4-20 mA, input voltage signal range(s) of 0-5 VDC, 1-5 VDC, 0-10 VDC, external 24 VDC required.			✓			
<a href="#"><u>XBF-AD04C</u></a>	\$231.00	LS Electric XGB analog input module, 4-channel, current/voltage, 14-bit, input current signal range(s) of 0-20 mA, 4-20 mA, input voltage signal range(s) of 0-5 VDC, 1-5 VDC, 0-10 VDC, +/- 10 VDC, external 24 VDC required.			✓			
<a href="#"><u>XBF-DV04A</u></a>	\$152.00	LS Electric XGB analog output module, 4-channel, voltage, 12-bit, output voltage signal range(s) of 0-10 VDC, external 24 VDC required.				✓		
<a href="#"><u>XBF-DV04C</u></a>	\$209.00	LS Electric XGB analog output module, 4-channel, voltage, 14-bit, output voltage signal range(s) of 0-5 VDC, 1-5 VDC, 0-10 VDC and +/- 10 VDC, external 24 VDC required.				✓		
<a href="#"><u>XBF-DC04A</u></a>	\$162.00	LS Electric XGB analog output module, 4-channel, current, 12-bit, output current signal range(s) of 0-20 mA and 4-20 mA, external 24 VDC required.				✓		
<a href="#"><u>XBF-DC04C</u></a>	\$209.00	LS Electric XGB analog output module, 4-channel, current, 14-bit, output current signal range(s) of 0-20 mA and 4-20 mA, external 24 VDC required.				✓		
<a href="#"><u>XBF-AH04A</u></a>	\$216.00	LS Electric XGB analog combo module, Input: 2-channel, current/voltage, 0-20 mA and 4-20 mA, 0-5 VDC, 1-5 VDC and 0-10 VDC, Output: 2-channel, current/voltage, 0-20 mA and 4-20 mA, 0-5 VDC, 1-5 VDC and 0-10 VDC.			✓	✓		
<b>Motion</b>								
<a href="#"><u>XBF-PN04B</u></a>	\$350.00	LS Electric XGB 4-axis positioning module, EtherCAT protocol, 1 high-speed input point(s), sinking/line driver (differential), 1-channel, differential and single-ended encoder input(s), (1) Ethernet 100Base-TX (RJ45) port(s). For use with LS Electric XEM-Dx32Hx PLCs.					✓	
<a href="#"><u>XBF-PN08B</u></a>	\$395.00	LS Electric XGB 8-axis positioning module, EtherCAT protocol, 1 high-speed input point(s), sinking/line driver (differential), 1-channel, differential and single-ended encoder input(s), (1) Ethernet 100Base-TX (RJ45) port(s). For use with LS Electric XEM-Dx32Hx PLCs.					✓	
<a href="#"><u>XBF-HQ02A</u></a>	\$176.00	LS Electric XGB counter input module, 200 kHz maximum switching frequency, 2 high-speed input point(s), 5-24 VDC, sinking, 2-channel, single-ended encoder input(s), 2 high-speed output point(s), 5-24 VDC, sinking, external 24 VDC required.					✓	✓
<a href="#"><u>XBF-HD02A</u></a>	\$253.00	LS Electric XGB counter input module, 500 kHz maximum switching frequency, 2 high-speed input point(s), 5-24 VDC, sinking, 2-channel, differential encoder input(s), 2 high-speed output point(s), 5-24 VDC, sinking, external 24 VDC required.					✓	✓
<b>Communication</b>								
<a href="#"><u>XBL-EIPT</u></a>	\$199.00	LS Electric XGB communication module, EtherNet/IP, 2 ports, (2) Ethernet 10/100Base-T (RJ45) port(s). For use with LS Electric XGB series PLCs.						

Note: See "Smart Link I/O System" on page tLSE-83 for the XTB-40H terminal block and cables. See "XGB PLC Replacement Terminals" on page tLSE-82 for replacement removable terminal blocks.