

## XBE-DR16A Digital Combo Module

XBE-DR16A is a combination module that has eight 24VDC sinking/sourcing inputs and 8 relay outputs.

| Part Number               | Price    | Classification       | Description                                                                                                                                                                                                  | Drawing             |
|---------------------------|----------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <a href="#">XBE-DR16A</a> | \$061e#: | Digital Combo Module | LS Electric XGB discrete combo module, Input: 8-point, 24 VDC, sinking/sourcing, Output: 8-point, 125 VDC/250 VAC, relay, (8) Form A (SPST) relays, 2A/point, 5A/common. Removable terminal blocks included. | <a href="#">PDF</a> |

| General Specifications     |                             | XBE-DR16A                                                                  |
|----------------------------|-----------------------------|----------------------------------------------------------------------------|
| Input Specifications       | Input Point                 | 8 point                                                                    |
|                            | Rated Input Voltage         | 24VDC                                                                      |
|                            | Rated Input Current         | ~ 4mA                                                                      |
|                            | Operation Voltage Range     | 20.4 ~ 28.8 VDC (ripple rate <5%)                                          |
|                            | On Voltage/Current          | 19VDC or higher / 3mA or higher                                            |
|                            | Off Voltage/Current         | 6VDC or less / 1mA or less                                                 |
|                            | Input Resistance            | ~ 5.6kΩ                                                                    |
|                            | Response Time               | Off → On<br>On → Off                                                       |
|                            |                             | 1/3/5/10/20/70/100 ms (set by CPU parameter)<br>Default: 3ms               |
|                            | Common Method               | 8 point / COM                                                              |
| Output Specifications      | Output Point                | 8 point                                                                    |
|                            | Rated Voltage / Current     | 24VDC, 2A (resistive load) / 220VAC, 2A (COSΨ=1), 5A/COM                   |
|                            | Min. Load Voltage / Current | 5VDC / 1mA                                                                 |
|                            | Max. Load Voltage           | 250VAC, 125VDC                                                             |
|                            | Off Leakage Current         | 0.1 mA or less                                                             |
|                            | Max. On/Off frequency       | 3,600 times                                                                |
|                            | Surge Absorber              | None                                                                       |
|                            | Response Time               | Off → On<br>On → Off                                                       |
|                            |                             | 10ms or less<br>12ms or less                                               |
|                            | Common Method               | 8 point / COM                                                              |
| Insulation Method          |                             | Photocoupler insulation (input), Relay insulation (output)                 |
| Insulation Pressure        |                             | 560VACrms / 3 Cyle (altitude 2000m)                                        |
| Insulation Resistance      |                             | 10MΩ or more by Megohmmeter                                                |
| Proper Cable Size          |                             | Stranded cable 0.3~0.75 mm <sup>2</sup> (external diameter 2.8 mm or less) |
| Current Consumption        |                             | 230mA (when all inputs and outputs are On)                                 |
| Operation Indicator        |                             | Input On, LED On<br>Output On, LED On                                      |
| External Connection Method |                             | 9 pin connector x 2                                                        |
| Weight                     |                             | 81g                                                                        |

## XBE-DR16A - 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 used.

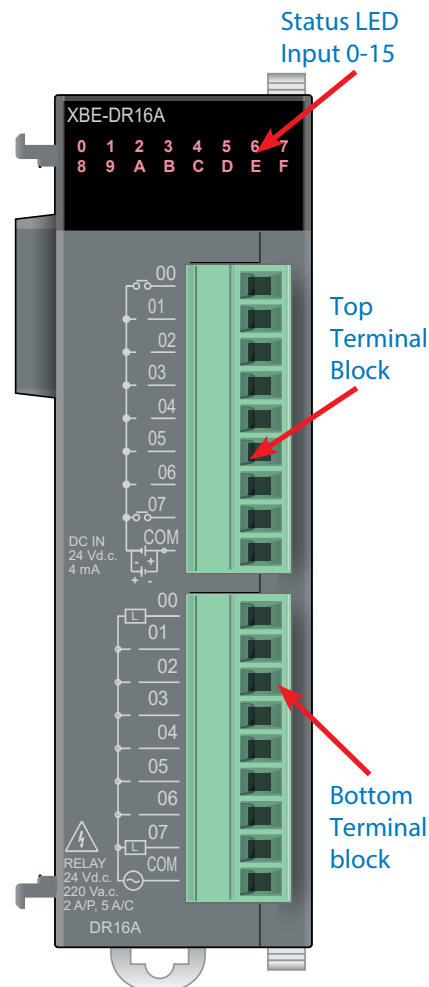
For Direct Variable nomenclature explanation, see [Direct Variable User Programming Memory](#).

| Part Number               | PLC Memory Allocation                                       | Actual I/O Direct Variable                 |
|---------------------------|-------------------------------------------------------------|--------------------------------------------|
| <a href="#">XBE-DR16A</a> | Input: %IX0.z.0 - %IX0.z.63<br>Output: %QX0.z.0 - %QX0.z.63 | %IX0.z.0 - %IX0.z.7<br>%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](#)





# XGB Digital Modules

## XBE-DR16A Digital Combo Module Wiring

### XBE-DR16A Input Circuit Configuration

**Circuit Configuration**

| Terminal Description | I/O Direct Variable |
|----------------------|---------------------|
| 00                   | %IX0.z.0            |
| 01                   | %IX0.z.1            |
| 02                   | %IX0.z.2            |
| 03                   | %IX0.z.3            |
| 04                   | %IX0.z.4            |
| 05                   | %IX0.z.5            |
| 06                   | %IX0.z.6            |
| 07                   | %IX0.z.7            |
| COM                  | n/a                 |

### XBE-DR16A Output Circuit Configuration

**Circuit Configuration**

|     |          |
|-----|----------|
| 00  | %QX0.z.0 |
| 01  | %QX0.z.1 |
| 02  | %QX0.z.2 |
| 03  | %QX0.z.3 |
| 04  | %QX0.z.4 |
| 05  | %QX0.z.5 |
| 06  | %QX0.z.6 |
| 07  | %QX0.z.7 |
| COM | n/a      |

Note: Input Ambient Temp Derating: Derate 5% for each degree above 50°C. Max 55°C (25% derating at 55°C).