## BX-DM1-18ER-D Cut Sheet





BRX Do-more PLC, 12-24 VDC required, serial port, microSD card slot, Discrete Input: 10-point, AC/DC, Discrete Output: 8-point, relay.

For complete product information, please see this item on our store at the following link:



https://www.automationdirect.com/pn/BX-DM1-18ER-D

## **Technical Specifications**

Brand	BRX Do-more
Item	PLC
<b>Total Memory</b>	192k words
Ladder Memory	64k words
<b>User Data Memory</b>	128k words
Removable Media Type	MicroSD card slot
Programming Language	Ladder
<b>Programming Software</b>	Do-more Designer programming software v2.0 or later
Communication Port and Connection Type(s)	(1) RS-232/RS-485 (3-pin terminal)
Port Protocol(s)	Do-more protocol     Modbus RTU Master/Slave     ASCII In/out     K-sequence Slave     webserver (non-secure HTTP)     programming and monitoring
Port Speed(s)	up to 115.2k baud
Real Time Clock/Calendar	Yes
Retentive Memory	Yes
Battery Backup	Yes
Maximum Expansion Modules Allowed	4
External Power Requirement	12-24 VDC
Number of Discrete Input Points	10
Nominal Input Voltage	12-24 VAC/VDC
Voltage Type	AC/DC
Discrete Input Type	Sinking/sourcing
Number of Isolated Discrete Input Commons	2
Number of Points per Discrete Input Common	5
Frequency Response	250 kHz
Number of Discrete Output Points	8

Relay Configuration   (8) Form A (SPST) relays	Nominal Output Voltage	12-48 VDC/24-240 VAC
Relay Configuration   (8) Form A (SPST) relays		
Number of Isolated Discrete Output Commons   2	. ,,	,
Number of Isolated Discrete Output Commons  Number of Points per Discrete Output Common  Maximum Number of PID Loops  Number of High-Speed Capable Input Points  - up to (3) up counters - up to (3) up/down counters - up to (3) quadrature (A and B) counters - up to (3) up/down counters - up to (3) quadrature (A and B with Z) counters - up to (3) up/down counters - up to (3) up/down counters - up to (3) up/down counters - up to (3) quadrature (A and B) counters - up to (3) up/down counters - up to (3) ingle input (edge) timers  - up to (3) dual input (dual edge) timers  - up to (3) single input (edge) timers  - up to (3) single input (edge) timers - up to (3) single input (down counters - up to (3) single input down counters - up to (3) ingle input up counters - up to (3) ingle input up counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) dual edge timers interval scaling - up to (4) input interrupts - up to (4) input interrupts - up to (4) timer interrupts - up to (4) timer interrupts - up to (4) match register interrupts	•	( ) ( ) (
Number of Points per Discrete Output Common		2A/point
Discrete Output Common   Maximum Number of PID Loops   100+ (configurable to memory limit)		2
Number of High-Speed Capable Input Points  10  - up to (3) up counters - up to (3) up/down counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B with Z) counters - up to (3) up/down counters - up to (3) quadrature (A and B with Z) counters - up to (3) up/down counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B) counters - up to (3) quadrature (A and B with Z) counters - up to (3) single input (edge) timers  - up to (3) single input (dual edge) timers  - up to (3) single input (edge) timers  - up to (3) single input (edge) timers - up to (3) single input down counters - up to (3) quadrature input (A and B) counters - up to (3) quadrature input (A and B) counters - up to (3) quadrature input (A and B) counters - up to (3) quadrature (A and B with Z) counters - up to (3) quadrature (A and B with Z) counters - up to (3) quadrature (A and B with Z) counters - up to (3) quadrature (A and B with Z) counters - up to (3) edge timers interval scaling - up to (4) input interrupts - up to (4) input interrupts - up to (4) input interrupts - up to (4) match register interrupts	•	4
Capable Input Points  * up to (3) up counters * up to (3) up/down counters * up to (3) pulse/direction (bi-directional) counters * up to (3) quadrature (A and B) counters * up to (3) quadrature (A and B with Z) counters * up to (3) up/down counters * up to (3) quadrature (A and B with Z) counters * up to (3) up/down counters * up to (3) pulse/direction (bi-directional) counters * up to (3) quadrature (A and B) counters * up to (3) guadrature (A and B with Z) counters * up to (3) single input (edge) timers * up to (3) single input (edge) timers  * up to (3) single input (edge) timers  * up to (3) single input down counters * up to (3) quadrature input (A and B) counters * up to (3) quadrature input (A and B) counters * up to (3) quadrature (A and B with Z) counters * up to (3) quadrature (A and B with Z) counters * up to (3) edge timers interval scaling * up to (4) input interrupts * up to (4) input interrupts * up to (4) input interrupts * up to (4) match register interrupts		100+ (configurable to memory limit)
* up to (3) down counters * up to (3) up/down counters * up to (3) pulse/direction (bi-directional) counters * up to (3) quadrature (A and B) counters * up to (3) quadrature (A and B with Z) counters * up to (3) up counters * up to (3) up counters * up to (3) up/down counters * up to (3) up counters * up to (3) down counters * up to (3) up/down counters * up to (3) pulse/direction (bi-directional) counters * up to (3) pulse/direction (bi-directional) counters * up to (3) quadrature (A and B) counters * up to (3) quadrature (A and B with Z) counters * up to (3) single input (edge) timers * up to (3) single input (edge) timers * up to (3) single input (edge) timers * up to (3) single input down counters * up to (3) single input down counters * up to (3) single input down counters * up to (3) pulse/direction (bi-directional) counters * up to (3) quadrature input (A and B) counters * up to (3) quadrature input (A and B) counters * up to (3) quadrature (A and B with Z) counters * up to (3) quadrature (A and B with Z) counters * up to (3) dual edge timers interval scaling * up to (4) input interrupts * up to (4) input interrupts * up to (4) match register interrupts		10
Position Scaling  • up to (3) down counters • up to (3) up/down counters • up to (3) pulse/direction (bi-directional) counters • up to (3) quadrature (A and B) counters • up to (3) quadrature (A and B with Z) counters • up to (3) single input (edge) timers • up to (3) dual input (dual edge) timers  Duration Measurement  up to (3) single input (edge) timers • up to (3) single input (edge) timers • up to (3) single input up counters • up to (3) single input down counters • up to (3) single input down counters • up to (3) pulse/direction (bi-directional) counters • up to (3) quadrature input (A and B) counters • up to (3) quadrature (A and B with Z) counters • up to (3) edge timers interval scaling • up to (3) dual edge timers interval scaling • up to (4) input interrupts • up to (4) imput interrupts • up to (4) match register interrupts	High-Speed Counter(s)	<ul> <li>up to (3) down counters</li> <li>up to (3) up/down counters</li> <li>up to (3) pulse/direction (bi-directional) counters</li> <li>up to (3) quadrature (A and B) counters</li> </ul>
• up to (3) dual input (dual edge) timers  Duration Measurement  • up to (3) single input (edge) timers  • up to (3) single input up counters • up to (3) single input down counters • up to (3) pulse/direction (bi-directional) counters • up to (3) quadrature input (A and B) counters • up to (3) quadrature (A and B with Z) counters • up to (3) edge timers interval scaling • up to (3) dual edge timers interval scaling • up to (4) input interrupts • up to (4) match register interrupts	Position Scaling	<ul> <li>up to (3) down counters</li> <li>up to (3) up/down counters</li> <li>up to (3) pulse/direction (bi-directional) counters</li> <li>up to (3) quadrature (A and B) counters</li> </ul>
• up to (3) single input up counters • up to (3) single input down counters • up to (3) pulse/direction (bi-directional) counters • up to (3) quadrature input (A and B) counters • up to (3) quadrature (A and B with Z) counters • up to (3) edge timers interval scaling • up to (3) dual edge timers interval scaling • up to (4) input interrupts • up to (4) match register interrupts	Interval Measurement	
• up to (3) single input down counters • up to (3) pulse/direction (bi-directional) counters • up to (3) quadrature input (A and B) counters • up to (3) quadrature (A and B with Z) counters • up to (3) edge timers interval scaling • up to (3) dual edge timers interval scaling • up to (4) input interrupts • up to (4) input interrupts • up to (4) match register interrupts	<b>Duration Measurement</b>	up to (3) single input (edge) timers
Interrupt(s)  • up to (4) timer interrupts • up to (4) match register interrupts	Frequency Measurement	<ul> <li>up to (3) single input down counters</li> <li>up to (3) pulse/direction (bi-directional) counters</li> <li>up to (3) quadrature input (A and B) counters</li> <li>up to (3) quadrature (A and B with Z) counters</li> <li>up to (3) edge timers interval scaling</li> </ul>
Includes BY DTD03S terminal block and D0 MC DAT bettony	Interrupt(s)	• up to (4) timer interrupts
BA-RTB033 terminal block and bo-wic-BAT battery	Includes	BX-RTB03S terminal block and D0-MC-BAT battery





Requires	BX-RTB18 or BX-RTB18-1 terminal block kit or ZIPLink pre-wired cables
Dangerous Goods	Battery Installed: Yes Packaging Instructions: 970 UN Number: UN3091 Hazard Type: Lithium Batteries Battery Type: Button Lithium Content: 0.07 Replacement Battery: D0-MC-BAT Generic Battery: CR2032

## Agency Approvals

UL Listed File #	E185989
UL Recognized File #	None
UL Hazardous File #	None
CE	View CE declarations
CSA File #	None
RoHS Status	Yes (See CE Doc)
EU REACH	View EU REACH document

## Dimensional Drawings



2D Drawing PDF Link: https://cdn.automationdirect.com /static/drawings/BX-DM1-18ER-D.pdf See store item page for other formats.