

## AMRAD'S PATENTED TURBO200® UNIVERSAL REPLACEMENT SERVICE CAPACITOR INSTRUCTIONS 131 <u>Different Items</u> at 370 VOLTS (AC); 131 <u>Different Items</u> at 440 VOLTS (AC) For a Total of 262 <u>Different Part Numbers</u>

32 Hargrove Grade • Palm Coast, FL 32137 USA For Technical Questions or Support 386-445-6000 (Days)

or 386-451-2122 (Evenings/Weekends)

Fax 386-445-6871

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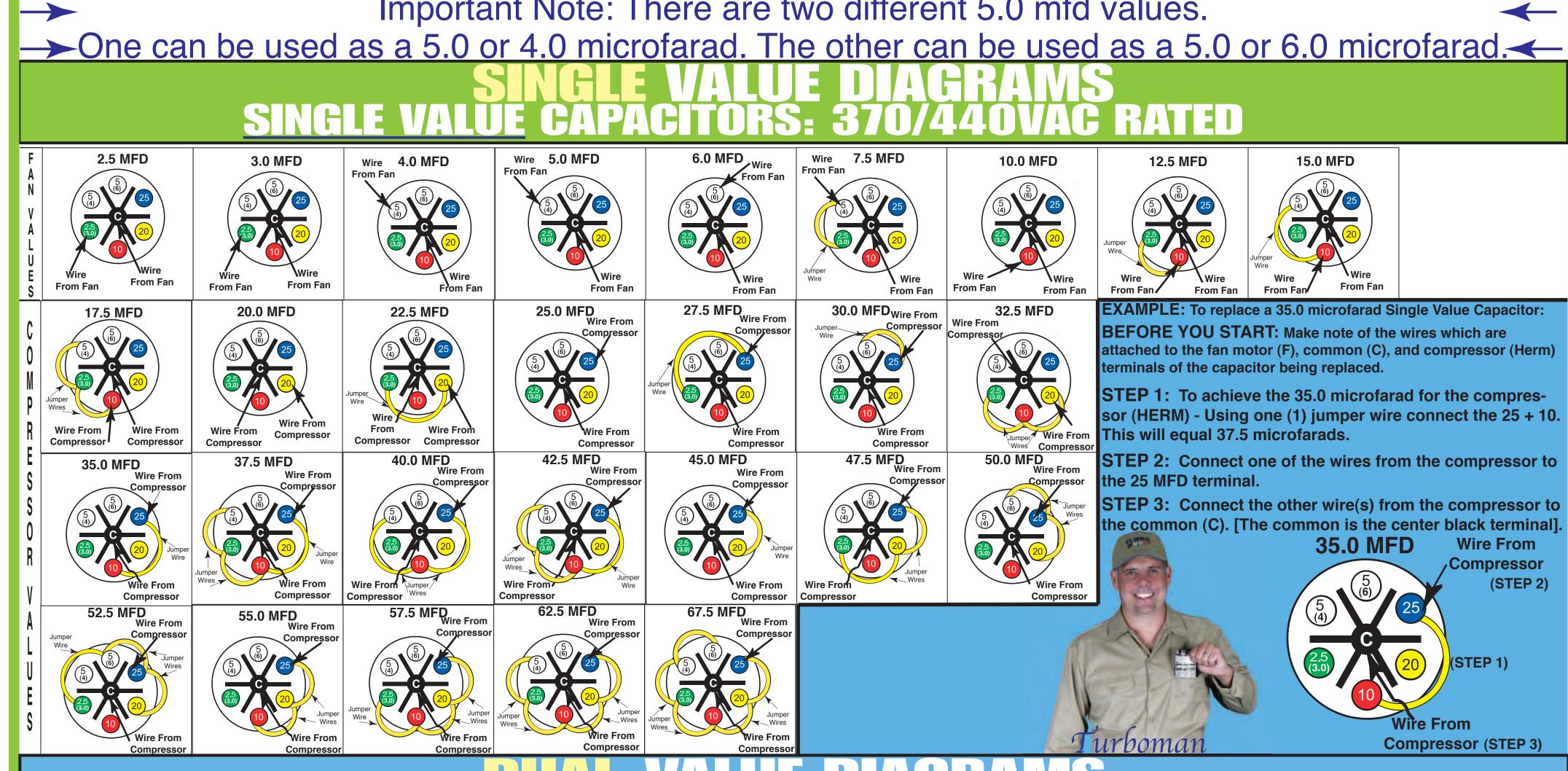


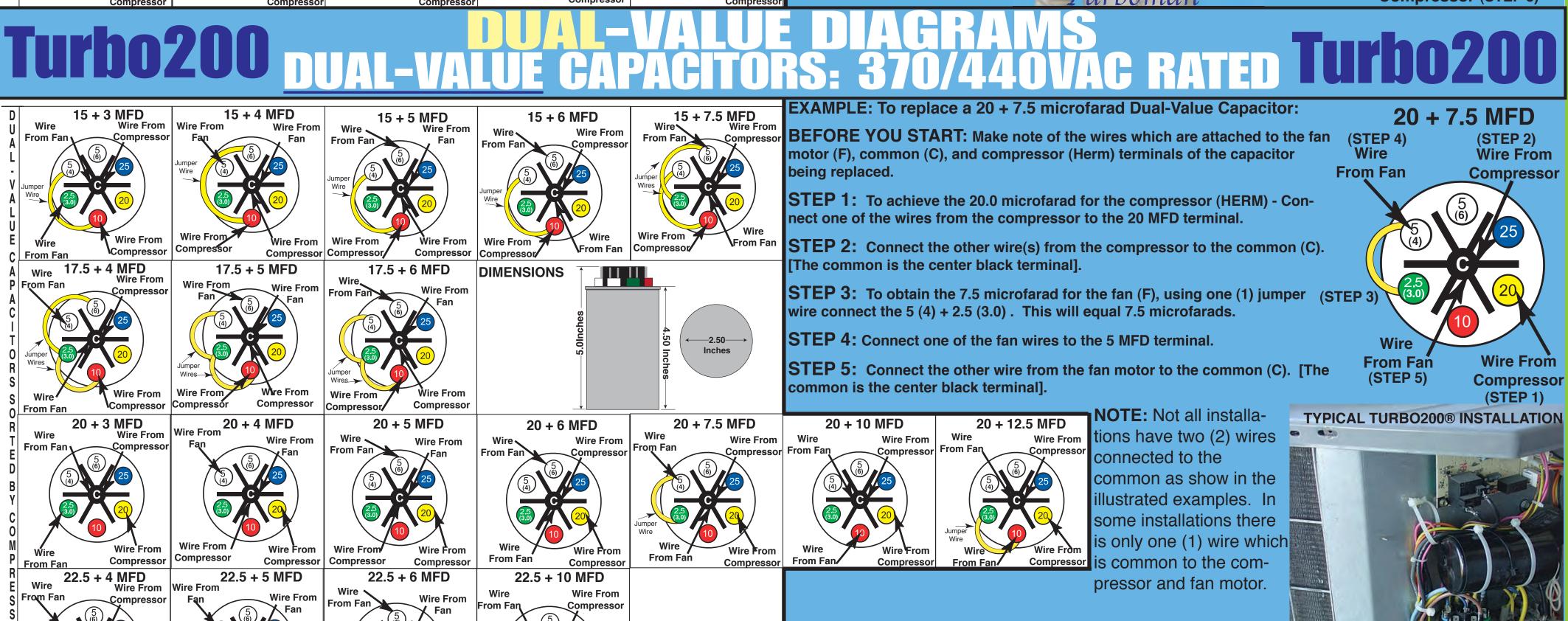
Family Of Products Designed, Developed & Manufactured In The USA By Amrad Engineering

Outside the U.S., contact AmRad's International Sales Group at: 1-386-445-6000 (8 AM to 5:30 PM, EST). \*The Turbo200® is produced under one or more American Radionic United States patent numbers: 7,835,133, 7,474,519; 7,423,861; 7,203,053; 6,014,308. Additional patents pending. The Turbo200® series is designed, developed and manufactured by American Radionic Co, Inc., Palm Coast, Florida USA

## Email: sales@AmericanRadionic.com Web: www.AmericanRadionic.com

Important Note: There are two different 5.0 mfd values.





Compressor

## **EXAMPLE:** To replace a 30 + 5 microfarad Dual-Value Capacitor: 25 + 3 MFD25 + 4 MFD25 + 5 MFD Wire From 25 + 6 MFD25 + 12.5 MFD Wire From 25 + 7.5 MFD25 + 10 MFD Wire From Wire From BEFORE YOU START: Make note of the wires which are attached to the fan motor (F), common (C), and compressor (Herm) terminals of the capacitor being replaced. STEP 1: To achieve the 30.0 microfarad for the compressor (HERM) - Using one (1) jumper wire connect the 20 + 10. This will equal 30 microfarads. From Fan From Fan Compressor From Fan Compressor Compressor | Compressor From Fan Compressor 27.5 + 5 MFD Wire From 27.5 + 10 MFD27.5 + 6 MFD**STEP 2:** Connect one of the compressor wires to the 20 MFD terminal. STEP 3: Connect the other wire(s) from the compressor to the common (C). [The common is the center black terminal]. STEP 4: Connect one of the fan wires to the 5 MFD terminal. Wire From From Fan Fan Compressor Compressor Compressor 30 + 6 MFD STEP 5: Connect the other wire from the fan motor to the common (C). [The 30 + 7.5 MFD Wire From 30 + 4 MFD30 + 5 MFD30 + 3 MFD30 + 10 MFD30 + 12.5 MFD Wire Wire From Wire From Wire From common is the center black terminal]. From Fan 30 + 5 MFDWire • (STEP 4) **Wire From** ompressor Jumper Wire From From Fan Jumper Wire From Wire From **₩ire From** From Fan Jumper Wire From Compressor From Fan Fan (STEP 5) Jumper Wire From Compressor Compressor Wire Compressor From Fan Compressor Wire Compresso 32.5 + 6 MFD 32.5 + 4 MFD 32.5 + 5 MFD32.5 + 10 MFD Wire From Wire From Wire From Wire From Compressor Sumper Compressor From Fan Compressor Wire From Compressor **✓**Wire From Compressor Wires Compressor Wire From 35 + 3 MFD35 + 4 MFD 35 + 5 MFD35 + 6 MFD35 + 7.5 MFD 35 + 10 MFD 35 + 12.5 MFD Wire From Wire From Wire From Wire From Wire From Wire From Compressor Jumper (STEP 3) Wire Wire From From Far Compressor NOTE: Not all installations have two (2) wires connected to the Wire Fron common as show in the illustrated examples. In some installa-From Fan Compressor Fan From Fan Compresso Compressor From Fan Compressor Compressor Compressor tions there is only one (1) wire which is common to the com-37.5 + 5 MFD 37.5 + 6 MFD37.5 + 10 MFD37.5 + 4 MFDpressor and fan motor. From Fan Compressor From Fan From Fan 40 + 4 MFD 40 + 3 MFD 40 + 5 MFD 40 + 6 MFD 40 + 7.5 MFD Wire From Wire From Wire From From Fan From Fan Compressor From Fan Wires Compressor Compressor \* NOTE: Total is 45 mfd -- ok to use 42.5 + 4 MFD 42.5 + 5 MFD 42.5 + 6 MFDRAD Engineering, Inc. Wire From ision of American Radionic Co., Inc., Palm Coast F. "since 1939" 45 + 3 MFD45 + 4 MFD 45 + 6 MFD45 + 5 MFD45 + 7.5 MFD45 + 10 MFD 45 + 12.5 MFD Wire From Turbo Pat. 7,474,519 **Wire From** The Universal Replacement Motor Run Capacitor Use Jumper wires to obtain any one of 260 different values - 67.5 combined Total 370VAC or 440VAC, 50-60 Hz From Fan From Fan From Fan From Fan Compresso Compresso -40°C to +70°C 47.5 + 4 MFD47.5 + 10 MFD 47.5 + 6 MFD47.5 + 5 MFDper EIA Spec. #456 Wire From Industrial Grade for Motor-Run Applications AmRad Part No.: 9200 MADE IN USA From Fan From Fan From Fan 200 - Designed, Developed and Manufact 50 + 3 MFD 50 + 4 MFD 50 + 6 MFD 50 + 5 MFD 50 + 10 MFD 50 + 7.5 MFDWire From Wire From **EXAMPLE:** To replace a 50 + 7.5 microfarad Dual-Value Capacitor: BEFORE YOU START: Make note of the wires which are attached to the fan motor (F), common (C), and compressor (Herm) terminals of the capacitor Compressor From Fan From Fan Compressor 52.5 + 4 MFD Wire From being replaced. 52.5 + 6 MFD52.5 + 5 MFD52.5 + 10 MFD **STEP 1:** To achieve the 50.0 microfarad for the compressor (HERM) - Using two (2) jumper wires (a) connect the 20 + 25, then (b) connect the 25 + 5. This will equal 50 microfarads. **STEP 2:** Connect one of the compressor wires to the 25 MFD terminal. From Fan From Fan From Fan From Fan Compressor 55 + 6 MFD Wire From 55 + 10 MFD Wire From 55 + 12.5 MFD Wire From 55 + 5 MFD 55 + 7.5 MFD Wire From 55 + 3 MFD55 + 4 MFD **STEP 3:** Connect the other wire(s) from the compressor to the common (C). Wire From Wire From Wire From [The common is the center black terminal]. **STEP 4:** To achieve the 7.5 microfarad for the fan (F) - Using one (1) jumper wire, connect the 5 mfd to the 2.5 mfd terminal. This will equal 7.5 microfarads. STEP 5: Connect one of the fan wires to the 5 MFD terminal. Wire Fron Wire From From Fan From Fan From Fan Compressor From Fan Compressor Compressor Compresso Compressor 57.5 + 4 MFD57.5 + 5 MFD 57.5 + 6 MFD57.5 + 10 MFD STEP 6: Connect the other wire from the fan motor to the common (C). [The common is the center black terminal]. 50 + 7.5 MFD**Wire From** Wire Compressor (STEP 2) "This is how we replace them today!!" From Fan Nire From From Fan From Fan From Fan From Fan Compressor **(STEP 5)** 60 + 4 MFD 60 + 6 MFD 60 + 7.5 MFD Wire From 60 + 3 MFD60 + 5 MFD Wire From Wire From **Jumper** (STEP 4) From Fan From Fan From Fan From Fan Compressor Compressor Compressor 62.5 + 6 MFD Wire From 62.5 + 4 MFD62.5 + 5 MFDWire From **From Fan** Compressor (STEP 6) (STEP 3) From Fan Compressor From Fan Compressor

Jumper (STEP 1)
Wires

(STEP 2)