Heat Dissipation Requirements

**IMPORTANT!** Mount Module horizontally to provide proper ventilation.

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### ZL-RRL16HDF-1 Sinking

**DirectLogic**
- **Productivity3000**
  - J1 +24V
  - J2 +24V
  - J3 +24V
- **Productivity2000**
  - J1 +24V
  - J2 +24V
  - J3 +24V
- **BRX**
  - J1 
  - J2 
  - J3 

**Jumper Position**
- **J1, J2, and J3**
  - +24V GND
  - Jumpers referenced above and below have this silkscreen on the PCB

**J1 +24V**
- Connects +24VDC to Relay Coils

**J1 GND**
- Connects GND to Connector Pins 1,7,13, & 19

**J2 +24V**
- Connects GND to Connector Pins 2, 8,14, & 20

**J2 GND**
- Connects GND to Connector Pins 2, 8,14, & 20

**J3 +24V**
- Factory set On ZL-RRL16-24-1
- Connects +24VDC to Relay Coil Commons

**J3 GND**
- Factory set On ZL-RRL16-24-2
- Connects GND to Relay Coil Common

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### ZL-RRL16HDF-2 Sourcing

**DirectLogic**
- **Productivity3000**
  - J1 +24V
  - J2 +24V
  - J3 +24V
- **Productivity2000**
  - J1 +24V
  - J2 +24V
  - J3 +24V
- **BRX**
  - J1 
  - J2 
  - J3 

**Jumper Position**
- **J1, J2, and J3**
  - +24V GND
  - Jumpers referenced above and below have this silkscreen on the PCB

**J1 +24V**
- Connects +24VDC to Relay Coils

**J1 GND**
- Connects GND to Connector Pins 1,7,13, & 19

**J2 +24V**
- Connects GND to Connector Pins 2, 8,14, & 20

**J2 GND**
- Connects GND to Connector Pins 2, 8,14, & 20

**J3 +24V**
- Factory set On ZL-RRL16-24-1
- Connects +24VDC to Relay Coil Commons

**J3 GND**
- Factory set On ZL-RRL16-24-2
- Connects GND to Relay Coil Common

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### ZL-RRL16HDF-24 Pinouts

**Connector Pin**
- **Relay 1 (K1-TB1 Top)**
- **Relay 2 (K2-TB1 Bottom)**
- **Relay 3 (K3-TB2 Top)**
- **Relay 4 (K4-TB2 Bottom)**
- **Relay 5 (K5-TB3 Top)**
- **Relay 6 (K6-TB3 Bottom)**
- **Relay 7 (K7-TB4 Top)**
- **Relay 8 (K8-TB4 Bottom)**
- **Relay 9 (K9-TB5 Top)**
- **Relay 10 (K10-TB5 Bottom)**
- **Relay 11 (K11-TB6 Top)**
- **Relay 12 (K12-TB6 Bottom)**
- **Relay 13 (K13-TB7 Top)**
- **Relay 14 (K14-TB7 Bottom)**
- **Relay 15 (K15-TB8 Top)**
- **Relay 16 (K16-TB8 Bottom)**

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### Mechanical Life
- 1,000,000 Operations at no load condition

### Electrical Life
- 30,000 Operations at rated resistive load (Normally Closed)

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### Power Consumption Per Coil

**Coil Resistance**
- 250VAC @ 5A General Use
- 30VDC @ 5A General Use

**Input Voltage Rating**
- 30VDC (±10%)

**Minimum Load**
- 275mA (Total 16 relays)

**Maximum Switching Voltage**
- 250VAC, 30VDC

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### Limitations

**Approvals**
- File # E139594 UL, cUL 508, CE, EN 61131-2:2007

**Relay modules are reverse polarity protected and will not operate if reverse voltage is connected.**

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**NOTE:** Use conductors rated 60°/75°C for relay outputs.
**WARNING:** To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes. Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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