

Environmental Specifications

Attribute	Value
ESD immunity	IEC 61000-4-2: 6 kV contact discharges 8 kV air discharges
Radiated RF immunity	IEC 61000-4-3: 10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 10V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz
EFT/B immunity	IEC 61000-4-4: ±2 kV @ 5 kHz on power ports ±2 kV @ 5 kHz on signal ports
Surge transient immunity	IEC 61000-4-5: ±1 kV line-line(DM) and ±2 kV line-earth(CM) on power ports ±1 kV line-line(DM) and ±2 kV line-earth(CM) on signal ports
Conducted RF immunity	IEC 61000-4-6: 10V rms with 1 kHz sine-wave 80% AM from 150 kHz...80 MHz

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. 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: EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: 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 24-Point Controllers

General Specifications – 2080-LC30-24QWB, 2080-LC30-24QVB, 2080-LC30-24QBB

Attribute	2080-LC30-24QWB	2080-LC30-24QVB	2080-LC30-24QBB
Number of I/O	24 (14 inputs, 10 outputs)		
Dimensions HxWxD	90 x 150 x 80 mm (3.54 x 5.91 x 3.15 in.)		
Shipping weight, approx.	0.423 kg (0.933 lb)		

General Specifications – 2080-LC30-24QWB, 2080-LC30-24QVB, 2080-LC30-24QBB

Attribute	2080-LC30-24QWB	2080-LC30-24QVB	2080-LC30-24QBB
Wire size	0.2...2.5 mm ² (24...12 AWG) solid copper wire or 0.2...2.5 mm ² (24...12 AWG) stranded copper wire rated @ 90 °C (194 °F) insulation max		
Wiring category ⁽¹⁾	2 – on signal ports 2 – on power ports		
Wire type	Use Copper Conductors only		
Terminal screw torque	0.6 Nm (4.4 lb-in) max (using a 2.5 mm (0.10 in.) flat-blade screwdriver)		
Input circuit type	12/24V sink/source (standard) 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		
Power consumption	12.32 W		
Power supply voltage range	20.4...26.4V DC Class 2		
I/O rating	Input 24V DC, 8.8 mA Output 2 A, 240V AC, general use	Input 24V DC, 8.8 mA Output 24V DC, Class 2, 1 A per point (Surrounding air temperature 30 °C) 24 V DC, Class 2, 0.3 A per point (Surrounding air temperature 65 °C)	
Isolation voltage	250V (continuous), Reinforced Insulation Type, Outputs to Aux and Network, Inputs to Outputs Type tested for 60 s @ 720V DC, Inputs to Aux and Network, 3250 V DC Outputs to Aux and Network, Inputs to Outputs	50V (continuous), Reinforced Insulation Type, I/O to Aux and Network, Inputs to Outputs Type tested for 60 s @ 720V DC, I/O to Aux and Network, Inputs to Outputs	
Pilot duty rating	C300, R150 (2080-LC30-24QWB only)	—	
Insulation stripping length	7 mm (0.28 in.)		
Enclosure type rating	Meets IP20		
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	High-Speed DC Input (Inputs 0...7)	Standard DC Input (Inputs 8 and higher)
Number of Inputs	8	6
Voltage category	24V DC sink/source	
Operating voltage range	16.8...26.4V DC	10...26.4V DC
Off-state voltage, max	5V DC	
Off-state current, max	1.5 mA	
On-state current, min	5.0 mA @ 16.8V DC	1.8 mA @ 10V DC
On-state current, nom	8.8 mA @ 24V DC	8.5 mA @ 24V DC
On-state current, max	12.0 mA @ 30V DC	

Inputs

Attribute	High-Speed DC Input (Inputs 0...7)	Standard DC Input (Inputs 8 and higher)
Nominal impedance	3 k Ω	3.74 k Ω
IEC input compatibility	Type 3	
AC input filter setting	8 ms for all embedded inputs (In Connected Components Workbench, go to the Embedded I/O configuration window to re-configure the filter setting for each input group)	

Isolated AC Inputs (2080-LC30-24QWB, 2080-LC30-24QVB, 2080-LC30-24QBB) (Inputs 0...7)

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-LC30-24QWB	2080-LC30-24QVB / 2080-LC30-24QBB	
	Relay Output	Hi-Speed Output (Outputs 0...1)	Standard Output (Outputs 2 and higher)
Number of outputs	10	2	8
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) 1.0 A @ 30 °C 0.3 A @ 65 °C (standard operation)	1.0 A @ 30 °C 0.3 A @ 65 °C (standard operation)
Surge current, per point	Refer to Relay Contacts Ratings on page 176	4.0 A every 1 s @ 30 °C; every 2 s @ 65 °C ⁽¹⁾	
Current, per common, max	5 A	—	—
Turn on time/ Turn off time, max	10 ms	2.5 μ s	0.1 ms 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				