BX-DM1E-18ED13 Cut Sheet





BRX Do-more PLC, 120-240 VAC required, Ethernet and serial ports, microSD card slot, Discrete Input: 10-point, AC/DC, Analog Input: 1-channel, current/voltage, Discrete Output: 8-point, sinking, Analog Output: 1-channel, current/voltage.

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



https://www.automationdirect.com/pn/BX-DM1E-18ED13

Technical Specifications	Technical	Specific	cations
--------------------------	------------------	----------	---------

Brand	BRX Do-more	
Item	PLC	
Total Memory	192k words	
Ladder Memory	64k words	
User Data Memory	128k words	
Removable Media Type	MicroSD card slot	
Programming Language	Ladder	
Programming Software	Do-more Designer programming software v2.0 or later	
Communication Port and Connection Type(s)	(1) Ethernet 10/100Base-T (RJ45)(1) RS-232/RS-485 (3-pin terminal)	
Port Protocol(s)	Do-more protocol MQTT Client FTP Client Modbus RTU Master/Slave Modbus TCP TCP/IP EtherNet/IP explicit messaging scanner/adapter Ethernet remote I/O K-sequence Slave programming and monitoring	
Port Speed(s)	10/100 Mbpsup to 115.2k baud	
Real Time Clock/Calendar	Yes	
Retentive Memory	Yes	
Battery Backup	Yes	
Maximum Expansion Modules Allowed	8	
External Power Requirement	120-240 VAC	
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 Nominal Output Voltage Discrete Output Type Sinking Load Current Unmber of Isolated Discrete Output Commons Number of Points per Discrete Output Common Maximum Switching Frequency Prequency Number of Analog Input Channels Analog Input Signal Type Current/voltage Number of Points per Analog Input Common Number of Points per Analog Input Common 1 Input Resolution Input Current Signal Range H-20 mA, +/- 20 mA Input Voltage Signal Range Untput Channels Analog Output Signal Type Current/voltage Number of Analog Output Channels Analog Output Signal Type Current/voltage Number of Non-Isolated Analog Output Common 1 Current/voltage Number of Points per Analog Output Common 1 Current/voltage Number of Points per Analog Output Common 1 Output Resolution 16-bit Output Current Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Maximum Number of Points Signal Range Maximum Number of Pliph-Speed Capable Input Points 10		
Discrete Output Type Sinking Load Current 0.5A/point Number of Isolated Discrete Output Commons Number of Points per Discrete Output Common Maximum Switching Frequency 250 kHz Number of Analog Input Channels 1 Analog Input Signal Type Current/voltage Number of Non-Isolated Analog Input Common 1 Input Resolution 16-bit Input Current Signal Range 4-20 mA, +/- 20 mA Input Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Non-Isolated Analog Output Commons 1 Analog Output Signal Type Current/voltage Number of Analog Output Commons 1 Number of Points per Analog Output Commons 1 Number of Points per Analog Output Commons 1 Output Resolution 16-bit 1 Output Resolution 16-bit 0 Output Current Signal Range 4-20 mA and +/- 20 mA Output Current Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Signal Range 0 Output Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Signal Range 0 Maximum Number of PID Loops 100+ (configurable to memory limit)		8
Load Current Number of Isolated Discrete Output Commons Number of Points per Discrete Output Common Maximum Switching Frequency Number of Analog Input Channels Analog Input Signal Type Number of Non-Isolated Analog Input Common Number of Points per Analog Input Common Input Resolution Input Resolution Input Current Signal Range Input Voltage Signal Range Number of Analog Output Channels Analog Output Signal Type Current/voltage Number of Non-Isolated Analog Output Common 1 Current/voltage Number of Points per Analog Output Common 1 Current/voltage Number of Non-Isolated Analog Output Common 1 Output Resolution 1 1 1 1 1 1 1 1 1 1 1 1 1	Nominal Output Voltage	12-24 VDC
Number of Isolated Discrete Output Commons Number of Points per Discrete Output Common Maximum Switching Frequency Number of Analog Input Channels Analog Input Signal Type Number of Non-Isolated Analog Input Common Number of Points per Analog Input Common Input Resolution Input Current Signal Range 4-20 mA, +/- 20 mA Input Voltage Signal Range Output Channels Analog Output Signal Type Current/voltage Number of Analog Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution 1 Current Signal Range Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 100+ (configurable to memory limit)	Discrete Output Type	Sinking
Discrete Output Commons Number of Points per Discrete Output Common Maximum Switching Frequency Number of Analog Input Channels Analog Input Signal Type Number of Non-Isolated Analog Input Commons Number of Points per Analog Input Common Input Resolution Input Resolution Input Voltage Signal Range Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Current Signal Range Output Current Signal Range Output Voltage Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed	Load Current	0.5A/point
Discrete Output Common Maximum Switching Frequency Number of Analog Input Channels Analog Input Signal Type Number of Non-Isolated Analog Input Commons Number of Points per Analog Input Common Input Resolution Input Current Signal Range Input Voltage Signal Range Analog Output Signal Type Number of Non-Isolated Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Current Signal Range Output Voltage Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed		2
Number of Analog Input Channels		4
Input Channels Analog Input Signal Type Number of Non-Isolated Analog Input Commons Number of Points per Analog Input Common Input Resolution Input Current Signal Range Input Voltage Signal Range Input Voltage Signal Range O-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Voltage Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed		250 kHz
Number of Non-Isolated Analog Input Commons Number of Points per Analog Input Common Input Resolution Input Current Signal Range 4-20 mA, +/- 20 mA Input Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Voltage Signal Range Output Voltage Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed		1
Analog Input Commons Number of Points per Analog Input Common Input Resolution Input Current Signal Range 4-20 mA, +/- 20 mA Input Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Voltage Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 1 1 1 1 1 1 1 1 1 1 1 1 1	Analog Input Signal Type	Current/voltage
Analog Input Common Input Resolution Input Current Signal Range Input Voltage Signal Range Input Voltage Signal Range O-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 100+ (configurable to memory limit)		1
Input Current Signal Range 4-20 mA, +/- 20 mA Input Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels 1 Analog Output Signal Type Current/voltage Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common 1 Output Resolution 16-bit Output Current Signal Range 4-20 mA and +/- 20 mA Output Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Maximum Number of PID Loops 100+ (configurable to memory limit) Number of High-Speed 10		1
Input Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC Number of Analog Output Channels 1 Analog Output Signal Type Current/voltage Number of Non-Isolated Analog Output Commons 1 Number of Points per Analog Output Common 1 Output Resolution 16-bit 0 Output Current Signal Range 4-20 mA and +/- 20 mA Output Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Maximum Number of PID Loops 100+ (configurable to memory limit) Number of High-Speed 10	Input Resolution	16-bit
Number of Analog Output Channels Analog Output Signal Type Current/voltage Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 1 Current/voltage 1 4-20 mA and +/- 20 mA 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC	Input Current Signal Range	4-20 mA, +/- 20 mA
Output Channels Analog Output Signal Type Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed	Input Voltage Signal Range	0-5 VDC, 0-10 VDC, +/- 5 VDC, +/- 10 VDC
Number of Non-Isolated Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 1 1 4-20 mA and +/- 20 mA 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC 100+ (configurable to memory limit)		1
Analog Output Commons Number of Points per Analog Output Common Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed 1 1 4-20 mA and +/- 20 mA 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC 100+ (configurable to memory limit)	Analog Output Signal Type	Current/voltage
Analog Output Common Output Resolution Output Current Signal Range Output Voltage Signal Range Maximum Number of PID Loops Number of High-Speed		1
Output Current Signal Range Output Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Maximum Number of PID Loops Number of High-Speed 10		1
Signal Range Output Voltage Signal Range 0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC Maximum Number of PID Loops Number of High-Speed 10	Output Resolution	16-bit
Signal Range Maximum Number of PID Loops Number of High-Speed		4-20 mA and +/- 20 mA
of PID Loops Number of High-Speed 100+ (configurable to memory limit)		0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC
		100+ (configurable to memory limit)
		10

BX-DM1E-18ED13 Cut Sheet



High-Speed Counter(s)	 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) quadrature (A and B) counters up to (3) quadrature (A and B with Z) counters
Position Scaling	 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) quadrature (A and B) counters up to (3) quadrature (A and B with Z) counters
Interval Measurement	up to (3) single input (edge) timersup to (3) dual input (dual edge) timers
Duration Measurement	• up to (3) single input (edge) timers
Frequency Measurement	 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
Interrupt(s)	 up to (4) input interrupts up to (4) timer interrupts up to (4) match register interrupts

Dangerous Goods	Battery Installed	
Requires	BX-RTB18 or BX-RTB18-1 terminal block kit or ZIP Link pre-wired cables	
Includes	BX-RTB03S terminal block and D0-MC-BAT battery	
Axis Profile(s)	 relative/absolute positioning velocity mode trapezoid S-curve electronic gearing camming following homing jogging 	
Output Pulse Mode(s)	 up to (4) virtual axes up to (3) PTO linear step/direction outputs up to (2) PTO rotary clockwise/counter-clockwise (CW/CCW) outputs up to (2) PTO quadrature (A and B) outputs up to (3) PWM pulse width modulation outputs 	
Number of High-Speed Capable Output Points	4	
Table-Driven Input(s)	up to (4) programmable limit switchesup to (4) preset tables	

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 Vew EU REACH document

None

Other