



|                          |     |  |
|--------------------------|-----|--|
| Product designation      |     | Micro PLC - Base module                              |
| Product type designation |     | LRD20RD012   |
| Auxiliary supply voltage |     | 12VDC  |
| Number of inputs         | Nr. | 8 digital + 4 digital/analog                         |
| Number of outputs        | Nr. | 8 relay  |
| Max I/O number           |     | 20 (12 inputs + 8 outputs) up to 44 with LRE modules |

| Power supply                |    |  |                |
|-----------------------------|----|--|----------------|
| Rated auxil. supply voltage |    |  | 12VDC          |
| Operating voltage range     |    |  | 10.4...14.4VDC |
| Average current consumption | mA |  | 265            |
| Power consumption Max       | W  |  | 5              |

| Digital inputs          |     |                                    |  |
|-------------------------|-----|------------------------------------|--|
| Number of digital input | Nr. |                                    | 8 + 4 digital/analog                                     |
| Rated voltage           | V   |                                    | 12VDC  |
| Input signals           |     | State 0 (OFF)<br>State 1 (ON)      | <2.5VDC<br>>7.5VDC                                       |
| Response time           |     | 0 to 1 (OFF-ON)<br>1 to 0 (ON-OFF) | 4ms (0.5ms for high speed)<br>4ms (0.3ms for high speed) |

| Analog inputs          |     |        |                                     |
|------------------------|-----|--------|-------------------------------------|
| Number of analog input | Nr. |        | 4 digital/analog                    |
| Analog input type      |     |        | Voltage inputs                      |
| Inputs signal range    | V   |        | 0...10                              |
| Resolution             |     |        | 0.01V                               |
| Bit of conversion      | bit |        | 8                                   |
| Current consumption at |     | 10VDC  | mA <0.17mA                          |
| Input impedance        |     | kΩ     | >40                                 |
| Admissible overload    |     | VDC    | 14                                  |
| Sampling time          |     | ms     | 5...20ms(LADDER),<br>2...10ms (FBD) |
| Maximum cable length   |     | m / ft | ≤30m/98ft (shielded wire)           |

| Digital outputs          |     |  |       |
|--------------------------|-----|--|-------|
| Number of digital output | Nr. |  | 8     |
| type                     |     |  | Relay |

#### System resources

Display

LCD display, 4  
lines x 16  
characters

### Connections

Terminals type

Screw

Tightening torque for terminals

|     |      |     |
|-----|------|-----|
| max | Nm   | 0.6 |
| Max | lbft | 0.4 |

Conductor section

AWG/Kcmil

|     |    |
|-----|----|
| min | 26 |
| max | 14 |

IEC

|     |                 |      |
|-----|-----------------|------|
| min | mm <sup>2</sup> | 0.14 |
| max | mm <sup>2</sup> | 2.5  |

### Ambient conditions

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -20 |
| max | °C | +55 |

Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

Relative humidity

% 20...90% without  
condensation

### Housing

Mounting

35mm DIN rail or  
screw fixing  
(M4x20mm)

Degree of protection

IP20

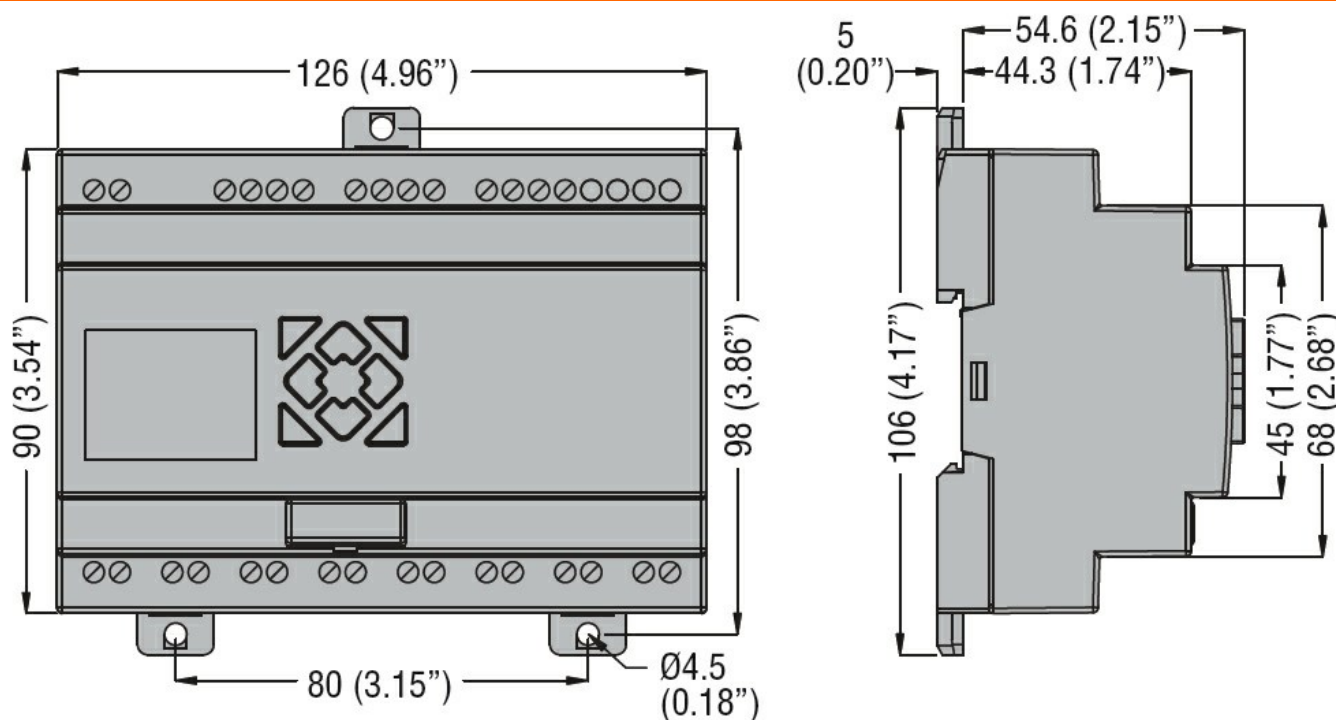
Dimensions (W x H x D)

mm 126 x 106 x 59.6

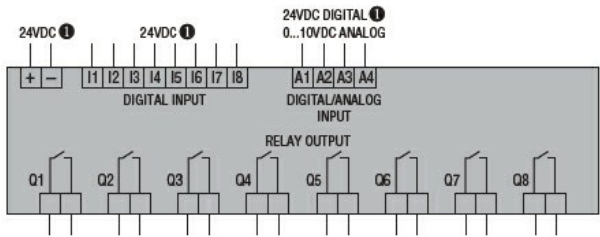
Weight

g 360

### Dimensions



### Wiring diagrams



① 12VDC for LRD20R D012.

Certifications and compliance

Compliance

|                  |
|------------------|
| CSA C22.2 n° 142 |
| IEC/EN 61131-2   |
| UL508            |

Certificates

|       |
|-------|
| cULus |
| EAC   |

ETIM classification

|          |                            |
|----------|----------------------------|
| ETIM 8.0 | EC001417 -<br>Logic module |
|----------|----------------------------|