

# BX-DM1E-36ED13 Cut Sheet



BRX Do-more PLC, 120-240 VAC required, Ethernet and serial ports, battery backup, microSD card slot, Discrete Input: 20-point, AC/DC, Analog Input: 4-channel, current/voltage, Discrete Output: 16-point, sinking, Analog Output: 2-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-36ED13>

## Technical Specifications

<b>Brand</b>	BRX Do-more
<b>Item</b>	PLC
<b>Total Memory</b>	192k words
<b>Ladder Memory</b>	64k words
<b>User Data Memory</b>	128k words
<b>Removable Media Type</b>	MicroSD card slot
<b>Programming Language</b>	Ladder
<b>Programming Software</b>	Do-more Designer programming software v2.0 or later
<b>Communication Port and Connection Type(s)</b>	<ul style="list-style-type: none"> <li>• (1) Ethernet 10/100Base-T (RJ45)</li> <li>• (1) RS-232/RS-485 (3-pin terminal)</li> </ul>
<b>Port Protocol(s)</b>	<ul style="list-style-type: none"> <li>• MQTT Client</li> <li>• MQTTs Client</li> <li>• FTP Client</li> <li>• Do-more protocol</li> <li>• Modbus RTU Master/Slave</li> <li>• Modbus TCP</li> <li>• TCP/IP</li> <li>• EtherNet/IP explicit messaging scanner/adaptor</li> <li>• EtherNet/IP implicit messaging scanner/adaptor</li> <li>• Ethernet remote I/O</li> <li>• K-sequence Slave</li> <li>• webserver (non-secure HTTP)</li> <li>• programming and monitoring</li> </ul>
<b>Port Speed(s)</b>	<ul style="list-style-type: none"> <li>• 10/100 Mbps</li> <li>• up to 115.2k baud</li> </ul>
<b>Real Time Clock/Calendar</b>	Yes
<b>Retentive Memory</b>	Yes
<b>Battery Backup</b>	Yes
<b>Maximum Expansion Modules Allowed</b>	8
<b>External Power Requirement</b>	120-240 VAC
<b>Number of Discrete Input Points</b>	20
<b>Nominal Input Voltage</b>	12-24 VAC/VDC
<b>Voltage Type</b>	AC/DC

<b>Discrete Input Type</b>	Sinking/sourcing
<b>Number of Isolated Discrete Input Commons</b>	5
<b>Number of Points per Discrete Input Common</b>	4
<b>Frequency Response</b>	250 kHz
<b>Number of Discrete Output Points</b>	16
<b>Nominal Output Voltage</b>	12-24 VDC
<b>Discrete Output Type</b>	Sinking
<b>Load Current</b>	0.5A/point
<b>Number of Isolated Discrete Output Commons</b>	4
<b>Number of Points per Discrete Output Common</b>	4
<b>Maximum Switching Frequency</b>	250 kHz
<b>Number of Analog Input Channels</b>	4
<b>Analog Input Signal Type</b>	Current/voltage
<b>Number of Non-Isolated Analog Input Commons</b>	1
<b>Number of Points per Analog Input Common</b>	4
<b>Input Resolution</b>	16-bit
<b>Input Current Signal Range</b>	4-20 mA and +/- 20 mA
<b>Input Voltage Signal Range</b>	0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC
<b>Number of Analog Output Channels</b>	2
<b>Analog Output Signal Type</b>	Current/voltage
<b>Number of Non-Isolated Analog Output Commons</b>	3
<b>Number of Points per Analog Output Common</b>	2
<b>Output Resolution</b>	16-bit
<b>Output Current Signal Range</b>	4-20 mA and +/- 20 mA

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<b>Output Voltage Signal Range</b>	0-5 VDC, 0-10 VDC, +/- 5 VDC and +/- 10 VDC
<b>Maximum Number of PID Loops</b>	100+ (configurable to memory limit)
<b>Number of High-Speed Capable Input Points</b>	10
<b>High-Speed Counter(s)</b>	<ul style="list-style-type: none"> <li>• up to (3) up counters</li> <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> <li>• up to (3) quadrature (A and B with Z) counters</li> </ul>
<b>Position Scaling</b>	<ul style="list-style-type: none"> <li>• up to (3) up counters</li> <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> <li>• up to (3) quadrature (A and B with Z) counters</li> </ul>
<b>Interval Measurement</b>	<ul style="list-style-type: none"> <li>• up to (3) single input (edge) timers</li> <li>• up to (3) dual input (dual edge) timers</li> </ul>
<b>Duration Measurement</b>	up to (3) single input (edge) timers
<b>Frequency Measurement</b>	<ul style="list-style-type: none"> <li>• up to (3) single input up counters</li> <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> <li>• up to (3) dual edge timers interval scaling</li> </ul>
<b>Interrupt(s)</b>	<ul style="list-style-type: none"> <li>• up to (4) input interrupts</li> <li>• up to (4) timer interrupts</li> <li>• up to (4) match register interrupts</li> </ul>

<b>Table-Driven Input(s)</b>	<ul style="list-style-type: none"> <li>• up to (4) programmable limit switches</li> <li>• up to (4) preset tables</li> </ul>
<b>Number of High-Speed Capable Output Points</b>	8
<b>Output Pulse Mode(s)</b>	<ul style="list-style-type: none"> <li>• up to (4) virtual axes</li> <li>• up to (3) PTO linear step/direction outputs</li> <li>• up to (3) PTO rotary clockwise/counter-clockwise (CW/CCW) outputs</li> <li>• up to (3) PTO quadrature (A and B) outputs</li> <li>• up to (3) PWM pulse width modulation outputs</li> </ul>
<b>Axis Profile(s)</b>	<ul style="list-style-type: none"> <li>• relative/absolute positioning</li> <li>• velocity mode</li> <li>• trapezoid</li> <li>• S-curve</li> <li>• electronic gearing</li> <li>• camming</li> <li>• following</li> <li>• homing</li> <li>• jogging</li> <li>• linear interpolation</li> <li>• online edit</li> <li>• x-y trend view</li> </ul>
<b>Includes</b>	BX-RTB03S terminal block and D0-MC-BAT battery
<b>Requires</b>	BX-RTB36 or BX-RTB36-1 terminal block kit or ZIPLink pre-wired cables

## Agency Approvals

<b>UL Listed File #</b>	E185989
<b>UL Recognized File #</b>	None
<b>UL Hazardous File #</b>	None
<b>CE</b>	<a href="#">View CE declarations</a>
<b>CSA File #</b>	None
<b>RoHS Status</b>	Yes (See CE Doc)
<b>EU REACH</b>	<a href="#">View EU REACH document</a>

## Dimensional Drawings



2D Drawing PDF Link:  
<https://cdn.automationdirect.com/static/drawings/BX-DM1E-36ED13.pdf>  
 See store item page for other formats.