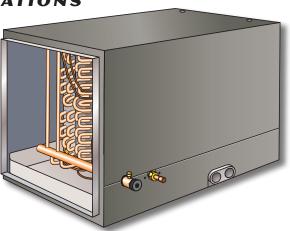
# CH33



## Horizontal

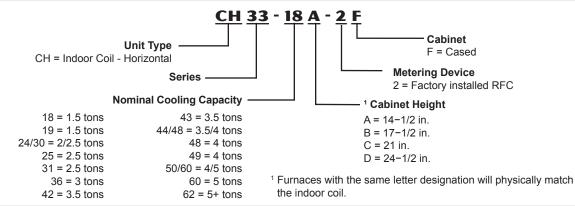
PRODUCT SPECIFICATIONS



Bulletin No. 210281 January 2013 Supersedes September 2010

1.5 to 5 Tons

#### **MODEL NUMBER IDENTIFICATION**



## **FEATURES**

#### **CONTENTS**

Air Resistance							3
Dimensions							4
Features							1
Model Number Identification							1
Specifications							2

## 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, UV-resistant polymer 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.

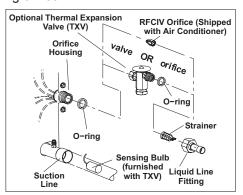
#### Refrigerant Flow Control IV

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	6	1.5 TO 2.5									
General Data	Model No.	CH33 -18A-2F	CH33 19A-2F	CH33 -24/30A-2F	CH33 -25A-2F	CH33 -25B-2F	CH33 -31A-2F	CH33 -31B-2F			
	Nominal size - Tons	1.5	1.5	2/2.5	2	2	2.5	2.5			
Line connections	Suction / vapor o.d sweat	3/4	3/4	3/4	3/4	3/4	3/4	3/4			
in.	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 of	orifice size	0.053	0.053	0.062	0.062	0.062	0.071	0.071			
Indoor	Net face area sq. ft.	1.75	3.5	3.5	3.5	3.5	4.33	4.67			
Coil	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	Α	Α	Α	Α	В	Α	В			
<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			

SPECIFICATION	S					3 TO 3.5 TON			
General Data	Model No.	CH33 -36A-2F	CH33 -36B-2F	CH33 -36C-2F	CH33 -42B-2F	CH33 -43B-2F	CH33 -43C-2F		
	Nominal size - Tons	3	3	3	3.5	3.5	3.5		
Line connections	Suction / vapor o.d sweat	3/4	3/4	3/4	7/8	7/8	7/8		
in.	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	Net face area sq. ft.	3.5	4.67	5.83	4.67	5.78	5.83		
Coil	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	e - Cabinet Width Designation	Α	В	С	В	В	С		
<sup>1</sup> Coil	& Furnace Cabinet Height - in.	14-1/2	17-1/2	21	17-1/2	17-1/2	21		
Shipping Data - Ibs.		54	44	48	60	76	82		

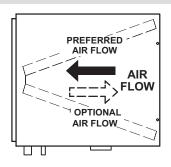
<b>SPECIFICATION</b>	S			3.5 TO 5 TON			
General Data	Model No.	CH33 -44/48B-2F	CH33 -48C-2F	CH33 -49C-2F	CH33 -50/60C-2F	CH33 -60D-2F	CH33 -62D-2F
	Nominal size - Tons	3.5/4	4	4	4/5	5	5
Line connections	Suction / vapor o.d sweat	7/8	7/8	7/8	7/8	7/8	7/8
in.	Liquid o.d sweat	3/8	3/8	3/8	3/8	3/8	3/8
	Condensate 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	Net face area sq. ft.	5.78	5.83	7.22	7.22	6.42	7.94
Coil	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 Furnac	e - Cabinet Width Designation	В	С	С	С	D	D
<sup>1</sup> Coi	I & 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

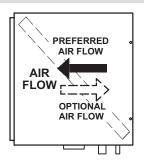
AIR R	AIR RESISTANCE															
						To	tal Air	Resista	nce - iı	ո. w.g.						
Air Volume	CH33	3-18A	CH33	CH33-19A		CH33-24/30A		CH33-25A		CH33-25B		3-31A	CH33-31B		CH33	3-36A
cfm	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet 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																

						To	tal Air	Resista	ance - ir	າ. w.g.						
Air Volume	CH33-36B		CH33-36C		CH33-43B		CH33-43C		CH33-42B CH33-44/48B		CH33-48C CH33-50/60C		CH33-49C		CH33	
cfm	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet Coil	Dry Coil	Wet 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)**

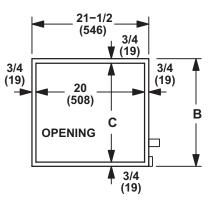
<sup>1</sup> Optional right-hand airflow requires a field fabricated 6 in. (152 mm) spacer in-between the furnace and coil.

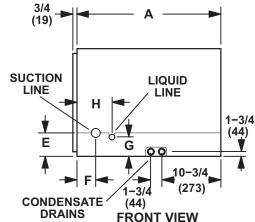


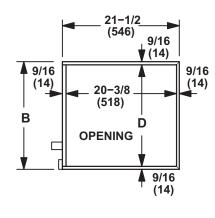


**TOP VIEW** 

**TOP VIEW** CH35-18A







**END VIEW** 

**END VIEW** 

	Α		В		С		D		Е		F		G		Н	
Model No.	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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