

**Measurement:** Harmonics/Demand/Max, K-factor, Volts/Demand/Min/Max, Amps/Demand/Max, Power/Demand/Min/Max (real, reactive, apparent), Power Factor (displacement, true), Energy, and Frequency. Includes many per-phase & total parameters, for over 280 measurements.

**Local Indication:** Display over 100 electric parameters in over 40 screens with up to three display values per screen. All three values of 3-Phase parameters are simultaneously displayed. Includes automatic display of engineering units in separate display.

**Serial Port:** Four network-connection options. All parameters available in network-accessible registers.

**Display Modes:** Fixed, Scroll, and Fast Forward. Enable/Disable displayable screens via push-button with all network register parameters always available.

**Current Inputs:** Full transformer isolation. (See Selection Table). Scaling is field selectable from built-in CT ratio library to display primary-side values when connected to CTs. Custom ratios can be written over the network.

**Voltage Inputs:** Full transformer isolation. (See Selection Table). Scaling is field selectable from built-in PT ratio library to display primary-side values when connected to PTs. Custom ratios can be written over the network.

**UL Certification:** Meets IEC1010 and is certified by Underwriters Laboratory to meet UL and CSA standards. Requires either of the two ac-only power supply options.

**Auxiliary Power Supply:** Three power supply options. Includes a universal power supply option which operates from either an ac or dc power source.

**Mechanical:** Three 4-digit, long life, red LED displays, 0.56" high. One 8-character red LED alphanumeric display. 4" round x 6.8" deep case. 4.5" Sq. faceplate.

## ORDER GUIDE 123

### RTH with DNP3 or Modbus Harmonics and Demand Measurements

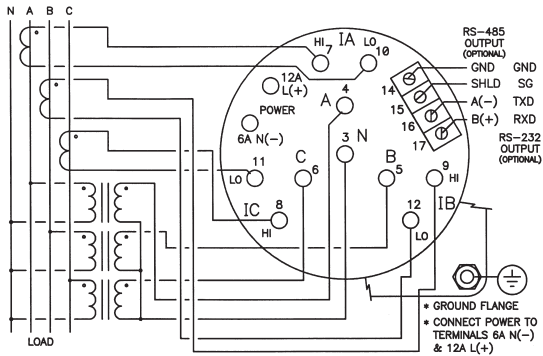
| Order Number = Base Model + 6 Option Codes |            |
|--|------------|
| Select Base Model                          |            |
| Modbus or DNP3 Meter                       | Base Model |
| 3-Wire, 2-Element                          | MTWDE2B    |
| 4-Wire, 2½-Element                         | MTWDE3B    |
| 4-Wire, 3-Element                          | MTWDE1B    |

| Select New Option Codes  |             |                  |                  |
|--------------------------|-------------|------------------|------------------|
| Optional Features        | Price Adder | Old Option Codes | New Option Codes |
| Auxiliary Power          |             |                  |                  |
| 115 V ac (UL certified)  | NO          | -VA2             | 0                |
| 230 V ac (UL certified)  | NO          | -VA4             | 1                |
| 24-250 V dc/115 V ac     | YES         | -VD4A            | 2                |
| Network Connections      |             |                  |                  |
| Modbus RTU w/RS-232      | NO          | -S093            | 9                |
| Modbus RTU w/RS-485      | NO          | -S103            | A                |
| DNP3 w/RS-232            | NO          | -S113            | B                |
| DNP3 w/RS-485            | NO          | -S123            | C                |
| Current & Voltage Inputs |             |                  |                  |
| 0-5 A ac and 120 V ac    | NO          | -X-X             | 0                |
| 0-1 A ac and 120 V ac    | NO          | -CI1-X           | 1                |
| Display                  |             |                  |                  |
| Standard LED             | NO          | N/A              | 0                |
| Aluminum Faceplate       |             |                  |                  |
| Clear 3-Wire             | NO          | -X               | 1P               |
| Black 3-Wire             | YES         | -B1              | HP               |
| Clear 4-Wire             | NO          | -X               | 1N               |
| Black 4-Wire             | YES         | -B1              | HN               |
| Frequency                |             |                  |                  |
| 60 Hz                    | NO          | -X               | 00               |
| 50 Hz                    | NO          | -F5              | 10               |

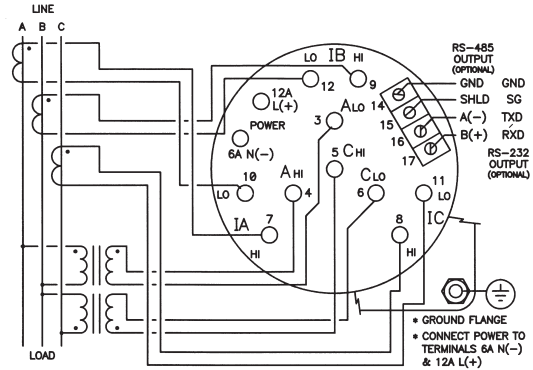
*Build order number by choosing base model number and then one new option code selection for each option type. An example: MTWDE1B2A001N00*

| Quantity and Type of Inputs Selection Table |         |         |         |
|---|---------|---------|---------|
| Electric System                             | 3-Wire  | 4-Wire  |         |
| Elements                                    | 2       | 2½      | 3       |
| Base Model                                  | MTWDE2B | MTWDE3B | MTWDE1B |
| Current Inputs                              | 2 or 3  | 3       | 3       |
| Voltage Inputs                              | 2 (L-L) | 2 (L-N) | 3 (L-N) |

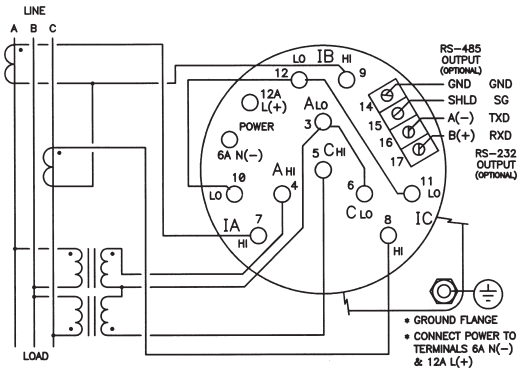
*Note: Specify CT and PT ratios if want preset at factory otherwise defaults (5:5 CT and 1:1 PT) will be provided.*



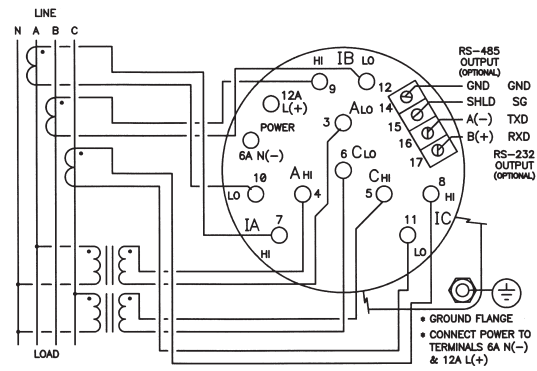
Typical connection diagram for 3-Element MTWDE1B Multifunction Meters (Common PT return shown)



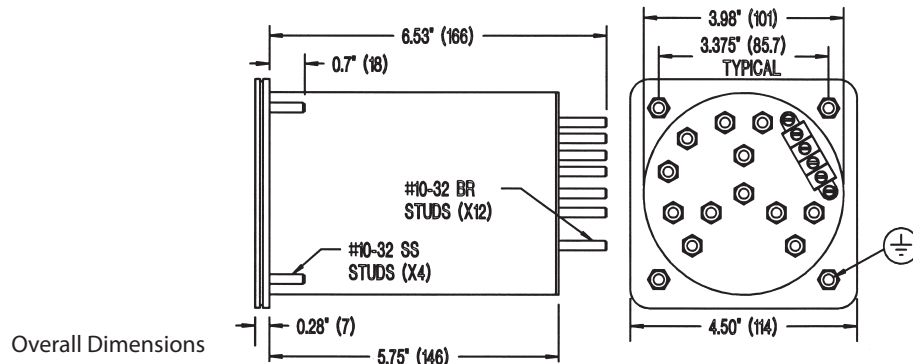
Typical connection diagram for 2-Element MTWDE2B Multifunction Meters



Typical connection diagram for 2-Element MTWDE2B Multifunction Meters when only two CT's are available (Common PT return shown)



Typical connection diagram for 2½-Element MTWDE3B Multifunction Meters (Separate PT return shown)



**Contact:**