Relay Contacts Ratings – Micro830 Controllers

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				

Micro850 Controllers

Micro850 controllers are suitable for applications that require more digital and analog I/O or higher performance analog I/O. These controllers can support up to four expansion I/O and come in 24-point and 48-point form factors with an embedded Ethernet port.

Number and Types of Inputs/Outputs for Micro850 Catalogs

Catalogs	Inputs				Outputs			Analog Out 0...10V DC	Analog In 0...10V (shared with DC In)	PTO/PWM Support (1)	Embedded HSC Support (2)	Ethernet Nodes(3)
	120V AC	120/240 V AC	24V DC/ V AC	12V DC	Relay	24V DC Source	24V DC Sink					
2080-LC50-24AWB	14	–	–	–	10	–	–	–	–	–	–	0
2080-L50E-24AWB	14	–	–	–	10	–	–	–	–	–	–	8
2080-LC50-24QWB	–	–	14	–	10	–	–	–	–	–	4	0
2080-L50E-24QWB	–	–	14	–	10	–	–	–	–	–	4	8
2080-LC50-24QVB	–	–	14	–	–	–	10	–	–	2 (PTO/PWM)	4	0
2080-L50E-24QVB	–	–	14	–	–	–	10	–	–	2 (PTO/PWM)	4	8
2080-LC50-24QBB	–	–	14	–	–	10	–	–	–	2 (PTO/PWM)	4	0
2080-L50E-24QBB	–	–	14	–	–	10	–	–	–	2 (PTO/PWM)	4	8
2080-LC50-48AWB	28	–	–	–	20	–	–	–	–	–	–	0
2080-L50E-48AWB	28	–	–	–	20	–	–	–	–	–	–	8
2080-LC50-48QWB	–	–	28	–	20	–	–	–	–	–	6	0
2080-L50E-48QWB	–	–	28	–	20	–	–	–	–	–	6	8
2080-LC50-48QWBK	–	–	28	–	20	–	–	–	–	–	6	0
2080-L50E-48QWBK	–	–	28	–	20	–	–	–	–	–	6	8
2080-LC50-48QVB	–	–	28	–	–	–	20	–	–	3 (PTO/PWM)	6	0
2080-L50E-48QVB	–	–	28	–	–	–	20	–	–	3 (PTO/PWM)	6	8
2080-LC50-48QBB	–	–	28	–	–	20	–	–	–	3 (PTO/PWM)	6	0
2080-L50E-48QBB	–	–	28	–	–	20	–	–	–	3 (PTO/PWM)	6	8

(1) You need firmware revision 6.011 or later to use PWM output.
(2) Maximum number of embedded HSC supported.
(3) For Micro850 (2080-L50E) controllers with firmware revision 21.011 or later.

General Specifications – Micro850 24-point Controllers

Attribute	2080-LC50-24AWB, 2080-L50E-24AWB	2080-LC50-24QWB, 2080-L50E-24QWB	2080-LC50-24QVB, 2080-L50E-24QVB	2080-LC50-24QBB, 2080-L50E-24QBB
Number of I/O	24 (14 inputs, 10 outputs)			
Dimensions (HxWxD)	90 x 158 x 80 mm (3.54 x 6.22 x 3.15 in.)			
Shipping weight, approx.	0.423 kg (0.933 lb)			
Wire size				

	Min	Max	
Solid and Stranded	0.14 mm^2 (26 AWG)	2.5 mm^2 (14 AWG)	Rated @ 90 °C (194 °F) insulation max

Wiring category(1)	2 – on signal ports 2 – on power ports 2 – on communication ports
Wire type	Use copper conductors only
Terminal screw torque	0.4...0.5 N•m (3.5...4.4 lb•in) using a 0.6 x 3.5 mm screwdriver. Note: Use a handheld screwdriver to hold down the screws at the side.

General Specifications – Micro850 24-point Controllers (Continued)

Attribute	2080-LC50-24AWB, 2080-L50E-24AWB	2080-LC50-24QWB, 2080-L50E-24QWB	2080-LC50-24QVB, 2080-L50E-24QVB	2080-LC50-24QBB, 2080-L50E-24QBB
Input circuit type	120V AC	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)
Power consumption, max	8 W – without plug-in modules and expansion I/O modules 28 W – with plug-in modules and expansion I/O modules			
Power supply voltage range	21.4…26.4V DC Class 2			
I/O rating, input	120V AC 16 mA	24V, 8.8 mA		
I/O rating, output	2 A, 240V AC, 2 A, 24V DC		24V DC, Class 2, 1 A per point (Surrounding air temperature 30 °C (86 °F)) 24V DC, Class 2, 0.3 A per point (Surrounding air temperature 65 °C (149 °F))	
Isolation voltage	250V (continuous), Reinforced Insulation Type, Output to Aux and Network, Inputs to Outputs. Type tested for 60 s @ 3250V DC Output to Aux and Network, Inputs to Outputs. 150V (continuous), Reinforced Insulation Type, Input to Aux and Network. Type tested for 60 s @ 1950V DC Input to Aux and Network.	250V (continuous), Reinforced Insulation Type, Output to Aux and Network, Inputs to Outputs. Type tested for 60 s @ 3250V DC Output to Aux and Network, Inputs to Outputs. 50V (continuous), Reinforced Insulation Type, Input to Aux and Network Type tested for 60 s @ 720V DC, Inputs to Aux and Network.	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		–	
Insulation-stripping length	7 mm (0.28 in.)			
Enclosure type rating	None (open-style)			
North American temp code	T4			

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

General Specifications – Micro850 48-point Controllers

Attribute	2080-LC50-48AWB, 2080-L50E-48AWB	2080-LC50-48QWB, 2080-LC50-48QWBK, 2080-L50E-48QWB, 2080-L50E-48QWBK,	2080-LC50-48QVB, 2080-L50E-48QVB	2080-LC50-48QBB, 2080-L50E-48QBB
Number of I/O	48 (28 inputs, 20 outputs)			
Dimensions (HxWxD)	90 x 238 x 80 mm (3.54 x 9.37 x 3.15 in.)			
Shipping weight, approx.	0.725 kg (1.60 lb)			
Wire size	<table><tr><th></th><th>Min</th><th>Max</th><th></th></tr><tr><td>Solid and Stranded</td><td>0.2 mm^2 (24 AWG)</td><td>2.5 mm^2 (14 AWG)</td><td>Rated @ 90 °C (194 °F) insulation max</td></tr></table>			
Wiring category (1)	2 – on signal ports 2 – on power ports 2 – on communication ports			
Wire type	Use copper conductors only			
Terminal screw torque	0.4…0.5 N•m (3.5…4.4 lb•in) using a 0.6 x 3.5 mm screwdriver. Use a handheld screwdriver to hold down the screws at the side.			
Input circuit type	120V AC	24V DC sink/source (standard and high-speed)		
Output circuit type	Relay		24V DC sink (standard and high-speed)	24V DC source (standard and high-speed)
Power consumption, max	11 W – without plug-in modules and expansion I/O modules 33 W – with plug-in modules and expansion I/O modules			
Power supply voltage range	21.4…26.4V DC Class 2			
I/O rating, input	120V AC, 16 mA	24V DC, 8.8 mA		
I/O rating, output	2 A, 240V AC 2 A, 24V DC		24V DC, 1 A per point (Surrounding air temperature 30 °C (86 °F)) 24V DC, 0.3 A per point (Surrounding air temperature 65 °C (149 °F))	