

# Black Max<sup>®</sup> Vector Duty Motors

\*\*\* 230/460V and 575V Motors Available \*\*\*



## Features

- Class F MAX GUARD<sup>®</sup> insulation system
- Constant torque operation from 0 to base speed on vector drive
- Constant horsepower operation to twice base RPM
- Continuous duty at 40° C ambient
- Optimized for operation with IGBT inverter (NEMA Design A)
- Class F N/C thermostats (one per phase)
- Utilizes double shielded ball bearings
- Exxon Polyrex<sup>®</sup> EM bearing grease
- C-Face with rigid base, except C-Face with removable rigid base as noted
- F1 standard conduit box location, field reversible to F2 (except as noted)
- Available with optional encoder installed on opposite drive end
- Electrically reversible
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty (through Marathon Electric)

## Applications

- Designed for inverter or vector applications where up to a 1000:1 constant torque speed range is required.
- Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments.

### Motor Shipping Schedule \*

|                   |              |               |
|-------------------|--------------|---------------|
| Same or one day * | Up to 7 days | Up to 10 days |
|-------------------|--------------|---------------|

Color indicates shipping lead time in business days. Check stock status online.

\* Certain heavy and oversized items can be shipped only via LTL.

Check our web site for current shipping method constraints by part number.

### 230/460V Motor Specifications

| Part Number * | Price | HP    | Base RPM | Volts   | Enclosure | NEMA Frame | Model No.   | F.L. Amps   | Weight (lb) * | Footnotes   |
|---------------|-------|-------|----------|---------|-----------|------------|-------------|-------------|---------------|-------------|
| Y592          |       | 1/4   | 1800     | 230/460 | TENV      | 56C        | 56H17T2001  | 1.2 / 0.6   | 19            | T, S, 13    |
| Y534          |       | 1/2   | 1800     | 230/460 | TENV      | 56C        | 56H17T5301  | 1.6 / 0.8   | 28            | T, S, 6, 13 |
| Y535          |       | 1     | 1800     | 230/460 | TENV      | 56C        | 56H17T5302  | 3.0 / 1.5   | 41            | T, S, 6, 13 |
| Y536          |       | 1     | 1800     | 230/460 | TENV      | 143TC      | 143THTR5326 | 3.0 / 1.5   | 43            | T, S, 6, 13 |
| Y537          |       | 1     | 1200     | 230/460 | TENV      | 145TC      | 145THTR5376 | 3.8 / 1.9   | 49            | T, S, 6, 13 |
| Y538          |       | 1-1/2 | 1800     | 230/460 | TENV      | 145TC      | 145THTR5326 | 4.8 / 2.4   | 50            | T, S, 6, 13 |
| Y551          |       | 2     | 1800     | 230/460 | TENV      | 145TC      | 145HTN6046  | 6.0 / 3.0   | 72            | T, CI       |
| Y540          |       | 2     | 1200     | 230/460 | TENV      | 184TC      | 184HTL7776  | 6.6 / 3.3   | 88            | T, AL       |
| Y541          |       | 3     | 1800     | 230/460 | TENV      | 182TC      | 182HTL7726  | 8.4 / 4.2   | 96            | T, AL       |
| Y542          |       | 3     | 1200     | 230/460 | TENV      | 213TC      | 213HTL7776  | 9.4 / 4.7   | 118           | T, AL       |
| Y543          |       | 5     | 1800     | 230/460 | TENV      | 184TC      | 184HTL7726  | 14.0 / 7.0  | 98            | T, AL       |
| Y544          |       | 5     | 1200     | 230/460 | TENV      | 215TC      | 215HTL7776  | 15.4 / 7.7  | 138           | T, AL       |
| Y545          |       | 7-1/2 | 1800     | 230/460 | TENV      | 213TC      | 213HTL7726  | 21.0 / 10.5 | 146           | T, AL       |
| Y546          |       | 7-1/2 | 1200     | 230/460 | TENV      | 254TC      | 254HTL5776  | 22.0 / 11.0 | 209           | T, AL       |
| Y547          |       | 10    | 1800     | 230/460 | TENV      | 215TC      | 215HTL7726  | 27.0 / 13.5 | 159           | T, AL       |
| Y548          |       | 10    | 1200     | 230/460 | TENV      | 256TC      | 256HTL5776  | 28 / 14     | 203           | T, AL       |
| Y549          |       | 15    | 1800     | 230/460 | TENV      | 254TC      | 254HTL5726  | 40 / 20     | 250           | T, AL, I    |
| Y552          |       | 20    | 1800     | 230/460 | TENV      | 256TC      | 256HTNA7026 | 52 / 26     | 300           | T, I, CI    |
| Y553          |       | 25    | 1800     | 230/460 | TENV      | 284TC      | 284HTNA7026 | 62 / 31     | 495           | T, I, CI    |
| Y393          |       | 30    | 1800     | 230/460 | TENV      | 286TC      | 286HTNA7026 | 74 / 37     | 575           | T, I, CI    |

\* Refer to the Motor Shipping Schedule table for shipping information.

#### Footnotes:

6 Bolt-on, removable base for footless mounting option  
 13 F1 Mounting Only, cannot modify to F2  
 AL Aluminum Frame Construction

#### Footnotes (continued):

CI Cast Iron Frame Construction  
 I Intermittent duty from 90-120 Hz operation  
 S Steel Frame Construction

#### Footnotes (continued):

T Thermostat overload

Note: Please review the AutomationDirect Terms & Conditions for warranty and service on his product.

Warranty service can be arranged through numerous Marathon Electric service centers. See list of service centers on our Web site at [www.automationdirect.com](http://www.automationdirect.com).



# Black Max<sup>®</sup> Vector Duty Motors

Company Information

Drives

Soft Starters

Motors

Power Transmission

Motion: Servos and Steppers

Motor Controls

Sensors: Proximity

Sensors: Photoelectric

Sensors: Encoders

Sensors: Limit Switches

Sensors: Current

Sensors: Pressure

Sensors: Temperature

Sensors: Level

Sensors: Flow Switches

Pushbuttons and Lights

Stacklights

Signal Devices

Process

Relays and Timers

Pneumatics: Air Prep

Pneumatics: Directional Control Valves

Pneumatics: Cylinders

Pneumatics: Tubing

Pneumatics: Air Fittings

Appendix Book 2

Terms and Conditions

| Motor Shipping Schedule   |              |               |
|---|--------------|---------------|
| Same or one day   | Up to 7 days | Up to 10 days |
| Color indicates shipping lead time in business days. Check stock status online. |              |               |

| 575V Motor Specifications |       |       |          |       |           |            |              |           |             |             |
|---------------------------|-------|-------|----------|-------|-----------|------------|--------------|-----------|-------------|-------------|
| Part Number               | Price | HP    | Base RPM | Volts | Enclosure | NEMA Frame | Model No.    | F.L. Amps | Weight (lb) | Footnotes   |
| Y555                      |       | 1/2   | 1800     | 575   | TENV      | 56C        | 56H17T5311   | 0.64      | 28          | T, S, 6, 13 |
| Y556                      |       | 1     | 1800     | 575   | TENV      | 56C        | 56H17T5312   | 1.2       | 41          | T, S, 6, 13 |
| Y557                      |       | 2     | 1800     | 575   | TENV      | 145TC      | 145THTN6060  | 2.4       | 72          | T, CI       |
| Y558                      |       | 3     | 1800     | 575   | TENV      | 182TC      | 182THTL7736  | 3.4       | 96          | T, AL       |
| Y559                      |       | 5     | 1800     | 575   | TENV      | 184TC      | 184THTL7736  | 5.6       | 98          | T, AL       |
| Y560                      |       | 7-1/2 | 1800     | 575   | TENV      | 213TC      | 213THTL7736  | 8.4       | 146         | T, AL       |
| Y561                      |       | 10    | 1800     | 575   | TENV      | 215TC      | 215THTL7736  | 10.8      | 159         | T, AL       |
| Y562                      |       | 15    | 1800     | 575   | TENV      | 254TC      | 254THTL5736  | 16.0      | 250         | T, AL, I    |
| Y563                      |       | 20    | 1800     | 575   | TENV      | 256TC      | 256THTNA7036 | 20.8      | 300         | T, CI, I    |

**Footnotes:**  
 6 Bolt-on, removable base for footless mounting option  
 13 F1 Mounting Only, cannot modify to F2  
 AL Aluminum Frame Construction

**Footnotes (continued):**  
 CI Cast Iron Frame Construction  
 I Intermittent duty from 90-120 Hz operation  
 S Steel Frame Construction

**Footnotes (continued):**  
 T Thermostat overload

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| Motor Accessories |       |  |
|-------------------|-------|--|
| Part Number       | Price | Description *  |
| A772              |       | Encoder kit, replacement, for Black Max encoder motors. Dynapar HS35 encoder, 5-26 VDC input, Line Driver output, 1024 pulses per revolution, 5/8-in bore. |

\* Replacement/spare encoder kit for Black Max Yxxx-A772 motors; can also be field installed on Black Max Yxxx motors without encoders.

## Motor with Shaft-Mounted Encoder\*

A Dynapar Model HS35 shaft-mounted encoder can be supplied pre-installed on the motors as shown in the price table below. The encoder requires a 5-26 VDC power source, provides a count of 1024 pulses per revolution (PPR) differential line driver output, and includes a 10-pin mating connector.

\* If connecting the motor to a DURApulse AC drive, a GS3-FB Feedback Card is required for the drive.

| Motor with Pre-installed Shaft-Mounted Encoder |       |       |             |       |             |             |       |       |
|--|-------|-------|-------------|-------|-------------|-------------|-------|-------|
| 230/460V Motors                                |       |       |             |       | 575V Motors |             |       |       |
| Part Number                                    | Price | HP    | Part Number | Price | HP          | Part Number | Price | HP    |
| Y592-A772                                      |       | 1/4   | Y543-A772   |       | 5           | Y555-A772   |       | 1/2   |
| Y534-A772                                      |       | 1/2   | Y544-A772   |       | 5           | Y556-A772   |       | 1     |
| Y535-A772                                      |       | 1     | Y545-A772   |       | 7-1/2       | Y557-A772   |       | 2     |
| Y536-A772                                      |       | 1     | Y546-A772   |       | 7-1/2       | Y558-A772   |       | 3     |
| Y537-A772                                      |       | 1     | Y547-A772   |       | 10          | Y559-A772   |       | 5     |
| Y538-A772                                      |       | 1-1/2 | Y548-A772   |       | 10          | Y560-A772   |       | 7-1/2 |
| Y551-A772                                      |       | 2     | Y549-A772   |       | 15          | Y561-A772   |       | 10    |
| Y540-A772                                      |       | 2     | Y552-A772   |       | 20          | Y562-A772   |       | 15    |
| Y541-A772                                      |       | 3     | Y553-A772   |       | 25          | Y563-A772   |       | 20    |
| Y542-A772                                      |       | 3     | Y393-A772   |       | 30          |             |       |       |

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## Encoder Connector Pinout

**Note:** A mating connector is supplied with the encoder. Prewired cables TRDA-25CBL-VWD-xx (10, 20, & 30 ft) and replacement MS connectors TRDA-25CON-VWD are available from AutomationDirect.

Dynapar HS35 Encoder PIN TRDA-25CBL-VWD-xx Cable Wire Color



Cable TRDA-25CBL-VWD-xx is available separately from AutomationDirect.

Connections to equipment determined by customer.

# Black Max<sup>®</sup> Vector Duty Motors

| Motor Performance Data (460 Volt) * |       |          |                 |                 |                     |                     |                 |               |                 |                   |                                     |  |        |        |        |         |
|-------------------------------------|-------|----------|-----------------|-----------------|---------------------|---------------------|-----------------|---------------|-----------------|-------------------|-------------------------------------|--|--------|--------|--------|---------|
| Part Number                         | HP    | F.L. rpm | F.L. Amps @460V | N.L. Amps @460V | F.L. Torque (lb-ft) | B.D. Torque (lb-ft) | Max. C hp rpm * | Max. Safe rpm | F.L. Effic. (%) | F.L. Power Factor | Rotor Inertia (lb-ft <sup>2</sup> ) | Ohms/Ph - Equiv. Wye Circuit (460 VAC) (at rated operating temp. in 40° C ambient) |        |        |        |         |
|                                     |       |          |                 |                 |                     |                     |                 |               |                 |                   |                                     | R1   | R2     | X1     | X2     | XM      |
| Y592                                | 1/4   | 1755     | 0.6             | 0.45            | 0.75                | 4.5                 | 3540            | 5400          | 70.0            | 58.0              | 0.045                               | 26.300   | 23.000 | 30.240 | 14.700 | 572.000 |
| Y534                                | 1/2   | 1735     | 0.8             | 0.52            | 1.5                 | 5.8                 | 3510            | 5400          | 80.0            | 72.0              | 0.056                               | 22.307   | 17.028 | 24.123 | 18.163 | 532.976 |
| Y535                                | 1     | 1750     | 1.5             | 1.0             | 3.0                 | 15.0                | 3505            | 5400          | 84.0            | 75.0              | 0.110                               | 8.378  | 5.623  | 10.707 | 9.912  | 278.036 |
| Y536                                | 1     | 1750     | 1.5             | 1.0             | 3.0                 | 15.0                | 3505            | 5400          | 84.0            | 75.0              | 0.110                               | 8.378  | 5.623  | 10.707 | 9.912  | 278.036 |
| Y537                                | 1     | 1145     | 1.9             | 1.3             | 4.5                 | 16.0                | 2260            | 5400          | 80.0            | 62.5              | 0.140                               | 10.302   | 8.372  | 13.793 | 15.325 | 193.835 |
| Y538                                | 1-1/2 | 1755     | 2.4             | 1.6             | 4.5                 | 29.0                | 3518            | 5400          | 85.5            | 69.0              | 0.140                               | 4.257  | 3.538  | 5.998  | 5.884  | 161.009 |
| Y551                                | 2     | 1750     | 3.0             | 1.7             | 6.0                 | 28.5                | 3525            | 5400          | 85.5            | 78.0              | 0.130                               | 3.834  | 2.897  | 5.950  | 5.637  | 154.800 |
| Y540                                | 2     | 1160     | 3.3             | 2.1             | 9.0                 | 34.0                | 2315            | 5400          | 82.5            | 67.5              | 0.380                               | 3.948  | 3.436  | 7.725  | 12.113 | 116.900 |
| Y541                                | 3     | 1755     | 4.2             | 2.2             | 9.0                 | 48.0                | 3515            | 5400          | 85.5            | 80.0              | 0.420                               | 2.356  | 1.731  | 4.266  | 4.304  | 123.930 |
| Y542                                | 3     | 1158     | 4.7             | 3.0             | 13.6                | 49.0                | 2300            | 4200          | 82.5            | 72.5              | 0.600                               | 2.469  | 2.318  | 6.508  | 4.125  | 83.910  |
| Y543                                | 5     | 1765     | 7.0             | 4.2             | 14.8                | 70.0                | 3555            | 5400          | 89.5            | 74.5              | 0.550                               | 1.242  | 0.947  | 2.534  | 4.236  | 64.128  |
| Y544                                | 5     | 1165     | 7.7             | 4.8             | 22.5                | 87.0                | 2320            | 4200          | 84.0            | 71.0              | 0.900                               | 1.130  | 1.250  | 3.709  | 2.573  | 51.972  |
| Y545                                | 7-1/2 | 1765     | 10.5            | 5.5             | 22.3                | 95.5                | 3525            | 4200          | 90.2            | 76.0              | 0.850                               | 0.699  | 0.567  | 1.765  | 2.260  | 38.178  |
| Y546                                | 7-1/2 | 1170     | 11.0            | 6.0             | 34.0                | 118.0               | 2325            | 4200          | 87.5            | 73.0              | 1.200                               | 0.510  | 0.680  | 2.846  | 3.247  | 42.714  |
| Y547                                | 10    | 1774     | 13.5            | 7.4             | 29.5                | 125.0               | 3540            | 4200          | 90.2            | 76.0              | 1.300                               | 0.369  | 0.334  | 1.423  | 2.281  | 34.932  |
| Y548                                | 10    | 1160     | 14              | 7.0             | 45.5                | 135.0               | 2320            | 4200          | 89.5            | 75.5              | 1.500                               | 0.534  | 0.693  | 2.258  | 2.323  | 30.530  |
| Y549                                | 15    | 1765     | 20              | 11.0            | 45.0                | 170.0               | 3550            | 4200          | 92.4            | 76.0              | 1.600                               | 0.134  | 0.316  | 1.047  | 1.569  | 22.151  |
| Y552                                | 20    | 1768     | 26              | 13.5            | 59.5                | 290.0               | 3560            | 5400          | 93.6            | 80.0              | 3.100                               | 0.234  | 0.213  | 0.746  | 0.689  | 18.204  |
| Y553                                | 25    | 1770     | 31              | 14.0            | 74.2                | 330.0               | 3530            | 3600          | 93.6            | 75.0              | 4.400                               | 0.143  | 0.160  | 0.724  | 0.678  | 13.965  |
| Y393                                | 30    | 1772     | 37              | 23.5            | 89.0                | 375.0               | 3560            | 3600          | 94.5            | 74.0              | 5.500                               | 0.113  | 0.123  | 0.543  | 0.557  | 11.200  |

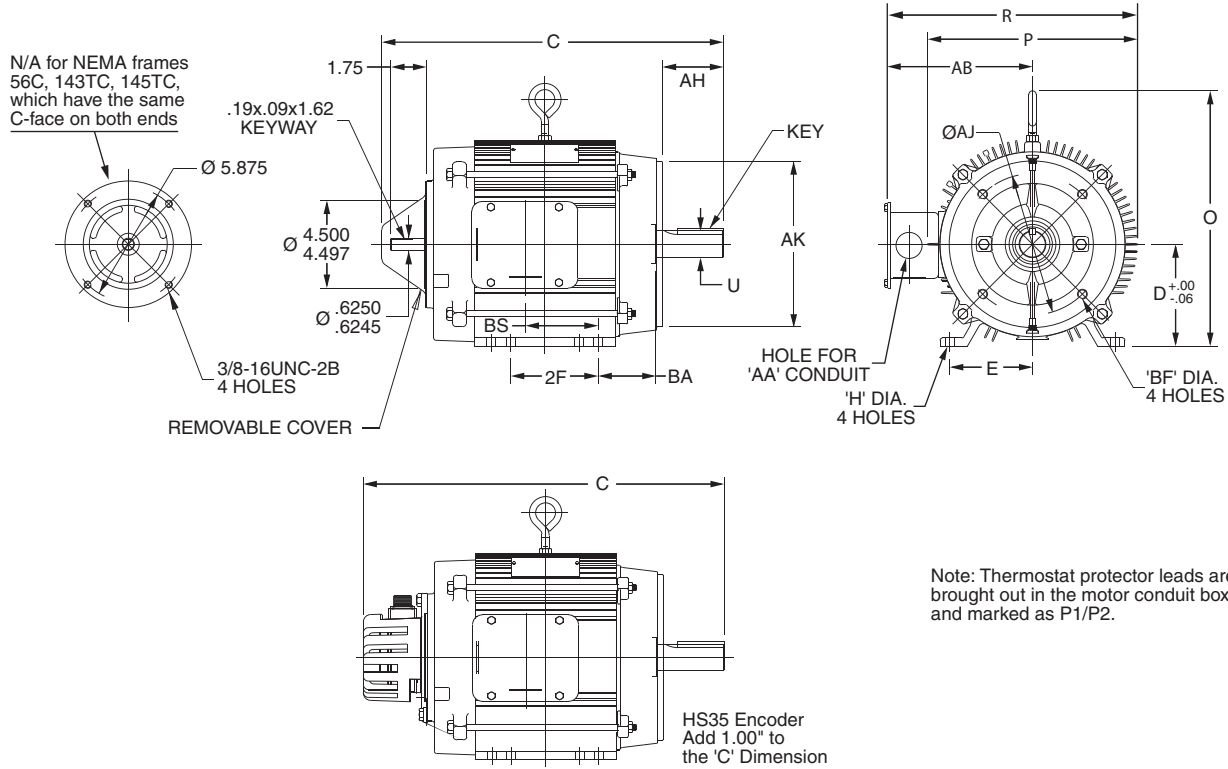
\* Maximum Constant hp rpm is for direct coupled loads.

| Motor Performance Data (575 Volt) * |       |          |                 |                 |                     |                     |                 |               |                 |                   |                                     |  |        |        |        |         |
|-------------------------------------|-------|----------|-----------------|-----------------|---------------------|---------------------|-----------------|---------------|-----------------|-------------------|-------------------------------------|--|--------|--------|--------|---------|
| Part Number                         | HP    | F.L. rpm | F.L. Amps @575V | N.L. Amps @575V | F.L. Torque (lb-ft) | B.D. Torque (lb-ft) | Max. C hp rpm * | Max. Safe rpm | F.L. Effic. (%) | F.L. Power Factor | Rotor Inertia (lb-ft <sup>2</sup> ) | Ohms/Ph - Equiv. Wye Circuit (575 VAC) (at rated operating temp. in 40° C ambient) |        |        |        |         |
|                                     |       |          |                 |                 |                     |                     |                 |               |                 |                   |                                     | R1   | R2     | X1     | X2     | XM      |
| Y555                                | 1/2   | 1735     | 0.8             | 0.8             | 1.52                | 5.8                 | 3510            | 5400          | 80.0            | 72                | 0.056                               | 22.307   | 17.028 | 24.123 | 18.163 | 532.976 |
| Y556                                | 1     | 1750     | 1.6             | 0.8             | 3.0                 | 15.0                | 3505            | 5400          | 84.0            | 75                | 0.11                                | 8.378  | 5.623  | 10.707 | 9.912  | 278.036 |
| Y557                                | 2     | 1750     | 2.4             | 1.6             | 6.0                 | 28.5                | 3525            | 5400          | 85.5            | 78                | 0.13                                | 3.834  | 2.897  | 5.950  | 5.637  | 154.780 |
| Y558                                | 3     | 1755     | 3.2             | 1.6             | 9.0                 | 48.0                | 3515            | 5400          | 85.5            | 80                | 0.42                                | 2.356  | 1.731  | 4.266  | 4.304  | 123.926 |
| Y559                                | 5     | 1765     | 5.6             | 3.2             | 14.9                | 70.0                | 3555            | 5400          | 89.5            | 74.5              | 0.52                                | 1.242  | 1.134  | 2.268  | 3.969  | 64.071  |
| Y560                                | 7-1/2 | 1765     | 8.0             | 4.8             | 22.3                | 95.5                | 3525            | 4200          | 90.2            | 76                | 0.9                                 | 0.699  | 0.567  | 1.765  | 2.260  | 38.178  |
| Y561                                | 10    | 1774     | 11.2            | 5.6             | 29.6                | 125.0               | 3540            | 4200          | 90.2            | 76                | 1.3                                 | 0.284  | 0.284  | 1.420  | 2.272  | 34.932  |
| Y562                                | 15    | 1765     | 16.0            | 8.8             | 44.6                | 170.0               | 3550            | 4200          | 92.4            | 76                | 1.6                                 | 0.314  | 0.316  | 1.047  | 1.569  | 22.151  |
| Y563                                | 20    | 1770     | 20.8            | 11.2            | 59.5                | 290.0               | 3560            | 3600          | 93.6            | 77                | 3.5                                 | 0.220  | 0.192  | 0.675  | 0.684  | 18.204  |

\* Maximum Constant hp rpm is for direct coupled loads.

# Black Max<sup>®</sup> Vector Duty Motors

## Motor Dimensions



**Motor Dimensions [Inches]**

| Part #      | HP          | NEMA Frame | Frame Construct | C     | D     | E    | 2F    | H    | O     | P     | R     | U     | AA         | AB   | AH    | AJ     | AK Max | BA           | BF           | BS           | Key          |          |        |       |              |       |            |      |        |      |        |      |              |
|-------------|-------------|------------|-----------------|-------|-------|------|-------|------|-------|-------|-------|-------|------------|------|-------|--------|--------|--------------|--------------|--------------|--------------|----------|--------|-------|--------------|-------|------------|------|--------|------|--------|------|--------------|
|             |             |            |                 |       |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              |              | 230/460V | 575V   |       |              |       |            |      |        |      |        |      |              |
| <b>Y592</b> | -           | 1/4        | Rolled Steel    | 11.88 | 3.50  | 3.00 | .34   | 6.35 | 5.69  | 7.21  | .625  | None  | 4.37       | 2.06 | 5.875 | 4.500  | 2.75   | 3/8-16       | 4.93         | .19x.19x1.38 | 2.84         |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y534</b> | <b>Y555</b> | 1/2        |                 | 13.48 |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              | 4.00         | 3.5      | 6.71   | 6.42  | 8.46         | .875  | 5.25       | 2.12 | 7.04   | 4.50 | 2.62   | 3.81 |              |
| <b>Y535</b> | <b>Y556</b> | 1          |                 | 14.98 |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              | 4.00         | 3.5      | 6.71   | 6.42  | 8.46         | .875  | 5.25       | 2.12 | 7.04   | 4.50 | 2.62   | 3.81 |              |
| <b>Y536</b> | -           | 1          |                 | 143TC | 15.04 | 4.00 | 3.5   | 6.71 | 6.42  | 8.46  | .875  | 5.25  | 2.12       | 7.04 | 4.50  | 2.62   | 3.81   |              |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y537</b> | -           | 1          |                 | 145TC | 16.04 | 2.75 | 5.00  | .37  | 7.45  | 7.98  | 11.03 | 7.04  | 4.50       | 2.62 | 3.81  |        |        |              |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y538</b> | -           | 1-1/2      |                 |       | 14.68 | 5.00 | 3.7   |      |       |       |       |       |            |      |       | 7.45   | 7.98   | 11.03        | 7.04         | 4.50         | 2.62         | 3.81     |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y551</b> | <b>Y557</b> | 2          | Cast Iron       | 14.68 | 5.00  | 3.7  | 7.45  | 7.98 | 11.03 | 7.04  | 4.50  | 2.62  | 3.81       |      |       |        |        |              |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y540</b> | -           | 2          | 184TC           | 16.94 | 4.50  | 3.75 | 5.50  | 4.4  | 11.22 | 9.74  | 12.07 | 1.125 | 1.09       | 7.19 | 2.62  | 3.50   | 2.75   | .25x.25x1.75 |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y541</b> | <b>Y558</b> | 3          | 182TC           | 17.39 | 4.50  | 3.75 | 5.50  | 4.4  | 11.22 | 9.74  | 12.07 | 1.125 | 1.09       | 7.19 | 2.62  | 3.50   | 2.98   | 4.05         | .31x.31x2.38 |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y542</b> | -           | 3          | 213TC           | 19.04 | 5.22  | 4.25 | 5.50  | .47  | 12.47 | 10.75 | 12.78 | 1.375 | 1.34       | 7.39 | 3.12  | 4.25   | 3.75   | .25x.25x1.75 |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y543</b> | <b>Y559</b> | 5          | 184TC           | 18.94 | 4.50  | 3.75 | 5.50  | .44  | 11.22 | 9.74  | 12.07 | 1.125 | 1.09       | 7.19 | 2.62  | 3.50   | 3.75   | .25x.25x1.75 |              |              |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y544</b> | -           | 5          | 215TC           | 20.54 | 5.22  | 4.25 | 7.00  | .47  | 12.47 | 10.75 | 12.78 | 1.375 | 1.34       | 7.39 | 3.12  | 7.25   | 8.500  | 4.25         | 1/2-13       | 5.55         | .31x.31x2.38 |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y545</b> | <b>Y560</b> | 7-1/2      | Aluminum        | 20.54 | 5.22  | 4.25 | 5.50  | .47  | 12.47 |       | 12.78 | 1.375 | 1.34       | 7.39 | 3.12  |        |        |              |              | 4.25         | 8.500        | 4.25     | 1/2-13 | 8.85  | .38x.38x2.88 |       |            |      |        |      |        |      |              |
| <b>Y546</b> | -           | 7-1/2      | 254TC           | 25.37 | 6.22  | 5.00 | 8.25  | .56  | 13.46 | 10.75 | 13.75 | 1.625 | 1.75 & 2.0 | 8.38 | 3.75  | 7.25   | 8.500  | 4.25         | 1/2-13       | 8.85         | .38x.38x2.88 |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y547</b> | <b>Y561</b> | 10         | 215TC           | 23.04 | 5.22  | 4.25 | 7.00  | .47  | 12.47 | 10.75 | 12.78 | 1.375 | 1.34       | 7.39 | 3.12  | 7.25   | 8.500  | 4.25         | 1/2-13       | 8.05         | .31x.31x2.38 |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y548</b> | -           | 10         | 256TC           | 26.87 | 6.22  | 5.00 | 8.25  | .56  | 13.46 | N/A   | 13.54 | 1.625 | 1.75 & 2.0 | 8.17 | 3.75  | 7.25   | 8.500  | 4.25         | 1/2-13       | 8.05         | .31x.31x2.38 |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y549</b> | <b>Y562</b> | 15         | 254TC           | 26.87 |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              |              | 10.00    | 13.46  | N/A   | 13.54        | 1.625 | 1.75 & 2.0 | 8.17 | 3.75   | 7.25 | 8.500  | 4.25 | 1/2-13       |
| <b>Y552</b> | <b>Y563</b> | 20         | 256TC           | 27.13 | 7.00  | 5.50 | 10.00 | .56  | 16.49 | 14.32 | 17.84 | 1.25  | 10.68      | 4.38 | 9.0   | 10.500 | 4.75   | 3/8-16       | 5.50         | .50x.50x3.25 |              |          |        |       |              |       |            |      |        |      |        |      |              |
| <b>Y553</b> | -           | 25         | 284TC           | 27.08 |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              | 10.00        | 16.49    | 14.32  | 17.84 | 1.25         | 10.68 | 4.38       | 9.0  | 10.500 | 4.75 | 3/8-16 | 5.50 | .50x.50x3.25 |
| <b>Y393</b> | -           | 30         | 286TC           | 28.58 |       |      |       |      |       |       |       |       |            |      |       |        |        |              |              |              | 10.00        | 16.49    | 14.32  | 17.84 | 1.25         | 10.68 | 4.38       | 9.0  | 10.500 | 4.75 | 3/8-16 | 5.50 | .50x.50x3.25 |

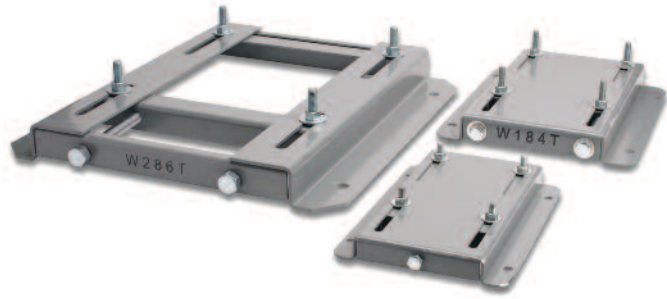
Note: Dimensions are for reference only. For complete dimensional information, refer to Marathon Electric at [www.marathonelectric.com](http://www.marathonelectric.com).

# STABLE™ Motor Slide Bases

## Mounting Slide Bases for 56 to 449T NEMA Motors

### Features

- Allows adjustment of motor mounting position
- Double adjusting screws for frames 182T-449T
- Manufactured to precise dimensional standards
- Dimensionally interchangeable with existing major makes
- Heavy-duty steel construction
- Painted with oven-baked primer for better adhesion of customer's paint
- All "D" bolts (motor mounting bolts) are fixed to the exact motor foot pattern
- All "D" bolts are welded into position to prevent spinning and dropping from slots
- Bases are provided with washers

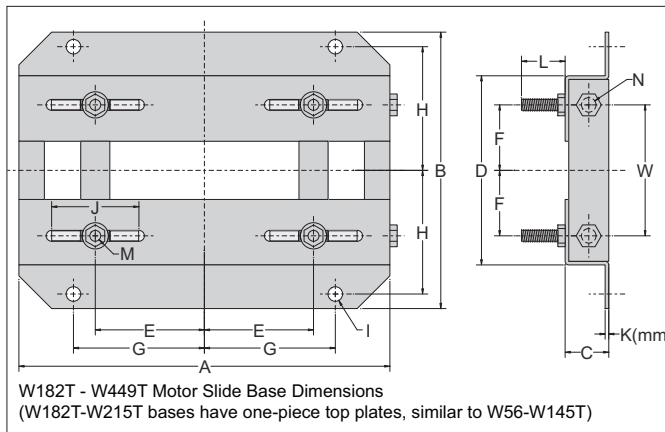
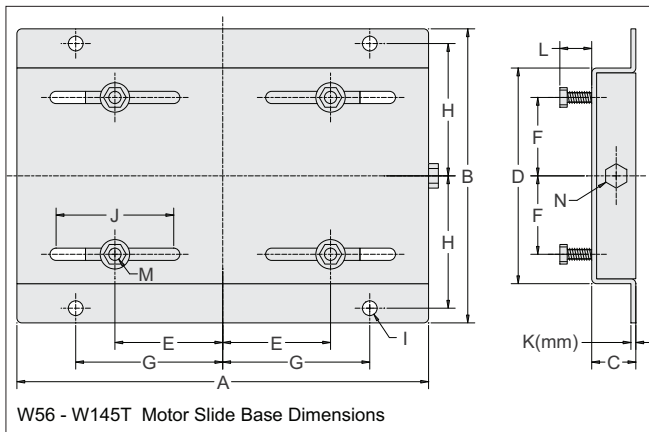


| Motor Slide Bases     |       |                 |                     |  |                                      |                      |   |                            |                            |                                    |                        |                    |
|-----------------------|-------|-----------------|---------------------|--|--------------------------------------|----------------------|---|----------------------------|----------------------------|------------------------------------|------------------------|--------------------|
| Part Number           | Price | Fits Frame Type | Product Weight (lb) | Fits Motor   |                                      |                      |   |                            |                            |                                    |                        |                    |
|                       |       |                 |                     | IronHorse  | Marathon                             |                      |   |                            |                            |                                    |                        |                    |
|                       |       |                 |                     |  | micro-MAX                            | MAX+                 | Black Max 230/460V                        | Black Max 575V             | Blue Max                   | NEMA Premium XRI                   | Blue Chip XRI 230/460V | Blue Chip XRI 575V |
| <b>MTA-BASE-W56*</b>  |       | 56*             | 2.8                 | MTPM-P3x-1x18<br>MTPM-P5x-1x18<br>MTPM-P7x-1x18<br>MTPM-0xx-1x18<br>MTPM-1xx-1x18<br>MTR(2)-xxx-xxxxx* | Y500<br>Y502<br>Y360<br>Y362<br>Y364 | Y280<br>Y281<br>Y282 | Y592(-A772)<br>Y534(-A772)<br>Y535(-A772) | Y555(-A772)<br>Y556(-A772) | -                          | E2000                              | -                      | -                  |
| <b>MTA-BASE-W143T</b> |       | 143T/TC         | 4.6                 | MTC(P)-001-3BD18(C)(CK)<br>MTC(P)-1P5-3BD36  | -                                    | -                    | Y536(-A772)                               | -                          | -                          | E2001A<br>E2003                    | -                      | -                  |
| <b>MTA-BASE-W145T</b> |       | 145T/TC         | 5.1                 | MTC(P)-001-3BD12<br>MTC(P)-1P5-3BD18(C)(CK)<br>MTC(P)-002-3BD18(C)(CK)<br>MTC(P)-002-3BD36             | Y366<br>Y368                         | Y284<br>Y285         | Y537(-A772)<br>Y538(-A772)<br>Y551(-A772) | Y557(-A772)                | -                          | E2002<br>E2004A<br>E2006<br>E2007A | -                      | -                  |
| <b>MTA-BASE-W182T</b> |       | 182T/TC         | 9.2                 | MTC(P)-1P5-3BD12<br>MTC(P)-003-3BD18(C)(CK)<br>MTC(P)-003-3BD36<br>MTF-002-1C18-182                    | Y1999                                | Y286                 | Y541(-A772)                               | Y558(-A772)                | -                          | E2005<br>E2009<br>E2010            | -                      | -                  |
| <b>MTA-BASE-W184T</b> |       | 184T/TC         | 10                  | MTC(P)-002-3BD12<br>MTC(P)-005-3BD18(C)(CK)<br>MTC(P)-005-3BD36<br>MTF-00x-1C18                        | Y1372                                | Y287                 | Y540(-A772)<br>Y543(-A772)                | Y559(-A772)                | -                          | E2008<br>E2012<br>E2013            | -                      | -                  |
| <b>MTA-BASE-W213T</b> |       | 213T/TC         | 13                  | MTC(P)-003-3BD12<br>MTC(P)-7P5-3BD18(C)(CK)<br>MTC(P)-7P5-3BD36  | Y994                                 | -                    | Y542(-A772)<br>Y545(-A772)                | Y560(-A772)                | -                          | E2011<br>E2015<br>E2016A           | -                      | -                  |
| <b>MTA-BASE-W215T</b> |       | 215T/TC         | 15                  | MTC(P)-005-3BD12<br>MTC(P)-010-3BD18(C)(CK)<br>MTC(P)-010-3BD36  | Y996                                 | -                    | Y544(-A772)<br>Y547(-A772)                | Y561(-A772)                | -                          | E2014<br>E2018<br>E2019A           | -                      | -                  |
| <b>MTA-BASE-W254T</b> |       | 254T/TC         | 18                  | MTC(P)-7P5-3BD12<br>MTC(P)-015-3BD18(C)(CK)<br>MTCP-015-3BD36  | -                                    | -                    | Y546(-A772)<br>Y549(-A772)                | Y562(-A772)                | -                          | -                                  | E205                   | E307               |
| <b>MTA-BASE-W256T</b> |       | 256T/TC         | 19                  | MTC(P)-010-3BD12<br>MTC(P)-020-3BD18(C)(CK)<br>MTCP-20-3BD36   | -                                    | -                    | Y548(-A772)<br>Y552(-A772)                | Y563(-A772)                | -                          | -                                  | E206                   | E308               |
| <b>MTA-BASE-W284T</b> |       | 284T/TC         | 20                  | MTCP-015-3BD12<br>MTC(P)-025-3BD18(C)(CK)  | -                                    | -                    | Y553(-A772)                               | -                          | -                          | -                                  | E207                   | E309               |
| <b>MTA-BASE-W286T</b> |       | 286T/TC         | 21                  | MTCP-20-3BD12<br>MTC(P)-030-3BD18(C)(CK)   | -                                    | -                    | Y393(-A772)                               | -                          | -                          | -                                  | E208                   | E310               |
| <b>MTA-BASE-W324T</b> |       | 324T/TC         | 30                  | MTC(P)-040-3BD18(C)(CK)  | -                                    | -                    | -   | -                          | Y571(-A774)<br>Y513(-A775) | -                                  | E209                   | E311               |
| <b>MTA-BASE-W326T</b> |       | 326T/TC         | 31                  | MTC(P)-050-3BD18(C)(CK)  | -                                    | -                    | -   | -                          | Y572(-A774)<br>Y514(-A775) | -                                  | E210                   | E312               |
| <b>MTA-BASE-W364T</b> |       | 364T/TC         | 43                  | MTC(P)-060-3BD18(C)(CK)  | -                                    | -                    | -   | -                          | Y573(-A774)<br>Y515(-A775) | -                                  | E211                   | E313               |
| <b>MTA-BASE-W365T</b> |       | 365T/TC         | 43                  | MTC(P)-075-3BD18(C)(CK)  | -                                    | -                    | -   | -                          | Y574(-A774)<br>Y516(-A775) | -                                  | E212                   | E315               |
| <b>MTA-BASE-W404T</b> |       | 404T/TC         | 58                  | -  | -                                    | -                    | -   | -                          | -                          | -                                  | -                      | -                  |
| <b>MTA-BASE-W405T</b> |       | 405T/TC         | 60                  | MTC(P)-100-3BD18(C)(CK)  | -                                    | -                    | -   | -                          | Y575(-A774)<br>Y517(-A775) | -                                  | E213                   | E314               |
| <b>MTA-BASE-W444T</b> |       | 444T            | 63                  | MTC(P)-125-3BD18   | -                                    | -                    | -   | -                          | -                          | -                                  | -                      | -                  |
| <b>MTA-BASE-W445T</b> |       | 445T            | 65                  | MTC(P)-150-3BD18   | -                                    | -                    | -   | -                          | -                          | -                                  | -                      | -                  |
| <b>MTA-BASE-W447T</b> |       | 447T            | 89                  | MTC(P)-200-3BD18   | -                                    | -                    | -   | -                          | -                          | -                                  | -                      | -                  |
| <b>MTA-BASE-W449T</b> |       | 449T            | 94                  | MTC-250-3D18<br>MTC-300-3D18   | -                                    | -                    | -   | -                          | -                          | -                                  | -                      | -                  |

\* IronHorse MTR2 56HC motors have double-punched bases to fit on slide base MTA-BASE-W56.

# STABLE Motor Slide Bases

## Dimensions – Mounting Slide Bases for NEMA Motors



| Dimensions [inches, except as noted] - STABLE Motor Slide Bases |        |        |       |        |        |        |         |        |     |       |        |         |             |          |        |
|---|--------|--------|-------|--------|--------|--------|---------|--------|-----|-------|--------|---------|-------------|----------|--------|
| MTA-BASE-Wxxxx  | A      | B      | C     | D      | E      | F      | G       | H      | I   | J     | K(mm)  | L       | M           | N        | W      |
| 56  | 10-5/8 | 6-1/2  | 1-1/8 | 4-1/2  | 2-7/16 | 1-1/2  | 3-13/16 | 2-7/8  | 3/8 | 3     | 2 mm   | 7/8     | 5/16 x 1    | 3/8 x 4  | n/a    |
| 143T  | 10-1/2 | 7-1/2  | 1-1/8 | 5-1/2  | 2-3/4  | 2      | 3-3/4   | 3-3/8  | 3/8 | 3     | 3 mm   | 13/16   | 5/16 x 1    | 3/8 x 4  | n/a    |
| 145T  | 10-1/2 | 8-1/2  | 1-1/8 | 6-1/2  | 2-3/4  | 2-1/2  | 3-3/4   | 3-7/8  | 3/8 | 3     | 3 mm   | 13/16   | 5/16 x 1    | 3/8 x 4  | n/a    |
| 182T  | 12-3/4 | 9-1/2  | 1-1/2 | 6-1/2  | 3-3/4  | 2-1/4  | 4-1/2   | 4-1/4  | 1/2 | 3     | 3.5 mm | 1-1/2   | 3/8 x 1-3/4 | 1/2 x 6  | 4-1/2  |
| 184T  | 12-3/4 | 10-1/2 | 1-1/2 | 7-1/2  | 3-3/4  | 2-3/4  | 4-1/2   | 4-3/4  | 1/2 | 3     | 3.5 mm | 1-1/2   | 3/8 x 1-3/4 | 1/2 x 6  | 5-1/2  |
| 213T  | 15     | 11     | 1-3/4 | 7-1/2  | 4-1/4  | 2-3/4  | 5-1/4   | 4-3/4  | 1/2 | 3-1/2 | 3.8 mm | 1-1/2   | 3/8 x 1-3/4 | 1/2 x 6  | 5-1/2  |
| 215T  | 15     | 12-1/2 | 1-3/4 | 9      | 4-1/4  | 3-1/2  | 5-1/4   | 5-1/2  | 1/2 | 3-1/2 | 3.8 mm | 1-1/2   | 3/8 x 1-3/4 | 1/2 x 6  | 7      |
| 254T  | 17-3/4 | 15-1/8 | 2     | 10-3/4 | 5      | 4-1/8  | 6-1/4   | 6-5/8  | 5/8 | 4     | 4.6 mm | 1-7/16  | 1/2 x 1-3/4 | 5/8 x 6  | 5-5/16 |
| 256T  | 17-3/4 | 16-7/8 | 2     | 12-1/2 | 5      | 5      | 6-1/4   | 7-1/2  | 5/8 | 4     | 4.6 mm | 1-7/16  | 1/2 x 1-3/4 | 5/8 x 6  | 7      |
| 284T  | 19-3/4 | 16-7/8 | 2     | 12-1/2 | 5-1/2  | 4-3/4  | 7       | 7-1/2  | 5/8 | 4-1/2 | 4.6 mm | 1-11/16 | 1/2 x 2     | 5/8 x 6  | 7      |
| 286T  | 19-3/4 | 18-3/8 | 2     | 14     | 5-1/2  | 5-1/2  | 7       | 8-1/4  | 5/8 | 4-1/2 | 4.6 mm | 1-11/16 | 1/2 x 2     | 5/8 x 6  | 8      |
| 324T  | 22-3/4 | 19-1/4 | 2-1/2 | 14     | 6-1/4  | 5-1/4  | 8       | 8-1/2  | 3/4 | 5-1/4 | 4.6 mm | 2-3/16  | 5/8 x 2-1/2 | 3/4 x 9  | 7      |
| 326T  | 22-3/4 | 20-3/4 | 2-1/2 | 15-1/2 | 6-1/4  | 6      | 8       | 9-1/4  | 3/4 | 5-1/4 | 4.6 mm | 2-3/16  | 5/8 x 2-1/2 | 3/4 x 9  | 8-1/2  |
| 364T  | 25-1/2 | 20-1/2 | 2-1/2 | 15-1/2 | 7      | 5-5/8  | 9       | 9-1/8  | 3/4 | 6     | 5.8 mm | 2-1/16  | 5/8 x 2-1/2 | 3/4 x 9  | 7-3/4  |
| 365T  | 25-1/2 | 21-1/2 | 2-1/2 | 16-1/2 | 7      | 6-1/8  | 9       | 9-5/8  | 3/4 | 6     | 5.8 mm | 2-1/16  | 5/8 x 2-1/2 | 3/4 x 9  | 8-3/4  |
| 404T  | 28-3/4 | 22-3/8 | 3     | 16-1/2 | 8      | 6-1/8  | 10      | 9-7/8  | 7/8 | 7     | 5.8 mm | 2-1/2   | 3/4 x 3     | 3/4 x 11 | 8-3/4  |
| 405T  | 28-3/4 | 23-7/8 | 3     | 18     | 8      | 6-7/8  | 10      | 10-5/8 | 7/8 | 7     | 5.8 mm | 2-1/2   | 3/4 x 3     | 3/4 x 11 | 10-1/4 |
| 444T  | 31-1/4 | 24-5/8 | 3     | 19-1/4 | 9      | 7-1/4  | 11      | 11     | 7/8 | 7-1/2 | 5.8 mm | 2-1/2   | 3/4 x 3     | 3/4 x 11 | 11     |
| 445T  | 31-1/4 | 26-5/8 | 3     | 21-1/4 | 9      | 8-1/4  | 11      | 12     | 7/8 | 7-1/2 | 5.8 mm | 2-1/2   | 3/4 x 3     | 3/4 x 11 | 13     |
| 447T  | 31-1/4 | 30-1/8 | 3     | 24-3/4 | 9      | 10     | 11      | 13-3/4 | 7/8 | 7-1/2 | 8 mm   | 3       | 3/4 x 3-1/2 | 3/4 x 11 | 16-1/2 |
| 449T  | 31-1/4 | 35-1/8 | 3     | 29-3/4 | 9      | 12-1/2 | 11      | 16-1/4 | 7/8 | 7-1/2 | 8 mm   | 3       | 3/4 x 3-1/2 | 3/4 x 11 | 21-1/2 |

- Company Information
- Drives
- Soft Starters
- Motors
- Power Transmission
- Motion: Servos and Steppers
- Motor Controls
- Sensors: Proximity
- Sensors: Photoelectric
- Sensors: Encoders
- Sensors: Limit Switches
- Sensors: Current
- Sensors: Pressure
- Sensors: Temperature
- Sensors: Level
- Sensors: Flow Switches
- Pushbuttons and Lights
- Stacklights
- Signal Devices
- Process
- Relays and Timers
- Pneumatics: Air Prep
- Pneumatics: Directional Control Valves
- Pneumatics: Cylinders
- Pneumatics: Tubing
- Pneumatics: Air Fittings
- Appendix Book 2
- Terms and Conditions