



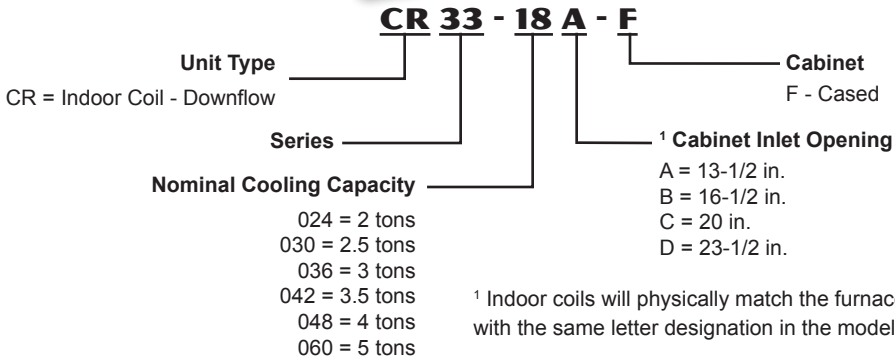
Downflow

PRODUCT SPECIFICATIONS

Bulletin No. 210419
December 2012
Supersedes May 2010



1.5 to 5 Tons



FEATURES

CONTENTS

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WARRANTY

All covered components limited warranty for five years in residential applications, one year warranty in non-residential applications.

Refer to Lennox Equipment Limited Warranty certificate included with equipment for details.

APPLICATIONS

Lennox designed downflow indoor coils can easily be installed with most Lennox downflow furnaces.

Applicable to expansion valve or RFCIV systems.

Expansion valve systems require optional field installed kit.

See bulletins in section Air Conditioners for cooling capacities.

See bulletins in section Heat Pump Outdoor Units for cooling and heating capacities.

TESTED

Tested with matching air conditioners and heat pump units.

Rated in accordance with AHRI Standard 210/240 conditions and DOE test procedures.

Air resistance tests from Lennox Laboratory air test chamber.

CABINET

Cabinets insulated with thick fiberglass insulation.

Constructed of painted, heavy-gauge steel.

Coil slides out of cabinet for ease of servicing

Removable panels provide access to coil.

Refrigerant lines extend outside of cabinet for easy installation.

See dimension drawing.

Furnace Match-Up

Coil inlet openings match corresponding Lennox furnace supply air openings with same letter designation in the model number. No adaptor required.

See Coil/Furnace Match-Up Charts in this bulletin for additional information.

FEATURES

REFRIGERANT SYSTEM

Coil Construction

Durable copper tubing.

Ripple-edged aluminum fins.

Lanced fins provide maximum exposure of fin surface to air stream.

Rifled tubing provides superior refrigerant heat transfer.

Twin coil construction assembled in a "V" configuration for large surface area.

Corrosion resistant plastic drain pan with dual fpt drain connections.

Liquid line seal nut section furnished for installation of expansion valve or RFCIV orifice.

Suction/vapor line has 1/4 in. port external to cabinet for expansion valve usage with external equalizer.

Sweat connections on both liquid and suction lines.

High pressure testing insures leakproof construction.

Refrigerant Control Choice

All models applicable to Lennox RFCIV refrigerant metering system when matched with specific air conditioners.

See Air Conditioners bulletins for applications.

Optional expansion valve or check/expansion valve is required in most applications and must be ordered extra.

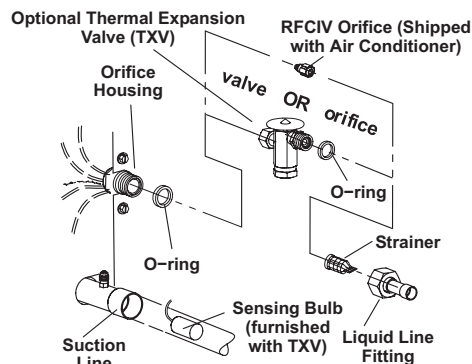
Refrigerant Flow Control IV

RFCIV accurately meters refrigerant in system.

Refrigerant control is accomplished by exact sizing of refrigerant metering orifice.

Principle of Lennox RFCIV system involves matching evaporator coil with proper bore size of orifice in metering device.

RFCIV system equalizes pressure shortly after compressor stops, unit starts unloaded, eliminating need for additional controls.



OPTIONS

Expansion Valve Kits

Expansion valve available for field installation.

See Air Conditioners and Heat Pump Outdoor Units bulletins for expansion valve/check expansion valve kit selection.

SPECIFICATIONS

1.5 TO 3 TON

| General Data | | Model No. | CR33-18A-F | CR33-24A-F | CR33-24B-F | CR33-30/36A-F | CR33-30/36B-F |
|----------------------|------------------------------|---------------------|------------|------------|------------|---------------|---------------|
| | | Nominal size - Tons | 1.5 | 2 | 2 | 2.5/3 | 2.5/3 |
| Line connections in. | Suction / vapor o.d. - sweat | | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 |
| | Liquid o.d. - sweat | | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Condensate drain (fpt) | | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 |
| Indoor Coil | Net face area sq. ft. | | 3.5 | 3.21 | 3.21 | 4.08 | 4.08 |
| | Tube diameter - in. | | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Number of rows | | 2 | 3 | 3 | 3 | 3 |
| | Fins per inch | | 18 | 12 | 12 | 12 | 12 |
| Shipping weight | lbs. | | 44 | 44 | 49 | 58 | 57 |

SPECIFICATIONS

2 TO 5 TON

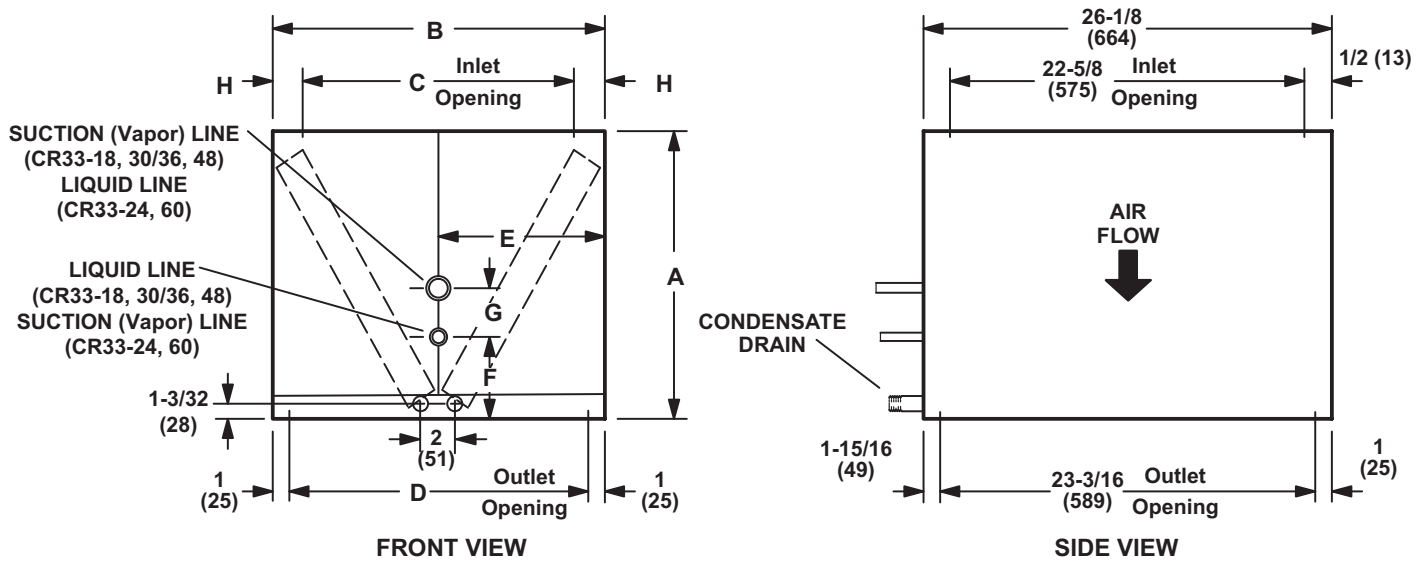
| General Data | | Model No. | CR33-30/36C-F | CR33-48B-F | CR33-48C-F | CR33-50/60C-F | CR33-60D-F |
|----------------------|------------------------------|---------------------|---------------|------------|------------|---------------|------------|
| | | Nominal size - Tons | 2.5/3 | 4 | 4 | 4/5 | 5 |
| Line connections in. | Suction / vapor o.d. - sweat | | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 |
| | Liquid o.d. - sweat | | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Condensate drain (fpt) | | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 | (2) 3/4 |
| Indoor Coil | Net face area sq. ft. | | 4.08 | 5.25 | 5.25 | 6.42 | 6.42 |
| | Tube diameter - in. | | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| | Number of rows | | 3 | 3 | 3 | 3 | 3 |
| | Fins per inch | | 12 | 12 | 12 | 12 | 12 |
| Shipping weight | lbs. | | 60 | 72 | 71 | 85 | 84 |

AIR RESISTANCE

| Model No. | Dry Coil | | Wet Coil | | |
|---------------------------|------------------------|------------------|------------|------------------|------|
| | Air Volume | Total Resistance | Air Volume | Total Resistance | |
| | cfm | in. w.g. | cfm | in. w.g. | |
| CR33 -18A-F | 370 | 0.05 | 255 | 0.05 | |
| | 510 | 0.08 | 305 | 0.07 | |
| | 645 | 0.10 | 355 | 0.09 | |
| | 815 | 0.15 | 395 | 0.12 | |
| | 980 | 0.20 | 435 | 0.15 | |
| | 1115 | 0.25 | 520 | 0.18 | |
| | 1250 | 0.30 | 600 | 0.20 | |
| | 1395 | 0.35 | 690 | 0.25 | |
| | 1535 | 0.40 | 775 | 0.30 | |
| | 1645 | 0.45 | 845 | 0.35 | |
| | 1760 | 0.50 | 920 | 0.39 | |
| 1870 | 0.55 | 1505 | 0.50 | | |
| CR33 -24A-F | 315 | 0.05 | 335 | 0.05 | |
| | 465 | 0.09 | 490 | 0.10 | |
| | 595 | 0.14 | 600 | 0.15 | |
| | 725 | 0.20 | 705 | 0.20 | |
| | 825 | 0.25 | 790 | 0.25 | |
| | 910 | 0.30 | 870 | 0.30 | |
| | 1000 | 0.35 | 940 | 0.35 | |
| | 1080 | 0.40 | 1020 | 0.40 | |
| | 1225 | 0.50 | 1090 | 0.45 | |
| | 1370 | 0.60 | 1160 | 0.51 | |
| | CR33 -24B-F | 400 | 0.06 | 400 | 0.07 |
| 500 | | 0.09 | 500 | 0.10 | |
| 600 | | 0.13 | 600 | 0.15 | |
| 700 | | 0.17 | 700 | 0.20 | |
| 800 | | 0.23 | 800 | 0.26 | |
| 900 | | 0.27 | 900 | 0.32 | |
| 1000 | | 0.33 | 1000 | 0.39 | |
| 1100 | | 0.39 | 1100 | 0.46 | |
| 1200 | | 0.47 | 1200 | 0.54 | |
| CR33 -30/36A-F | | 600 | 0.10 | 600 | 0.10 |
| | | 700 | 0.13 | 700 | 0.14 |
| | 800 | 0.16 | 800 | 0.18 | |
| | 900 | 0.20 | 900 | 0.23 | |
| | 1000 | 0.24 | 1000 | 0.27 | |
| | 1100 | 0.28 | 1100 | 0.32 | |
| | 1200 | 0.33 | 1200 | 0.38 | |
| | 1300 | 0.38 | 1300 | 0.43 | |
| | 1400 | 0.43 | 1400 | 0.49 | |
| CR33 -30/36B-F | 525 | 0.05 | 410 | 0.05 | |
| | 660 | 0.08 | 495 | 0.08 | |
| | 795 | 0.10 | 580 | 0.10 | |
| | 980 | 0.15 | 785 | 0.15 | |
| | 1165 | 0.20 | 995 | 0.20 | |
| | 1320 | 0.25 | 1155 | 0.25 | |
| | 1475 | 0.30 | 1320 | 0.30 | |
| | 1605 | 0.35 | 1465 | 0.35 | |
| | 1735 | 0.40 | 1610 | 0.40 | |
| | 1805 | 0.43 | 1730 | 0.45 | |
| | 1875 | 0.46 | 1850 | 0.50 | |

| Model No. | Dry Coil | | Wet Coil | | |
|---------------------------|------------------------|------------------|------------|------------------|------|
| | Air Volume | Total Resistance | Air Volume | Total Resistance | |
| | cfm | in. w.g. | cfm | in. w.g. | |
| CR33 -30/36C-F | 600 | 0.06 | 600 | 0.07 | |
| | 700 | 0.08 | 700 | 0.10 | |
| | 800 | 0.10 | 800 | 0.13 | |
| | 900 | 0.13 | 900 | 0.17 | |
| | 1000 | 0.16 | 1000 | 0.21 | |
| | 1100 | 0.19 | 1100 | 0.25 | |
| | 1200 | 0.22 | 1200 | 0.29 | |
| | 1300 | 0.26 | 1300 | 0.34 | |
| | 1400 | 0.29 | 1400 | 0.38 | |
| | CR33 -48B-F | 1200 | 0.14 | 1200 | 0.17 |
| | | 1300 | 0.16 | 1300 | 0.20 |
| 1400 | | 0.19 | 1400 | 0.23 | |
| 1500 | | 0.22 | 1500 | 0.26 | |
| 1600 | | 0.25 | 1600 | 0.29 | |
| 1700 | | 0.28 | 1700 | 0.32 | |
| 1800 | | 0.30 | 1800 | 0.36 | |
| CR33 -48C-F | 1900 | 0.34 | 1900 | 0.42 | |
| | 2000 | 0.37 | 2000 | 0.45 | |
| | 595 | 0.05 | 575 | 0.05 | |
| | 860 | 0.10 | 820 | 0.10 | |
| | 1060 | 0.15 | 995 | 0.15 | |
| | 1235 | 0.20 | 1170 | 0.20 | |
| | 1395 | 0.25 | 1320 | 0.25 | |
| | 1545 | 0.30 | 1445 | 0.30 | |
| | 1675 | 0.35 | 1575 | 0.35 | |
| | 1805 | 0.40 | 1710 | 0.40 | |
| CR33 -50/60C-F | 1925 | 0.45 | 1825 | 0.45 | |
| | 2030 | 0.50 | 1915 | 0.50 | |
| | 1395 | 0.17 | 1400 | 0.19 | |
| | 1500 | 0.19 | 1500 | 0.22 | |
| | 1605 | 0.21 | 1600 | 0.24 | |
| | 1700 | 0.24 | 1710 | 0.27 | |
| | 1805 | 0.27 | 1800 | 0.31 | |
| | 1905 | 0.29 | 1890 | 0.33 | |
| | 2000 | 0.32 | 2000 | 0.36 | |
| | 2105 | 0.35 | 2105 | 0.40 | |
| CR33 -60D-F | 2200 | 0.39 | 2190 | 0.45 | |
| | 1395 | 0.17 | 1400 | 0.19 | |
| | 1500 | 0.19 | 1500 | 0.22 | |
| | 1605 | 0.21 | 1600 | 0.24 | |
| | 1700 | 0.24 | 1710 | 0.27 | |
| | 1805 | 0.27 | 1800 | 0.31 | |
| | 1905 | 0.29 | 1890 | 0.33 | |
| | 2000 | 0.32 | 2000 | 0.36 | |
| | 2105 | 0.35 | 2105 | 0.40 | |
| | 2200 | 0.39 | 2190 | 0.45 | |

DIMENSIONS - INCHES (MM)



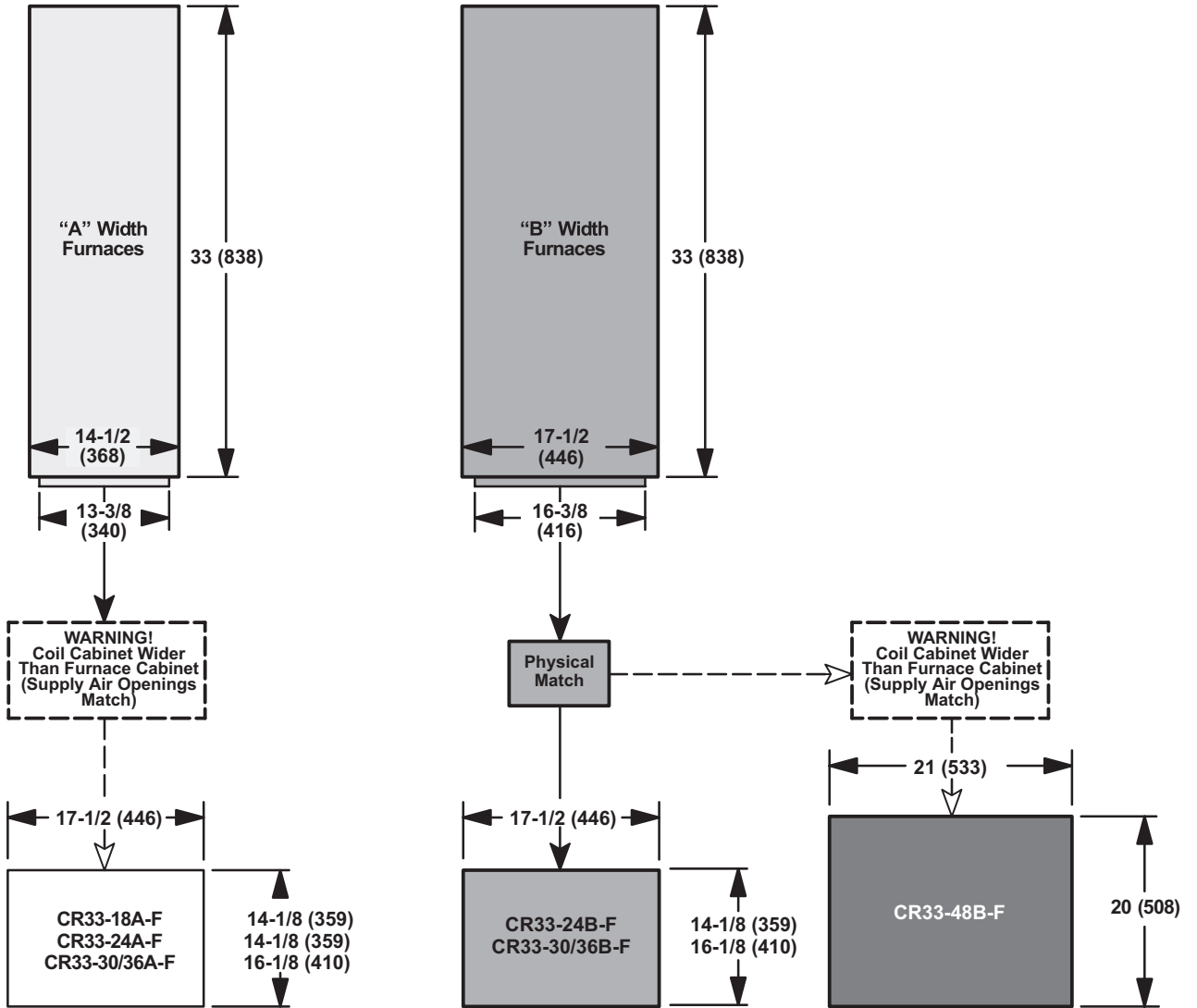
NOTE - Liquid and Suction Line locations are reversed on CR33-24 and CR33-060 models.

| Model Number | A | | B | | C | | D | | E | | F | | G | | H | |
|---------------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|-------|-----|---------|-----|-------|----|
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| CR33-18A-F | 14-1/8 | 359 | 17-1/2 | 445 | 13-1/2 | 343 | 15-1/2 | 394 | 8-3/4 | 222 | 6-1/4 | 159 | 3 | 76 | 2 | 51 |
| CR33-24A-F | 14-1/8 | 359 | 17-1/2 | 445 | 13-1/2 | 343 | 15-1/2 | 394 | 8-3/4 | 222 | 6-1/4 | 159 | 3 | 76 | 2 | 51 |
| CR33-24B-F | 14-1/8 | 359 | 17-1/2 | 445 | 16-1/2 | 419 | 15-1/2 | 394 | 8-3/4 | 222 | 5 | 127 | 5 | 127 | 1/2 | 13 |
| CR33-30/36A-F | 16-1/8 | 410 | 17-1/2 | 445 | 13-1/2 | 343 | 15-1/2 | 394 | 8-3/4 | 222 | 5 | 127 | 5 | 127 | 2 | 51 |
| CR33-30/36B-F | 16-1/8 | 410 | 17-1/2 | 445 | 16-1/2 | 419 | 15-1/2 | 394 | 8-3/4 | 222 | 6-1/8 | 156 | 3 | 76 | 1/2 | 13 |
| CR33-30/36C-F | 16-1/8 | 410 | 21 | 533 | 20 | 508 | 19 | 483 | 10-1/2 | 267 | 6-1/8 | 156 | 3 | 76 | 1/2 | 13 |
| CR33-48B-F | 20 | 508 | 21 | 533 | 16-1/2 | 419 | 19 | 483 | 10-1/2 | 267 | 8-1/8 | 206 | 4 | 102 | 2-1/4 | 57 |
| CR33-48C-F | 20 | 508 | 21 | 533 | 20 | 508 | 19 | 483 | 10-1/2 | 267 | 8-1/8 | 206 | 4 | 102 | 1/2 | 13 |
| CR33-50/60C-F | 23-5/8 | 600 | 24-1/2 | 622 | 20 | 508 | 22-1/2 | 572 | 12-1/4 | 311 | 3-1/2 | 89 | 17-3/16 | 437 | 2-1/4 | 57 |
| CR33-60D-F | 23-5/8 | 600 | 24-1/2 | 622 | 23-1/2 | 597 | 22-1/2 | 572 | 12-1/4 | 311 | 3-1/2 | 89 | 17-3/16 | 437 | 1/2 | 13 |

PHYSICAL MATCHES

DOWN-FLOW GAS FURNACES - CR33 COILS

(Note - Coil opening will physically match the furnace supply air opening with the same letter designation in the model number.)

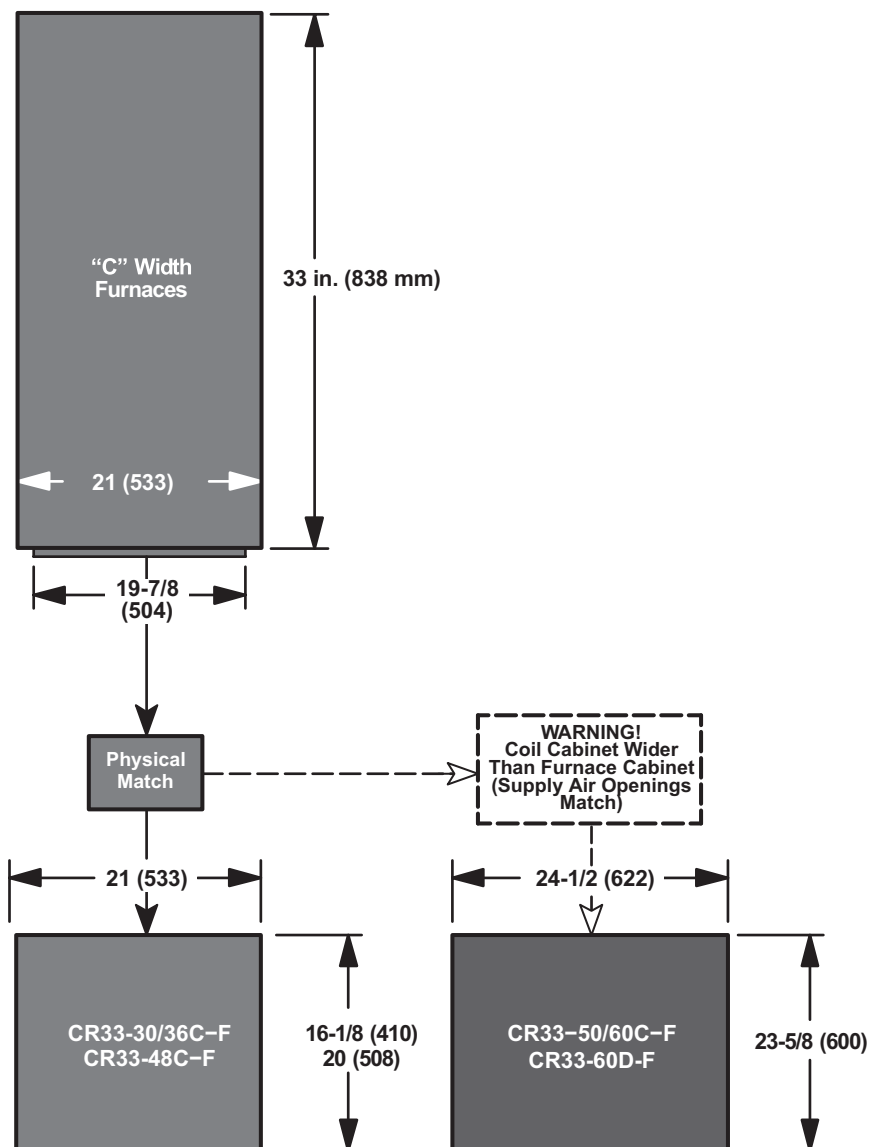


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PHYSICAL MATCHES

DOWNfLOW GAS FURNACES – CR33 COILS

(Note – Coil opening will physically match the furnace supply air opening with the same letter designation in the model number.)



REVISIONS

| Sections | Description of Change |
|------------|----------------------------|
| Dimensions | Updated (Physical Matches) |



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For the latest technical information, www.lennox.com/technical

Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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