DC-Powered Relay Modules

**Part Number**  
ZL-CM08RL24

**Description**  
8-channel relay module w/LEDs

**Approvals**  
UL/CUL/CE

**Operating Range, Coil**  
0 - 24VDC

**Input Current per Channel**  
25mA ±5%

**Coil Supply Voltage**  
24VDC±5%

**Coil Supply Current Max**  
200mA

**Pickup Current**  
16.7mA

**Switching Speed**  
60Hz

**Wire Range (Rated Cross Section)**  
14 - 30 AWG (0.2 - 2.5mm²) 75°C min.

**Contact Type**  
1 Form C (SPDT)

**Contact Voltage (per point)**  
250VAC/30VDC

**Contact Current (per point)**  
10A (25°C)

**Coil/Contact Isolation**  
2500VAC (up to 1min.)

**Operating Temperature**  
-10°C to +45°C

**OFF to ON/ON to OFF Response**  
15ms/5ms

**Life Mechanical Contact**  
2x10^6th

**Maximum Switching Voltage**  
400V ca 125Vcc

**Maximum Current for Relay**  
10A (25°C)

**Maximum Power, Inductive**  
ca1500VA cc 150W

**Maximum Power, Resistive**  
ca2500VA cc 300W

**Minimum Load**  
100mA 5Vcc

**Channel to Channel/Contact Isolation**  
1000VAC (up to 1 min.)

**Terminal Block Contact**  
Copper alloy, tin lead plating

**Dimensions (L x W x H)**  
5.78"(147mm)x3.66"(93mm)x 2.87"(73mm)

**Spare Relays**  
ZL-RELAY-24

**Spare Relay Clips**  
ZL-RELAY-KIT

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**Relay Connector Module ZL-CM08RL24**  
Cables and PLC I/O Modules

**PLC Type** | **Cable Type** | **PLC I/O Module Type** | **Connector Module Type**
---|---|---|---
DL205 | ZL-2CBL1 | D2-08TD1 | ZL-CM08RL24
DL205 | ZL-2CBL1 | D2-08TD2 | ZL-CM08RL24
DL205 | ZL-2CBL1 | D2-08TR | ZL-CM08RL24

**Mounting Orientation:**

- **TOP**
- **BOTTOM**

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**WARNING:** WIRE ONLY ACCORDING TO WIRING DIAGRAMS SHOWN BELOW TO AVOID CAUSING DAMAGE TO THE PLC OR CONNECTOR MODULE. MATCH THE CORRECT COMBINATION OF CABLE, PLC I/O MODULE, AND CONNECTOR MODULE AS SHOWN.

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To download fullsize color .pdf Ziplink Wiring Diagrams go to www.Automationdirect.com website
**Wiring Diagram: Power Supply and Cable**

**PLC DL205 Type D2-08TD1**

**DC Output**  I/O Module

- **Power supply** 24VDC
- **Enable Relay Jumper** (installed)
- **Disable Relay Jumper** (uninstalled)
- **Warning**: It is recommended to install a 2 Amp fast blow fuse in series with the power supply as an extra safety measure. Use a fuse terminal block such as a DINnector DN-F10 or DN-F10L

**ZL-CM08RL24**

**I/O Module Output Octal Address** 0 corresponds to RELAY 0
**I/O Module Output Octal Address** 1 corresponds to RELAY 1
**I/O Module Output Octal Address** 2 corresponds to RELAY 2
**I/O Module Output Octal Address** 3 corresponds to RELAY 3
**I/O Module Output Octal Address** 4 corresponds to RELAY 4
**I/O Module Output Octal Address** 5 corresponds to RELAY 5
**I/O Module Output Octal Address** 6 corresponds to RELAY 6
**I/O Module Output Octal Address** 7 corresponds to RELAY 7

**Cable ZL-2CBL1**

**WARNING**: In applications approaching 10 amps, use 12AWG wire.

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**PLC DL205 Type D2-08TD2**

**DC Output**  I/O Module

- **Power supply** 24VDC
- **Enable Relay Jumper** (installed)
- **Disable Relay Jumper** (uninstalled)
- **Warning**: It is recommended to install a 2 Amp fast blow fuse in series with the power supply as an extra safety measure. Use a fuse terminal block such as a DINnector DN-F10 or DN-F10L

**ZL-CM08RL24**

**I/O Module Output Octal Address** 0 corresponds to RELAY 0
**I/O Module Output Octal Address** 1 corresponds to RELAY 1
**I/O Module Output Octal Address** 2 corresponds to RELAY 2
**I/O Module Output Octal Address** 3 corresponds to RELAY 3
**I/O Module Output Octal Address** 4 corresponds to RELAY 4
**I/O Module Output Octal Address** 5 corresponds to RELAY 5
**I/O Module Output Octal Address** 6 corresponds to RELAY 6
**I/O Module Output Octal Address** 7 corresponds to RELAY 7

**Cable ZL-2CBL1**

**WARNING**: In applications approaching 10 amps, use 12AWG wire.
ZL-CM08RL24

I/O Module Output Octal Address 0 corresponds to RELAY 0
I/O Module Output Octal Address 1 corresponds to RELAY 1
I/O Module Output Octal Address 2 corresponds to RELAY 2
I/O Module Output Octal Address 3 corresponds to RELAY 3
I/O Module Output Octal Address 4 corresponds to RELAY 4
I/O Module Output Octal Address 5 corresponds to RELAY 5
I/O Module Output Octal Address 6 corresponds to RELAY 6
I/O Module Output Octal Address 7 corresponds to RELAY 7

WARNING: In applications approaching 10 amps, use 12AWG wire.

External power supply for PLC I/O Module and relay coils only (not load devices)

Warning: It is recommended to install a 2 Amp fast blow fuse in series with the power supply as an extra safety measure. Use a fuse terminal block such as a DP connector DN-F10 or DN-F10L.

WARNING: In applications approaching 10 amps, use 12AWG wire.