### Certifications

| Certification (when product is marked)(1) | Value |
|---|---|
| c-UL-us | UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E322657.<br><br>UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E334470. |
| CE | European Union 2004/108/EC EMC Directive, compliant with:<br>EN 61326-1; Meas./Control/Lab., Industrial Requirements<br>EN 61000-6-2; Industrial Immunity<br>EN 61000-6-4; Industrial Emissions<br>EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)<br><br>European Union 2006/95/EC LVD, compliant with:<br>EN 61131-2; Programmable Controllers (Clause 11) |
| C-Tick | Australian Radiocommunications Act, compliant with:<br>AS/NZS CISPR 11; Industrial Emissions |

(1) See the Product Certification link at http://www.rockwellautomation.com/products/certification/ for Declaration of Conformity, Certificates, and other certification details.

## Micro830 48-Point Controllers

### General Specifications – 2080-LC30-48AWB, 2080-LC30-48QWB, 2080-LC30-48QVB, 2080-LC30-48QBB

| Attribute | 2080-LC30-48AWB | 2080-LC30-48QWB | 2080-LC30-48QVB | 2080-LC30-48QBB |
|---|---|---|---|---|
| Number of I/O | 48 (28 inputs, 20 outputs) | | | |
| Dimensions HxWxD | 90 x 230 x 80 mm<br>(3.54 x 9.06 x 3.15 in.) | | | |
| Shipping weight, approx. | 0.725 kg (1.60 lb) | | | |
| Wire size | 0.2…2.5 $mm^2$ (24…12 AWG) solid copper wire or<br>0.2…2.5 $mm^2$ (24…12 AWG) stranded copper wire<br>rated @ 90 °C (194 °F ) insulation max | | | |
| Wiring category(1) | 2 – on signal ports<br>2 – on power ports | | | |
| Wire type | Use copper conductors only | | | |
| Terminal screw torque | 0.6 Nm (4.4 lb-in) max<br>(using a 2.5 mm (0.10 in.) flat-blade screwdriver) | | | |
| Input circuit type | 120V AC | 12/24V sink/source (standard)<br>24V sink/source (high-speed) | | |
| Output circuit type | Relay | | 24V DC sink (standard and high-speed) | 24V DC source (standard and high-speed) |
| Event input interrupt support | Yes, inputs 0…15 only | | | |
| Power consumption | 18.2 W | | | |
| Power supply voltage range | 20.4…26.4V DC Class 2 | | | |

### General Specifications – 2080-LC30-48AWB, 2080-LC30-48QWB, 2080-LC30-48QVB, 2080-LC30-48QBB

| Attribute | 2080-LC30-48AWB | 2080-LC30-48QWB | 2080-LC30-48QVB | 2080-LC30-48QBB |
|---|---|---|---|---|
| I/O rating | Input 120V AC, 16 mA<br>Output 2 A, 240V AC, general use | Input 24V DC, 8.8 mA<br>Output 2 A, 240V AC, general use | Input 24V DC, 8.8 mA<br>Output 24V DC, 1 A per point (Surrounding air temperature 30 °C)<br>24 V DC, 0.3 A per point (Surrounding air temperature 65 °C) | |
| Insulation stripping length | 7 mm (0.28 in.) | | | |
| Enclosure type rating | Meets IP20 | | | |
| Pilot duty rating | C300, R150 | | — | |
| Isolation voltage | 250V (continuous), Reinforced Insulation Type, Outputs to Aux and Network, Inputs to Outputs<br>Type tested for 60 s @ 3250V DC I/O to Aux and Network, Inputs to Outputs | 250V (continuous), Reinforced Insulation Type, Outputs to Aux and Network, Inputs to Outputs<br>Type tested for 60 s @ 720V DC, Inputs to Aux and Network, 3250V DC Outputs to Aux and Network, Inputs to Outputs | 50V (continuous), Reinforced Insulation Type, I/O to Aux and Network, Inputs to Outputs<br>Type tested for 60 s @ 720V DC, I/O to Aux and Network, Inputs to Outputs | |
| North American temp code | T4 | | | |

(1) Use this Conductor Category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1.

### Inputs

| Attribute | 2080-LC30-48AWB | 2080-LC30-48QWB / 2080-LC30-48QVB / 2080-LC30-48QBB | |
|---|---|---|---|
| | 120V AC Input | High-Speed DC Input (Inputs 0…11) | Standard DC Input (Inputs 12 and higher) |
| Number of Inputs | 28 | 12 | 16 |
| Voltage category | 110V AC | 24V DC sink/source | |
| Operating voltage | 132V, 60Hz AC, max | 16.8…26.4V DC | 10…26.4V DC |
| Off-state voltage, max | 20V AC | 5V DC | |
| Off-state current, max | 1.5 mA | 1.5 mA | |
| On-state current, min | 5 mA @ 79V AC | 5.0 mA @ 16.8V DC | 1.8 mA @ 10V DC |
| On-state current, nom | 12 mA @ 120V AC | 8.8 mA @ 24V DC | 8.5 mA @ 24V DC |
| On-state current, max | 16 mA @ 132V AC | 12.0 mA @ 30V DC | |
| Nominal impedance | 12 kΩ @ 50 Hz<br>10 kΩ @ 60 Hz | 3 kΩ | 3.74 kΩ |
| IEC input compatibility | Type 3 | | |
| Inrush current, max | 250 mA @ 120V AC | | |
| Input frequency, max | 63 Hz | | |
| AC input filter setting | 8 ms for all embedded inputs<br>(In Connected Components Workbench, go to the Embedded I/O configuration window to reconfigure the filter setting for each input group) | | |

### Isolated AC Inputs (2080-LC30-48QWB, 2080-LC30-48QVB, 2080-LC30-48QBB) (Inputs 0…11)

| Attribute | Value |
|---|---|
| On-state voltage, nom | 12/24V AC @ 50/60 Hz |
| Off-state voltage, min | 4V AC @ 50/60Hz |
| Operating frequency, nom | 50/60 Hz |

### Outputs

| Attribute | 2080-LC30-48AWB / 2080-L30-48QWB | 2080-LC30-48QVB / 2080-LC30-48QBB | |
|---|---|---|---|
| | Relay Output | Hi-Speed Output (Outputs 0…3) | Standard Output (Outputs 4 and higher) |
| Number of outputs | 20 | 4 | 16 |
| Output voltage, min | 5V DC, 5V AC | 10.8V DC | 10V DC |
| Output voltage, max | 125V DC, 265V AC | 26.4V DC | 26.4V DC |
| Load current, min | 10 mA | | |
| Load current, max | 2.0 A | 100 mA (high-speed operation)<br>1.0 A @ 30 °C<br>0.3 A @ 65 °C (standard operation) | 1.0 A @ 30 °C<br>0.3 A @ 65 °C (standard operation) |
| Surge current, per point | Refer to Relay Contacts Ratings on page 180 | 4.0 A every 1 s @ 30 °C; every 2 s @ 65 °C(1) | |
| Current, per common, max | 5 A | — | — |
| Turn on time/<br>Turn off time, max | 10 ms | 2.5 µs | 0.1 ms<br>1 ms |

(1) Applies for general purpose operation only. Does not apply for high-speed operation.

### Relay Contacts Ratings

| Maximum Volts | Amperes | | Amperes Continuous | Volt-Amperes | |
|---|---|---|---|---|---|
| | Make | Break | | Make | Break |
| 120V AC | 15 A | 1.5 A | 2.0 A | 1800V A | 180V A |
| 240V AC | 7.5 A | 0.75 A | | | |
| 24V DC | 1.0 A | | 1.0 A | 28V A | |
| 125V DC | 0.22 A | | | | |