DC Electric Controllers

IC1D

IC1D Controllers

The Ingersoll Rand IC1D Insight controllers give you full closed-loop control in a compact package. With features like a 1/4 VGA color display and easy, intuitive, quick set-up programming, the IC1D provides unmatched performance.

IC1M

IC1M Controllers

The Ingersoll Rand IC1M Insight Controller is a basic single-spindle controller that works with all QE Tools and QM motors. It can be either rack- or cabinet-mounted as a single unit or in groups of up to 40 units for multiple spindle systems. Programming is accomplished via ICS Software over Ethernet, Parameter Transfer Key or direct computer connection.

Standard Features
- 1/4 VGA color display (IC1D)
- Full keypad and navigation keys (IC1D)
- One-line LED Display (IC1M)
- Ethernet connection
- RS232
- Eight I/O
- 1000 cycle storage (IC1D)
- 200 cycle storage (IC1M)
- Eight instant configurations
- 256 stored configurations
- Dual power mode 120-240 V AC
- Quick set-up feature
- Small footprint (mm) 152h x 191w x 238d

Optional Features
All units are available with the following options:
- 115 V AC power cord
- 220 V AC power cord
- 230 V AC EU pigtail power cord
- Cabinet mount / wall mount
- PFCS software package
- Plus software package
- 16 additional I/O
- Fieldbus cards

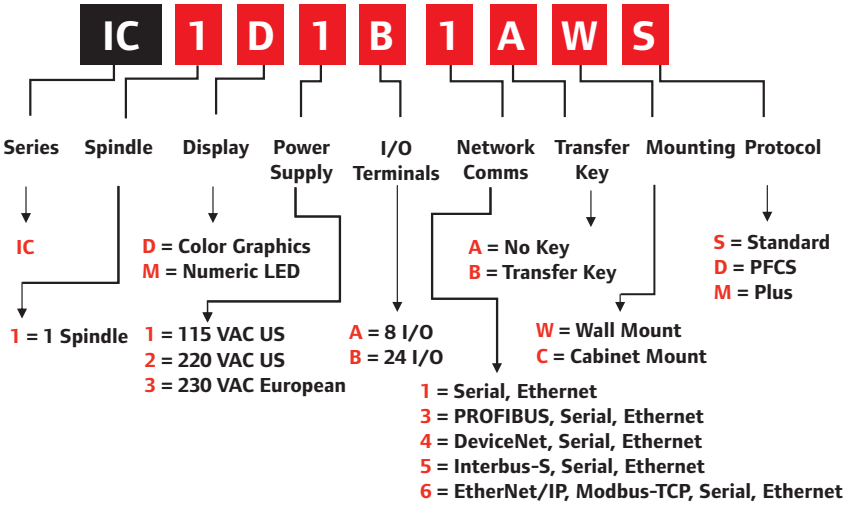
Languages Available
- Chinese
- English
- French
- German
- Italian
- Russian
- Spanish

Service and Accessories
- Complete installation and repair service available
- Socket selector: IC-socket-4
- Light tower, see page 48
- Transfer key: 80150113
- Custom racks
- For additional accessories, see pages 47 – 48

Manuals:

04581732

IC Series DC Electric Controllers



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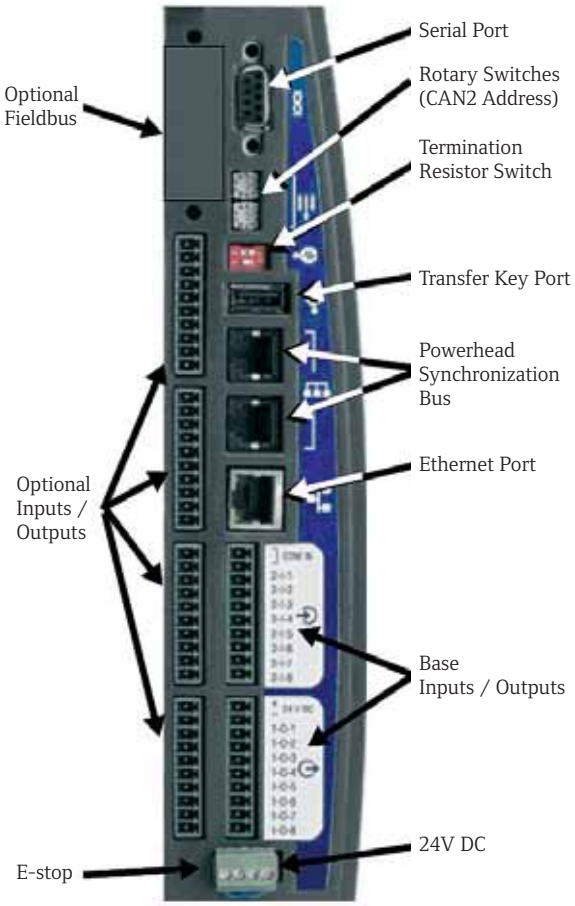
IC1D Model	IC1M Model	Power Cord	Number of Input / Outputs	Communication Package	Transfer Key
IC1D1A1AWS	IC1M1A1AWS	115 V AC USA	8	Ethernet and Serial	No
IC1D2A1AWS	IC1M2A1AWS	220 V AC USA	8	Ethernet and Serial	No
IC1D1A1BWS	IC1M1A1BWS	115 V AC USA	8	Ethernet and Serial	Yes
IC1D2A1BWS	IC1M2A1BWS	220 V AC USA	8	Ethernet and Serial	Yes
IC1D3A1BWS	IC1M2A1BWS	230 V AC Europe	8	Ethernet and Serial	Yes
IC1D1A3AWS	IC1M1A3AWS	115 V AC USA	8	PROFIBUS, Ethernet, and Serial	No
IC1D2A3AWS	IC1M2A3AWS	220 V AC USA	8	PROFIBUS, Ethernet, and Serial	No
IC1D1A3BWS	IC1M1A3BWS	115 V AC USA	8	PROFIBUS, Ethernet, and Serial	Yes
IC1D2A3BWS	IC1M2A3BWS	220 V AC USA	8	PROFIBUS, Ethernet, and Serial	Yes
IC1D3A3BWS	IC1M2A3BWS	230 V AC Europe	8	PROFIBUS, Ethernet, and Serial	Yes
IC1D1A4AWS	IC1M1A4AWS	115 V AC USA	8	DeviceNet, Ethernet, and Serial	No
IC1D2A4AWS	IC1M2A4AWS	220 V AC USA	8	DeviceNet, Ethernet, and Serial	No
IC1D1A4BWS	IC1M1A4BWS	115 V AC USA	8	DeviceNet, Ethernet, and Serial	Yes
IC1D2A4BWS	IC1M2A4BWS	220 V AC USA	8	DeviceNet, Ethernet, and Serial	Yes
IC1D3A4BWS	IC1M2A4BWS	230 V AC Europe	8	DeviceNet, Ethernet, and Serial	Yes
IC1D1A5AWS	IC1M1A5AWS	115 V AC USA	8	Interbus-S, Ethernet, and Serial	No
IC1D2A5AWS	IC1M2A5AWS	220 V AC USA	8	Interbus-S, Ethernet, and Serial	No
IC1D1A5BWS	IC1M1A5BWS	115 V AC USA	8	Interbus-S, Ethernet, and Serial	Yes
IC1D2A5BWS	IC1M2A5BWS	220 V AC USA	8	Interbus-S, Ethernet, and Serial	Yes
IC1D3A5BWS	IC1M2A5BWS	230 V AC Europe	8	Interbus-S, Ethernet, and Serial	Yes
IC1D1A6AWS	IC1M1A6AWS	115 V AC USA	8	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	No
IC1D2A6AWS	IC1M2A6AWS	220 V AC USA	8	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	No
IC1D1A6BWS	IC1M1A6BWS	115 V AC USA	8	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes
IC1D2A6BWS	IC1M2A6BWS	220 V AC USA	8	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes
IC1D3A6BWS	IC1M2A6BWS	230 V AC Europe	8	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes
IC1D1B1AWS	IC1M1B1AWS	115 V AC USA	24	Ethernet and Serial	No
IC1D2B1AWS	IC1M2B1AWS	220 V AC USA	24	Ethernet and Serial	No
IC1D1B1BWS	IC1M1B1BWS	115 V AC USA	24	Ethernet and Serial	Yes
IC1D2B1BWS	IC1M2B1BWS	220 V AC USA	24	Ethernet and Serial	Yes
IC1D3B1BWS	IC1M2B1BWS	230 V AC Europe	24	Ethernet and Serial	Yes
IC1D1B3AWS	IC1M1B3AWS	115 V AC USA	24	PROFIBUS, Ethernet, and Serial	No
IC1D2B3AWS	IC1M2B3AWS	220 V AC USA	24	PROFIBUS, Ethernet, and Serial	No
IC1D1B3BWS	IC1M1B3BWS	115 V AC USA	24	PROFIBUS, Ethernet, and Serial	Yes
IC1D2B3BWS	IC1M2B3BWS	220 V AC USA	24	PROFIBUS, Ethernet, and Serial	Yes
IC1D3B3BWS	IC1M2B3BWS	230 V AC Europe	24	PROFIBUS, Ethernet, and Serial	Yes
IC1D1B4AWS	IC1M1B4AWS	115 V AC USA	24	DeviceNet, Ethernet, and Serial	No
IC1D2B4AWS	IC1M2B4AWS	220 V AC USA	24	DeviceNet, Ethernet, and Serial	No
IC1D1B4BWS	IC1M1B4BWS	115 V AC USA	24	DeviceNet, Ethernet, and Serial	Yes
IC1D2B4BWS	IC1M2B4BWS	220 V AC USA	24	DeviceNet, Ethernet, and Serial	Yes
IC1D3B4BWS	IC1M2B4BWS	230 V AC Europe	24	DeviceNet, Ethernet, and Serial	Yes
IC1D1B5AWS	IC1M1B5AWS	115 V AC USA	24	Interbus-S, Ethernet, and Serial	No
IC1D2B5AWS	IC1M2B5AWS	220 V AC USA	24	Interbus-S, Ethernet, and Serial	No
IC1D1B5BWS	IC1M1B5BWS	115 V AC USA	24	Interbus-S, Ethernet, and Serial	Yes
IC1D2B5BWS	IC1M2B5BWS	220 V AC USA	24	Interbus-S, Ethernet, and Serial	Yes
IC1D3B5BWS	IC1M2B5BWS	230 V AC Europe	24	Interbus-S, Ethernet, and Serial	Yes
IC1D1B6AWS	IC1M1B6AWS	115 V AC USA	24	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	No
IC1D2B6AWS	IC1M2B6AWS	220 V AC USA	24	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	No
IC1D1B6BWS	IC1M1B6BWS	115 V AC USA	24	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes
IC1D2B6BWS	IC1M2B6BWS	220 V AC USA	24	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes
IC1D3B6BWS	IC1M2B6BWS	230 V AC Europe	24	EtherNet/IP, Modbus-TCP, Ethernet, and Serial	Yes

DC Electric Controllers

Insight IC1Display & IC1Module

Measurement torque: Accuracy	±0.2% of torque full scale ±1 count of angle (degrees)
Measurement resolution	±0.025% of torque full scale
Torque transducer bridge excitation	±5V DC/GND
Torque transducer zero offset / drift compensation	±0.4% of full scale
Input signal sensitivity	2.0 mV/V
Calibration	Values read from spindle memory Automatic digital correction
Frequency response (torque filter)	Selectable 75 Hz, 150 Hz, 350 Hz, 500 Hz, 750 Hz
Keypad (IC-D only)	Membrane keypad containing 4 hot keys, 4 function keys, numerical keypad and directional keypad
Display	IC-D: 3.5-inch diagonal, 320px by 240px, 8-bit 65K backlit color (QVGA) flat panel display IC-M: 5- character, 7-segment numerical LED display
Parameter sets	256
Number of cycles stored in memory	IC-D: 1,000 IC-M: 200
Communication	Serial RS232, Ethernet, optional PROFIBUS, DeviceNet, Interbus-S, EtherNet / IP, Modbus - TCP
I/O	8 inputs / 8 outputs, with behavior assignable through ISC software: with optional I/O card, an additional 16 inputs and outputs are available
Indicators	Power ON lamp
Input voltage	Single-phase 120 volts, 50/60 Hz, 16 amps Single-phase 230 volts, 50/60 Hz, 8 amps
Ambient operating conditions	0 – 50° C, 20/90% non-condensing humidity
Enclosure	IP-52
System weight	5.6 kg (12.4 lb)
Dimensions (mm)	152 h x 191 w x 238d