

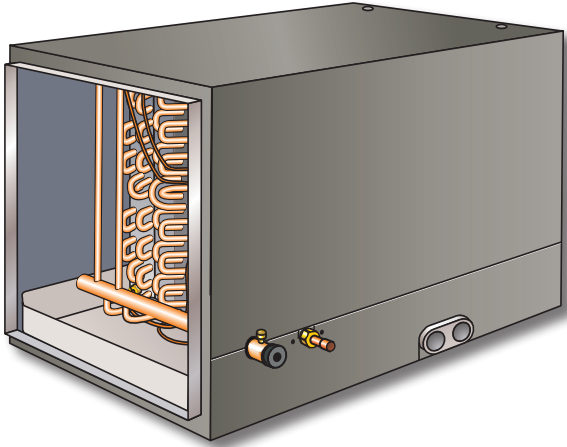


Horizontal

Bulletin No. 210281  
September 2010

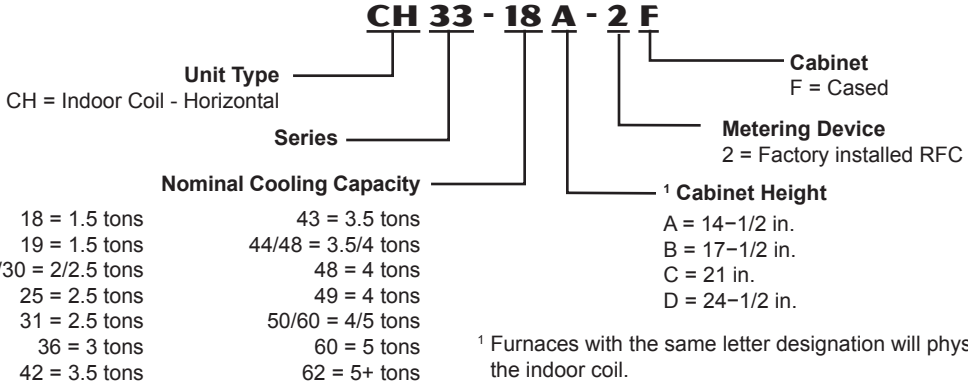
Supersedes April 2007

PRODUCT SPECIFICATIONS



1.5 to 5 Tons

MODEL NUMBER IDENTIFICATION



FEATURES

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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 horizontal indoor coils can easily be installed with most Lennox horizontal 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.

Heavy gauge, pre-painted galvanized steel.

Flanges furnished for ease of duct connection.

Engaging holes furnished on cabinet for alignment with furnace.

Removable panels provide access to coil.

Refrigerant lines extend outside of cabinet for easy connection.

Furnace Match-Up

All cased coils exactly match corresponding furnaces with same letter designation in model number. No adaptor required.

Engaging holes furnished on cabinet for alignment.

## 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 flow.

Non-corrosive drain pan with dual drain connections.

Sweat connections on both liquid and suction lines.

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

RFCIV metering device factory installed in liquid line.

High pressure testing ensures 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.

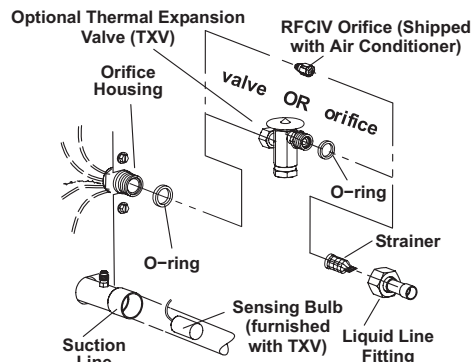
### Refrigerant Flow Control IV

RFCIV accurately meters refrigerant in system.

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

Principle of Lennox RFCIV system involves matching indoor 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 2.5 TON

| General Data                                        |                              | Model No. | CH33<br>-18A-2F | CH33<br>19A-2F | CH33<br>-24/30A-2F | CH33<br>-25A-2F | CH33<br>-25B-2F | CH33<br>-31A-2F | CH33<br>-31B-2F |
|-----------------------------------------------------|------------------------------|-----------|-----------------|----------------|--------------------|-----------------|-----------------|-----------------|-----------------|
| Nominal size - Tons                                 |                              |           | 1.5             | 1.5            | 2/2.5              | 2               | 2               | 2.5             | 2.5             |
| Line connections<br>in.                             | Suction / vapor o.d. - sweat |           | 3/4             | 3/4            | 3/4                | 3/4             | 3/4             | 3/4             | 3/4             |
|                                                     | Liquid o.d. - sweat          |           | 3/8             | 3/8            | 3/8                | 3/8             | 3/8             | 3/8             | 3/8             |
|                                                     | Condensate drain (fpt)       |           | 3/4             | 3/4            | 3/4                | 3/4             | 3/4             | 3/4             | 3/4             |
| RFCIV metering device orifice size                  |                              |           | 0.053           | 0.053          | 0.062              | 0.062           | 0.062           | 0.071           | 0.071           |
| Indoor<br>Coil                                      | Net face area sq. ft.        |           | 1.75            | 3.5            | 3.5                | 3.5             | 3.5             | 4.33            | 4.67            |
|                                                     | Tube diameter - in.          |           | 3/8             | 3/8            | 3/8                | 3/8             | 3/8             | 3/8             | 3/8             |
|                                                     | Number of rows               |           | 2               | 2              | 2                  | 3               | 2               | 3               | 3               |
|                                                     | Fins per inch                |           | 18              | 19             | 18                 | 14              | 19              | 16              | 14              |
| Matching Lennox Furnace - Cabinet Width Designation |                              |           | A               | A              | A                  | A               | B               | A               | B               |
| <sup>1</sup> Coil & Furnace Cabinet Height - in.    |                              |           | 14-1/2          | 14-1/2         | 14-1/2             | 14-1/2          | 17-1/2          | 14-1/2          | 17-1/2          |
| Shipping Data - lbs.                                |                              |           | 20              | 37             | 42                 | 38              | 38              | 40              | 45              |

### SPECIFICATIONS

#### 3 TO 3.5 TON

| General Data                                        |                              | Model No. | CH33<br>-36A-2F | CH33<br>-36B-2F | CH33<br>-36C-2F | CH33<br>-42B-2F | CH33<br>-43B-2F | CH33<br>-43C-2F |
|-----------------------------------------------------|------------------------------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nominal size - Tons                                 |                              |           | 3               | 3               | 3               | 3.5             | 3.5             | 3.5             |
| Line connections<br>in.                             | Suction / vapor o.d. - sweat |           | 3/4             | 3/4             | 3/4             | 7/8             | 7/8             | 7/8             |
|                                                     | Liquid o.d. - sweat          |           | 3/8             | 3/8             | 3/8             | 3/8             | 3/8             | 3/8             |
|                                                     | Condensate drain (fpt)       |           | 3/4             | 3/4             | 3/4             | 3/4             | 3/4             | 3/4             |
| RFCIV metering device orifice size                  |                              |           | 0.076           | 0.076           | 0.076           | 0.082           | 0.082           | 0.082           |
| Indoor<br>Coil                                      | Net face area sq. ft.        |           | 3.5             | 4.67            | 5.83            | 4.67            | 5.78            | 5.83            |
|                                                     | Tube diameter - in.          |           | 3/8             | 3/8             | 3/8             | 3/8             | 3/8             | 3/8             |
|                                                     | Number of rows               |           | 3               | 2               | 2               | 3               | 4               | 3               |
|                                                     | Fins per inch                |           | 12              | 18              | 18              | 12              | 12              | 13              |
| Matching Lennox Furnace - Cabinet Width Designation |                              |           | A               | B               | C               | B               | B               | C               |
| <sup>1</sup> Coil & Furnace Cabinet Height - in.    |                              |           | 14-1/2          | 17-1/2          | 21              | 17-1/2          | 17-1/2          | 21              |
| Shipping Data - lbs.                                |                              |           | 54              | 44              | 48              | 60              | 76              | 82              |

**SPECIFICATIONS**

**3.5 TO 5 TON**

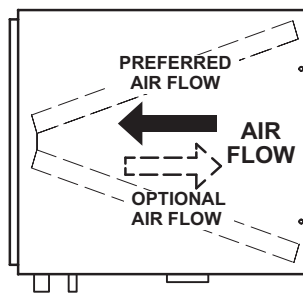
| General Data                                        |                              | Model No.           | CH33       | CH33    | CH33    | CH33       | CH33    | CH33    |
|-----------------------------------------------------|------------------------------|---------------------|------------|---------|---------|------------|---------|---------|
|                                                     |                              |                     | -44/48B-2F | -48C-2F | -49C-2F | -50/60C-2F | -60D-2F | -62D-2F |
|                                                     |                              | Nominal size - Tons | 3.5/4      | 4       | 4       | 4/5        | 5       | 5       |
| Line connections<br>in.                             | Suction / vapor o.d. - sweat |                     | 7/8        | 7/8     | 7/8     | 7/8        | 7/8     | 7/8     |
|                                                     | Liquid o.d. - sweat          |                     | 3/8        | 3/8     | 3/8     | 3/8        | 3/8     | 3/8     |
|                                                     | Condensate drain (fpt)       |                     | 3/4        | 3/4     | 3/4     | 3/4        | 3/4     | 3/4     |
| RFCIV metering device orifice size                  |                              |                     | 0.082      | 0.091   | 0.091   | 0.091      | 0.099   | 0.099   |
| Indoor<br>Coil                                      | Net face area sq. ft.        |                     | 5.78       | 5.83    | 7.22    | 7.22       | 6.42    | 7.94    |
|                                                     | Tube diameter - in.          |                     | 3/8        | 3/8     | 3/8     | 3/8        | 3/8     | 3/8     |
|                                                     | Number of rows               |                     | 3          | 3       | 3       | 3          | 3       | 3       |
|                                                     | Fins per inch                |                     | 12         | 12      | 13      | 12         | 12      | 12      |
| Matching Lennox Furnace - Cabinet Width Designation |                              |                     | B          | C       | C       | C          | D       | D       |
| <sup>1</sup> Coil & Furnace Cabinet Height - in.    |                              |                     | 17-1/2     | 21      | 21      | 21         | 24-1/2  | 24-1/2  |
| Shipping Data - lbs.                                |                              |                     | 72         | 76      | 86      | 86         | 87      | 97      |

**AIR RESISTANCE**

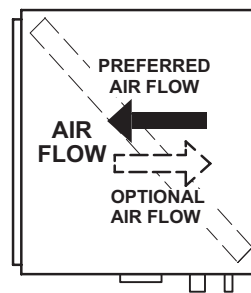
| Air<br>Volume<br>cfm | Total Air Resistance - in. w.g. |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|----------------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                      | CH33-18A                        |             | CH33-19A    |             | CH33-24/30A |             | CH33-25A    |             | CH33-25B    |             | CH33-31A    |             | CH33-31B    |             | CH33-36A    |             |
|                      | Dry<br>Coil                     | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil |
| 200                  | 0.04                            | 0.05        | 0.02        | 0.02        | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         |
| 400                  | 0.09                            | 0.14        | 0.05        | 0.06        | 0.05        | 0.08        | 0.04        | 0.05        | 0.03        | 0.04        | 0.04        | 0.05        | 0.02        | 0.02        | ---         | ---         |
| 600                  | 0.16                            | 0.27        | 0.09        | 0.11        | 0.09        | 0.12        | 0.09        | 0.11        | 0.05        | 0.07        | 0.09        | 0.10        | 0.05        | 0.06        | ---         | ---         |
| 800                  | 0.25                            | 0.39        | 0.15        | 0.17        | 0.14        | 0.20        | 0.15        | 0.19        | 0.09        | 0.11        | 0.15        | 0.17        | 0.09        | 0.11        | 0.15        | 0.18        |
| 1000                 | 0.37                            | 0.53        | 0.22        | 0.25        | 0.21        | 0.29        | 0.23        | 0.29        | 0.15        | 0.17        | 0.24        | 0.27        | 0.14        | 0.16        | 0.22        | 0.27        |
| 1200                 | ---                             | ---         | ---         | ---         | 0.28        | 0.38        | 0.32        | 0.40        | 0.21        | 0.23        | 0.34        | 0.38        | 0.19        | 0.23        | 0.30        | 0.39        |
| 1400                 | ---                             | ---         | ---         | ---         | 0.37        | 0.48        | 0.43        | 0.50        | 0.28        | 0.30        | 0.45        | 0.51        | 0.26        | 0.30        | 0.41        | 0.48        |
| 1600                 | ---                             | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | 0.53        | 0.63        |
| 1800                 | ---                             | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---         |

| Air<br>Volume<br>cfm | Total Air Resistance - in. w.g. |             |             |             |             |             |             |             |                         |             |                         |             |             |             |                      |             |
|----------------------|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------|-------------|-------------------------|-------------|-------------|-------------|----------------------|-------------|
|                      | CH33-36B                        |             | CH33-36C    |             | CH33-43B    |             | CH33-43C    |             | CH33-42B<br>CH33-44/48B |             | CH33-48C<br>CH33-50/60C |             | CH33-49C    |             | CH33-60D<br>CH33-62D |             |
|                      | Dry<br>Coil                     | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil             | Wet<br>Coil | Dry<br>Coil             | Wet<br>Coil | Dry<br>Coil | Wet<br>Coil | Dry<br>Coil          | Wet<br>Coil |
| 800                  | 0.08                            | 0.10        | 0.06        | 0.08        | 0.10        | 0.10        | 0.06        | 0.06        | ---                     | ---         | ---                     | ---         | ---         | ---         | ---                  | ---         |
| 1000                 | 0.11                            | 0.16        | 0.10        | 0.13        | 0.14        | 0.18        | 0.09        | 0.10        | 0.14                    | 0.16        | ---                     | ---         | ---         | ---         | ---                  | ---         |
| 1200                 | 0.16                            | 0.21        | 0.15        | 0.18        | 0.20        | 0.25        | 0.15        | 0.16        | 0.19                    | 0.23        | 0.16                    | 0.19        | 0.15        | 0.16        | ---                  | ---         |
| 1400                 | 0.21                            | 0.27        | 0.19        | 0.23        | 0.26        | 0.31        | 0.18        | 0.21        | 0.25                    | 0.29        | 0.21                    | 0.26        | 0.20        | 0.23        | 0.12                 | 0.16        |
| 1600                 | 0.27                            | 0.35        | 0.24        | 0.31        | 0.34        | 0.36        | 0.26        | 0.28        | 0.30                    | 0.38        | 0.27                    | 0.30        | 0.25        | 0.29        | 0.16                 | 0.20        |
| 1800                 | ---                             | ---         | ---         | ---         | 0.42        | 0.47        | 0.31        | 0.38        | 0.38                    | 0.42        | 0.33                    | 0.39        | 0.31        | 0.36        | 0.20                 | 0.24        |
| 2000                 | ---                             | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---                     | ---         | 0.39                    | 0.49        | 0.40        | 0.44        | 0.24                 | 0.30        |
| 2200                 | ---                             | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---                     | ---         | ---                     | ---         | 0.48        | 0.54        | 0.29                 | 0.36        |
| 2400                 | ---                             | ---         | ---         | ---         | ---         | ---         | ---         | ---         | ---                     | ---         | ---                     | ---         | ---         | ---         | 0.34                 | 0.42        |

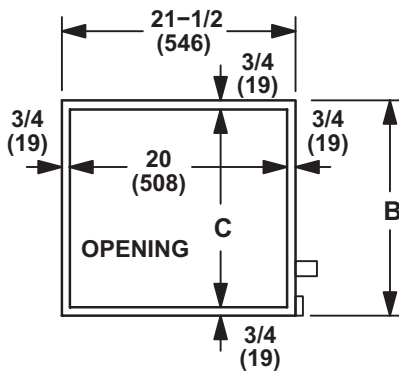
# DIMENSIONS - INCHES (MM)



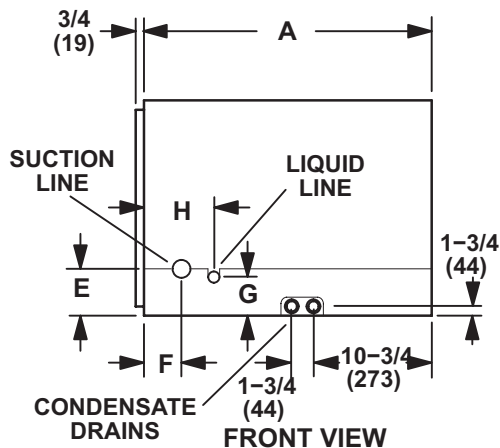
TOP VIEW



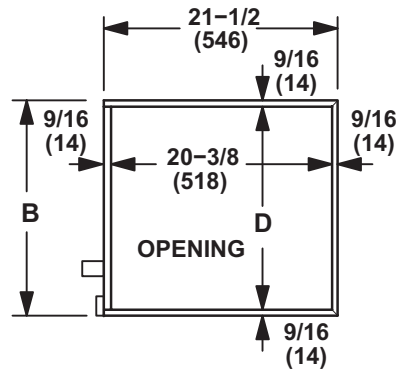
TOP VIEW  
CH33-18A



END VIEW



FRONT VIEW



END VIEW

| Model No.      | A      |     | B      |     | C      |     | D      |     | E     |     | F     |    | G     |    | H     |     |
|----------------|--------|-----|--------|-----|--------|-----|--------|-----|-------|-----|-------|----|-------|----|-------|-----|
|                | in.    | mm  | in.    | mm  | in.    | mm  | in.    | mm  | in.   | mm  | in.   | mm | in.   | mm | in.   | mm  |
| CH33-18A-2F    | 21-1/2 | 546 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 3-3/4 | 95  | 3-1/4 | 83 | 2-3/4 | 70 | 1-3/4 | 44  |
| CH33-19A-2F    | 26-1/2 | 673 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-24/30A-2F | 26-1/2 | 673 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-25A-2F    | 26-1/2 | 673 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-25B-2F    | 26-1/2 | 673 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-31A-2F    | 31-1/2 | 800 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-31B-2F    | 26-1/2 | 673 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-36A-2F    | 26-1/2 | 673 | 14-1/2 | 368 | 13     | 330 | 13-3/8 | 340 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-36B-2F    | 26-1/2 | 673 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-36C-2F    | 26-1/2 | 673 | 21     | 533 | 19-1/2 | 495 | 19-7/8 | 505 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-42B-2F    | 26-1/2 | 673 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-43B-2F    | 31-1/2 | 800 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-43C-2F    | 26-1/2 | 673 | 21     | 533 | 19-1/2 | 495 | 19-7/8 | 505 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-44/48B-2F | 31-1/2 | 800 | 17-1/2 | 444 | 16     | 406 | 16-3/8 | 416 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-48C-2F    | 26-1/2 | 673 | 21     | 533 | 19-1/2 | 495 | 19-7/8 | 505 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-49C-2F    | 31-1/2 | 800 | 21     | 533 | 19-1/2 | 495 | 19-7/8 | 505 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-50/60C-2F | 31-1/2 | 800 | 21     | 533 | 19-1/2 | 495 | 19-7/8 | 505 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-60D-2F    | 26-1/2 | 673 | 24-1/2 | 622 | 23     | 584 | 23-3/8 | 594 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |
| CH33-62D-2F    | 31-1/2 | 800 | 24-1/2 | 622 | 23     | 584 | 23-3/8 | 594 | 4     | 102 | 2-1/8 | 54 | 3     | 76 | 4-7/8 | 124 |



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