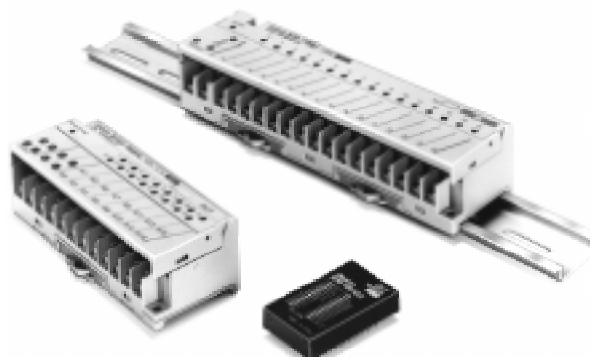


Reduce Wiring Back to PLC Rack for 32 I/O Points

- Transmit 16 input signals over just 2 wires (3 wires if only one terminal has a power supply)
- Normal I/O delay (19.2 ms typical) or short I/O delay (3 ms typical) models
- Output models offer Hold or Load Off options for handling transmission errors
- Compact B7AS measures 30% shorter than conventional 16-point blocks
- Printed circuit board models available



Ordering Information

MODEL NUMBER LEGEND

Input Models

B7A□ - T 6 □ □
 1 2 3 4 5

1. Series

None: Standard
 S: Small

2. Input/Output Classification

T: Input

3. Number of I/O Points

6: 16

4. Input Logic/Internal I/O Common

4	Input logic	Internal I/O common
A	NPN compatible	- common
B	NPN compatible	+/- common
C	PNP compatible	+/- common
D	PNP (TTL) compatible	---

5. I/O Delay Time (Typical)/Appearance

5	I/O delay	Appearance
1	19.2 ms	Screw terminals
2	19.2 ms	Printed circuit board model
6	3 ms	Screw terminals
7	3 ms	Printed circuit board model

Output Models

B7A□ - R 6 □ □ □
 1 2 3 4 5 6

1. Series

None: Standard
 S: Small

2. Input/Output Classification

R: Output

3. Number of I/O Points

6: 16

4. Output Logic/Output Capacity

3	Output logic	Output capacity
A	NPN open collector	0.05 A/point
B	NPN open collector	0.1 A/point
C	NPN open collector	0.5 A/point
F	PNP open collector	0.1 A/point
G	PNP open collector	0.5 A/point

5. Error Processing

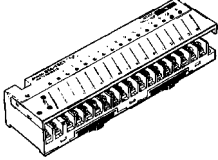
1: HOLD
 3: LOAD OFF
 5: HOLD/LOAD OFF

6. I/O Delay (Typical)/Appearance

5	I/O delay time	Appearance
1	19.2 ms	Screw terminals
2	19.2 ms	Printed circuit board model
6	3 ms	Screw terminals
7	3 ms	Printed circuit board model

■ 16-POINT LINK MODULES

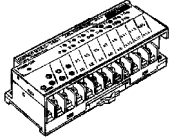
Screw Terminal Models

Appearance	I/O classification	I/O configuration	I/O delay (typical)	Internal I/O common	Error processing (See Note 1)	Part number	
	Input	NPN compatible	Normal speed 19.2 ms	- common	---	B7A-T6A1 (See Note 2)	
				+/- common	---	B7A-T6B1 (See Note 2)	
		PNP compatible		High speed 3 ms	- common	---	B7A-T6A6 (See Note 2)
					+/- common	---	B7A-T6B6 (See Note 2)
		NPN compatible		Normal speed 19.2 ms	+ common	HOLD	B7A-R6B11
					+ common	LOAD OFF	B7A-R6B31
	PNP compatible	High speed 3 ms	- common	HOLD	B7A-R6F11		
			- common	LOAD OFF	B7A-R6F31		
	Output	NPN open collector 100 mA/point	NPN open collector 500 mA/point (See Note 3)	Normal speed 19.2 ms	+ common	HOLD	B7A-R6G11
					+ common	LOAD OFF	B7A-R6C11
		+ common	HOLD		B7A-R6C31		
		+ common	LOAD OFF		B7A-R6C31		
		- common	HOLD		B7A-R6F11		
		- common	LOAD OFF		B7A-R6F31		
		- common	HOLD		B7A-R6G11		
		- common	LOAD OFF		B7A-R6G31		
NPN open collector 100 mA/point	NPN open collector 500 mA/point (See Note 3)	PNP open collector 100 mA/point	High speed 3 ms	+ common	HOLD	B7A-R6B16	
				+ common	LOAD OFF	B7A-R6B36	
+ common	HOLD	B7A-R6C16					
+ common	LOAD OFF	B7A-R6C36					
- common	HOLD	B7A-R6F16					
- common	LOAD OFF	B7A-R6F36					
- common	HOLD	B7A-R6G16					
- common	LOAD OFF	B7A-R6G36					
NPN open collector 100 mA/point	NPN open collector 500 mA/point (See Note 3)	PNP open collector 100 mA/point	High speed 3 ms	+ common	HOLD	B7A-R6B16	
				+ common	LOAD OFF	B7A-R6B36	
+ common	HOLD	B7A-R6C16					
+ common	LOAD OFF	B7A-R6C36					
- common	HOLD	B7A-R6F16					
- common	LOAD OFF	B7A-R6F36					
- common	HOLD	B7A-R6G16					
- common	LOAD OFF	B7A-R6G36					

Note: 1. HOLD: The previous output condition will be on hold when an error occurs.
LOAD OFF: All outputs will be OFF when an error occurs.

2. The 16-point B7A-T6A□ and 16-point B7A-T6B□ are different from each other in terminal configuration.

Small Screw Terminal Models

Appearance	I/O classification	I/O configuration	I/O delay (typical)	Internal I/O common	Error processing (See Note 1)	Part number	
	Input	NPN compatible	Normal speed 19.2 ms	+/- common	---	B7AS-T6B1	
			High speed 3 ms		---	B7AS-T6B6	
	Output	NPN open collector 100 mA/point	Normal speed 19.2 ms	High speed 3 ms	+/- common	HOLD	B7AS-R6B11
						LOAD OFF	B7AS-R6B31
						HOLD	B7AS-R6B16
						LOAD OFF	B7AS-R6B36


Note: 1. HOLD: The previous output condition will be on hold when an error occurs.
LOAD OFF: All outputs will be OFF when an error occurs.

2. The 16-point B7A-T6A□ and 16-point B7A-T6B□ are different from each other in terminal configuration.

3. N-channel MOS FET open drain output

4. P-channel MOS FET open drain output

Printed Circuit Board Models

Appearance	I/O classification	I/O configuration	I/O delay (typical)	Error processing (See Note)	Part number
	Input	TTL input	Normal speed 19.2 ms	---	B7A-T6D2
			High speed 3 ms	---	B7A-T6D7
	Output	NPN open collector 50 mA/point	Normal speed 19.2 ms	HOLD/LOAD OFF selected by wiring	B7A-R6A52
			High speed 3 ms		B7A-R6A57

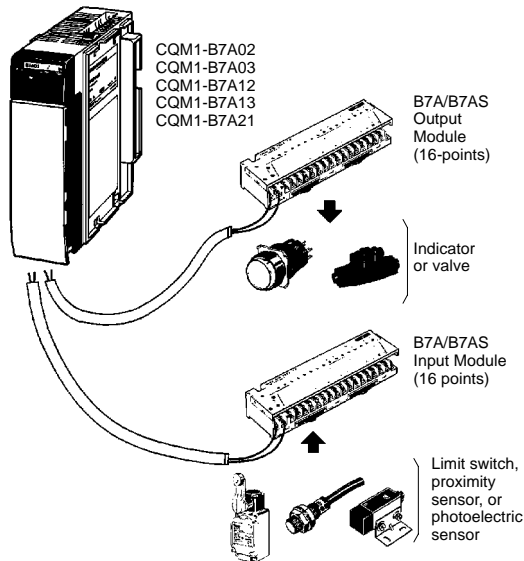
Note: HOLD: The previous output condition will be on hold when an error occurs.
 LOAD OFF: All outputs will be OFF when an error occurs.

■ POWER SUPPLIES

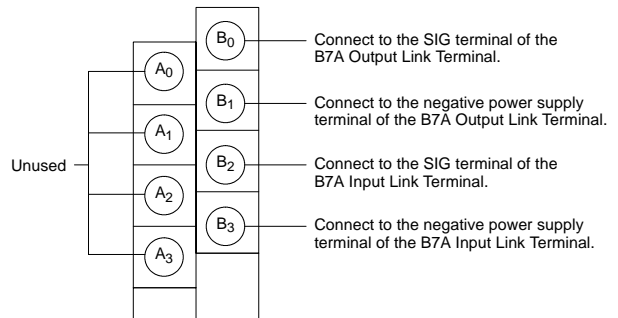
Input voltage	Output rating	Application	Part number
120 to 240 VAC	0.13 A, 24 VDC	Use one to power each input or output block	S82K-00324
	0.3 A, 24 VDC	Use one to power two blocks from a single power supply	S82K-00724
	0.6 A, 24 VDC	Use this to power blocks connected to sensors, relays indicator lights	S82K-01524
	1.3 A, 24 VDC	Use one where excess power is needed	S82K-03024

Application Examples

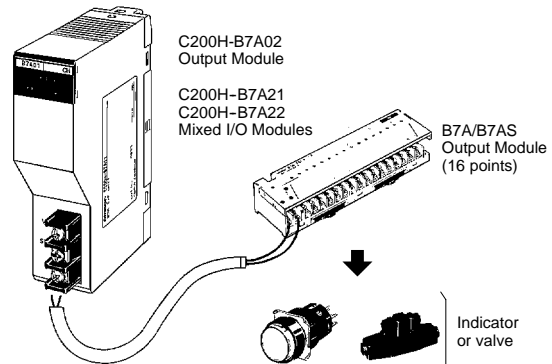
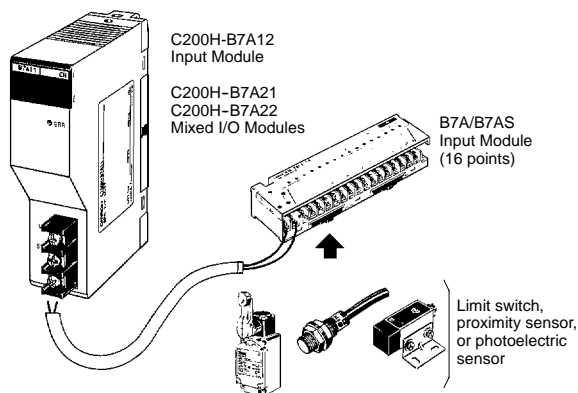
CQM1 B7A Master Link Modules



CQM1 Connecting Terminals



C200H B7A Master Link Modules



Note: B7A-series high-speed models cannot be used with C200H-B7A11 and C200H-B7A01.