



Project Submittal

Project Name: Lakewood Storage
Project Number: 376132
Project Altitude: 500
Project Location:
4101 NE Port Drive
Lee's Summit, Missouri US

Date: 11/28/2022
Quote: 281890
Roof Top Units: 0
Split Systems: 10

Customer: Zone Comm Kansas City
Engineer: BC Engineers Inc

Table of Contents

Tag	Qty	Model	Description
<u>F-1, CU-1</u>	1	22K27	ML14XC1-048-463 CONDENSER/4TON/460-3
	1	16Y15	CHX35-51/61C-6F-1 COIL/4-5 Ton/Cased
	1	19A34	ML196UH090XE48C Furnace-Gas/90Btuh/4Ton
<u>F-2:6, CU-1:6</u>	5	22K27	ML14XC1-048-463 CONDENSER/4TON/460-3
	5	16Y15	CHX35-51/61C-6F-1 COIL/4-5 Ton/Cased
	5	19A34	ML196UH090XE48C Furnace-Gas/90Btuh/4Ton
<u>F-7:9, CU-7:9</u>	3	22K27	ML14XC1-048-463 CONDENSER/4TON/460-3
	3	16Y15	CHX35-51/61C-6F-1 COIL/4-5 Ton/Cased
	3	19A34	ML196UH090XE48C Furnace-Gas/90Btuh/4Ton
<u>UH-1</u>	1	18C71	LF25-105A-1 UNIT HEATER
<u>Miscellaneous Items</u>			

Revit® Building Information Modeling (BIM) - [Click here](#)

AutoCAD® Templates - [Click here](#)



Project Submittal

Tag: F-1, CU-1
Condenser: ML14XC1-048-463
Evaporator Coil: CHX35-51/61C-6F
Furnace: ML196UH090XE48C

UNIT OVERVIEW AHRI Reference - 207742097

Voltage	SEER EER	Tons	Gross Cooling Ttl/Sens (MBH)	Net Cooling Ttl/Sens (MBH)	Supply Air Flow (cfm)	ESP/TSP (in.WC)	EAT DB/WB (°F)	LAT DB/WB (°F)
480 Volt 3 Phase / 60Hz	14.25 12	4.0	45.7 / 33.5	43.3 / 31.1	1,299	0.5 / 0.7	80.0 / 67.0	56.0 / 55.7

COOLING

Cooling Performance		Temperatures (DB/WB °F)	
Gross Cooling (Ttl/Sens)	45.7 / 33.5 MBH	Ambient	95.0
Net Cooling (Ttl/Sens)	43.3 / 31.1 MBH	Entering	80.0
Coil Moisture Removal	11.46 lb/hr	Leaving – (Coil)	56.0
		Leaving – (Unit)	57.7
			56.3

ARI Performance		Compressors		Refrigerant		Condensate Drain	
ARI Cooling	46.0 MBH	Cooling Stages	Single	Type	R-410A	Qty	2
		Compressor Qty	1	Cond Suction Line	7/8	Size	0.75 in.
				Cond Liquid Line	3/8	Pipe Thread	fpt
				Coil Suction Line	7/8		
				Coil Liquid Line	3/8		

HEATING

Heating Performance		Temperatures (DB/WB °F)		Specifications	
Output	85.6 / MBH	Leaving	61.0	Thermal Efficiency	96.0%
(High/Low)	88.0 / MBH			Gas Line Size	0.5 in.
Input (High/Low)	61.0 °F			Heat Exchange Type	Aluminum
Heat Rise					

VENTILATION

Air Flow (cfm)		Supply Fan		Air Resistance (in.WC)	
Supply	1,299	Nominal Power	0.75hp	Total	0.71
Outdoor	150	Drive Type	ECM Multi Speed Constant Torque	Ext Supply	0.50
		Speed	Medium-Low	Wet Coil	0.21
		Orientation	Upflow/Horizontal		

ELECTRICAL

Condenser		Furnace	
Voltage	480 Volt 3 Phase / 60Hz	Voltage	120V / 1Ph / 60Hz
MCA	8 amp	MCA	LESS THAN 12 amp
MOCP	10 amp	MOCP	15 amp
Condenser Oper Range-Nom Volt	+/- 10%		
Oper Range-Nom Volt	+/- 10%		

ADDITIONAL DATA

Condenser		Furnace		Evaporator Coil	
Dimensions	28.25 in. x 28.25 in. x 37.25 in.	Dimensions	28.75 in. x 21.00 in. x 33.00 in.	Dimensions	31.50 in. x 21.50 in. x 21.00 in.
Total Weight	218 lb	Total Weight	152 lb	Total Weight	70 lb



Project Submittal

Tag:

F-1, CU-1

Field Installed Accessories

Catalog Number	Qty	Description
17G74	1	CS7500 Comm'I Programmable T-stat w/ FDD Field Installed
93G35	1	Freezestat 3/8 Field Installed
34M72	1	Low Ambient Control (30 Deg) Fan Cycling Field Installed
87L97	1	Air Fltr And Rack Kit Horz (C Width) Field Installed
60L46	1	3" Concentric Vent Kit Field Installed
51W10	1	Furnace Horizontal Suspension Kit Field Installed

Product Features

Cabinet

Heavy gauge galvanized steel cabinet
Non-corrosive drain pan
Fully Insulated heavy gauge steel cabinet
Heavy Gauge Cold Rolled Steel Cabinet

Cooling System

Non Chlorine, Ozone Friendly Refrigerant, R410A
RFC IV Metering Device furnished (easily removed for expansion valve use)
High Pressure Switch (Manual Reset)
Scroll Compressor
Quantum Coil / Fortified aluminum allow tube/enhanced fin coil
Hi-Capacity Drier factory installed in liquid line
Low Pressure Switch
Twin Coils assembled in an "A" configuration
Check and Expansion Valve is factory installed

Heating System

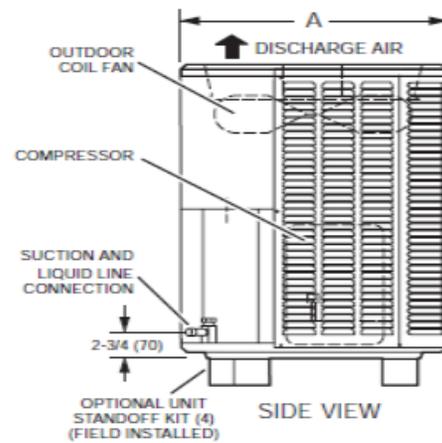
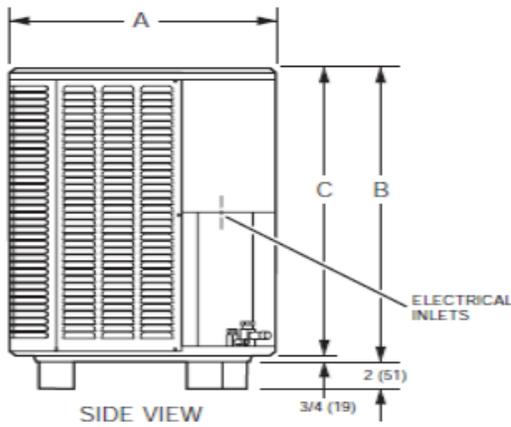
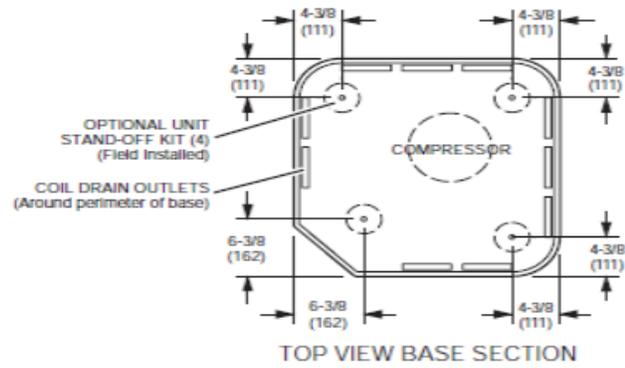
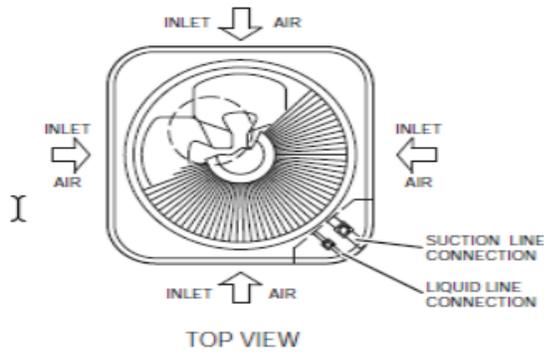
Aluminized Steel Inshot Burners
Aluminized Steel Tubular Heat Exchanger
SureLight(R) Hot Surface Ignition

Warranty

Condenser Limited compressor warranty of 5 years for Residential Installations
Condenser See Limited Warranty Certificate included with unit for details
Condenser Limited compressor warranty of 5 years for Non-Residential Installations
Coil See Limited Warranty Certificate included with unit for details
Coil Limited warranty on all other covered components of 1 year (Comm Use)
Furnace See Limited Warranty Certificate included with unit for details
Furnace Limited warranty on heat exchanger of 20 years
Furnace Limited warranty on all other covered components of 1 year (Comm Use)
Furnace Limited warranty on Surelight ignition control system of 1 Year (Comm Use)

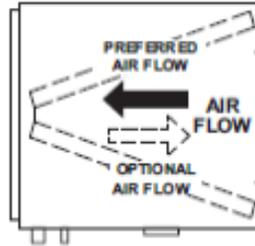


Project Submittal

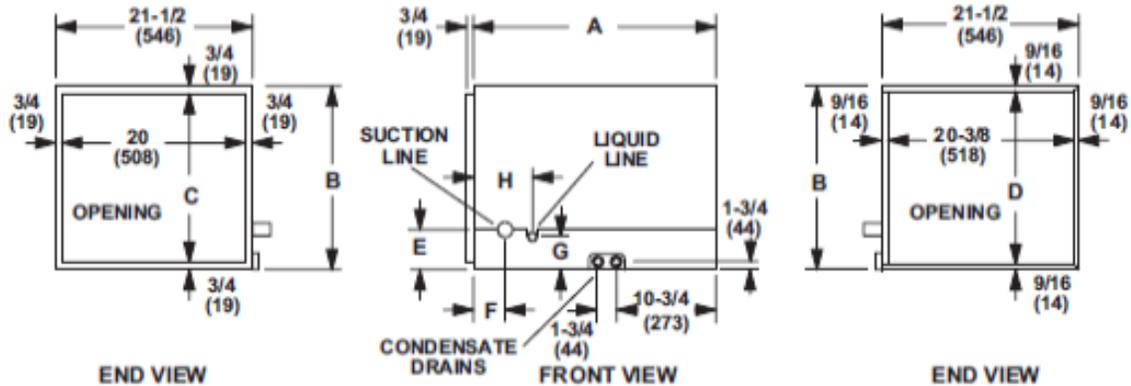


Model	A		B		C	
	inches	mm	inches	mm	inches	mm
018	24-1/4	616	29-1/4	743	28-1/2	724
024	28-1/4	718	29-1/4	743	28-1/2	724
030	28-1/4	718	37-1/4	946	36-1/2	927
036	28-1/4	718	33-1/4	845	32-1/2	826
041	28-1/4	718	37-1/4	946	36-1/2	927
042	28-1/4	718	37-1/4	946	36-1/2	927
047	32-1/4	817	33-1/4	845	32-1/2	826
048	28-1/4	718	37-1/4	946	36-1/2	927
059	32-1/4	817	43-1/4	1099	42-1/2	1080
060	32-1/4	817	43-1/4	1099	42-1/2	1080

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



TOP VIEW



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
CHX35-18A-6F	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
CHX35-24A-6F	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
CHX35-24B-6F	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
CHX35-30A-6F	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
CHX35-30B-6F	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
CHX35-36A-6F	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
CHX35-36B-6F	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
CHX35-36C-6F	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
CHX35-42B-6F	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
CHX35-42C-6F	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
CHX35-48B-6F	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
CHX35-48C-6F	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
CHX35-51/61C-6F	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
CHX35-60D-6F	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

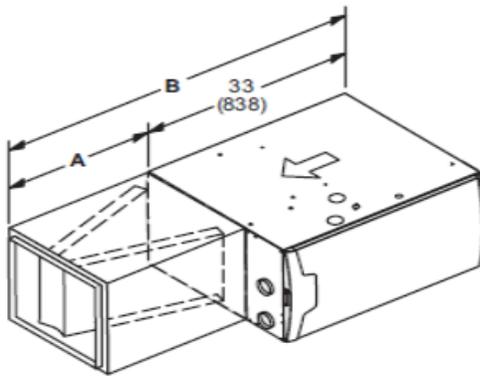
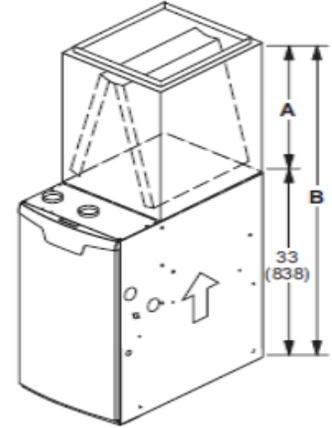


Project Submittal

DIMENSIONS - FURNACE/COIL COMBINED DIMENSIONS

UPFLOW POSITION

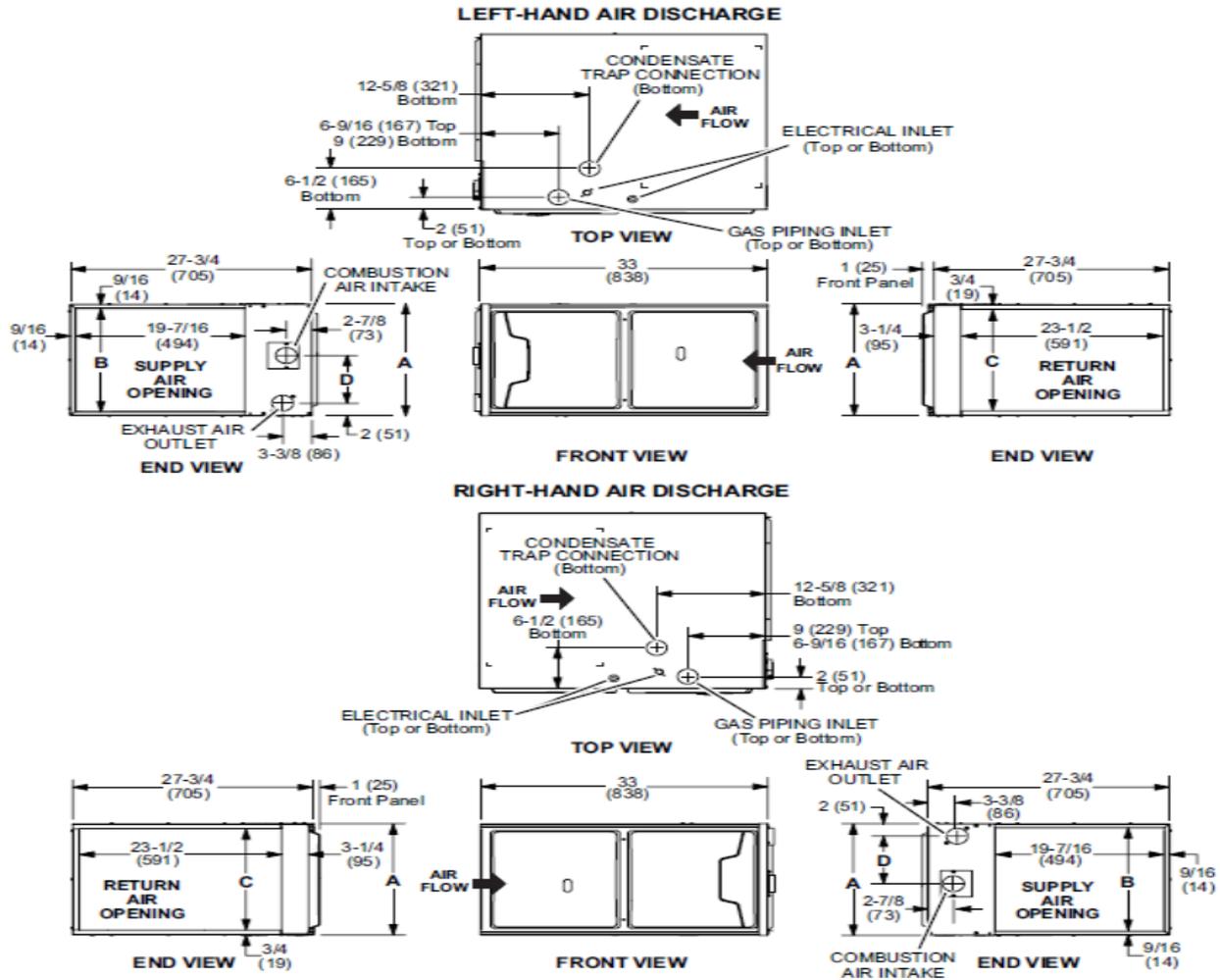
Model Number	C35/CX35 Cased				C35 Uncased			
	A		B		A		B	
	in.	mm	in.	mm	in.	mm	in.	mm
C35/CX35-18/24B	16-1/2	419	49-1/2	1257	14-1/8	359	47-1/8	1197
C35/CX35-24B	18-1/2	470	51-1/2	1308	16-3/8	416	49-3/8	1254
C35/CX35-30B	22-1/2	572	55-1/2	1410	20-3/4	527	53-3/4	1365
C35/CX35-30/36B	24-1/2	622	57-1/2	1461	22-1/4	565	55-1/4	1403
C35/CX35-30/36C	24-1/2	622	57-1/2	1461	22-3/8	568	55-3/8	1407
C35/CX35-48B	27-1/2	699	60-1/2	1537	26-1/4	667	59-1/4	1505
C35/CX35-48C	27-1/2	699	60-1/2	1537	25-7/8	657	58-7/8	1495
C35/CX35-49C	29-1/2	749	62-1/2	1588	28-1/2	724	61-1/2	1562
C35/CX35-50/60C	27-1/2	699	60-1/2	1537	30-5/8	778	63-5/8	1616
C35/CX35-60C	29-1/2	749	62-1/2	1588	28	711	61	1549
C35/CX35-60D	29-1/2	749	62-1/2	1588	28	711	61	1549



HORIZONTAL POSITION

Model Number	CH35/CHX35			
	A		B	
	in.	mm	in.	mm
CH35/CHX35-24B	26-1/2	673	59-1/2	1511
CH35/CHX35-30B				
CH35/CHX35-36B				
CH35/CHX35-36C				
CH35/CHX35-42C				
CH35/CHX35-48C	31-1/2	880	64-1/2	1638
CH35/CHX35-42B				
CH35/CHX35-48B				
CH35/CHX35-51C				
CH35/CHX35-60D				

DIMENSIONS - UNIT - HORIZONTAL POSITION



Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
ML196UH030XE36B ML196UH045XE36B ML196UH070XE36B ML196UH070XE48B	17-1/2	446	16-3/8	416	16	406	7-5/8	194
ML196UH090XE36C ML196UH090XE48C ML196UH090XE60C ML196UH110XE60C	21	533	19-7/8	505	19-1/2	495	9-3/8	238
ML196UH135XE60D	24-1/2	622	23-3/8	594	23	584	11-1/8	283



ComfortSense®

4 Heat / 2 Cool Universal Multi-Stage



Project Submittal

Tag: F-2:6, CU-1:6
Condenser: ML14XC1-048-463
Evaporator Coil: CHX35-51/61C-6F
Furnace: ML196UH090XE48C

UNIT OVERVIEW AHRI Reference - 207742097

Voltage	SEER EER	Tons	Gross Cooling Ttl/Sens (MBH)	Net Cooling Ttl/Sens (MBH)	Supply Air Flow (cfm)	ESP/TSP (in.WC)	EAT DB/WB (°F)	LAT DB/WB (°F)
480 Volt 3 Phase / 60Hz	14.25 12	4.0	45.7 / 33.5	43.3 / 31.1	1,299	0.5 / 0.7	80.0 / 67.0	56.0 / 55.7

COOLING

Cooling Performance			Temperatures (DB/WB °F)			
Gross Cooling (Ttl/Sens)	45.7 / 33.5 MBH		Ambient	95.0	95.0	
Net Cooling (Ttl/Sens)	43.3 / 31.1 MBH		Entering	80.0	67.0	
Coil Moisture Removal	11.46 lb/hr		Leaving – (Coil)	56.0	55.7	
			Leaving – (Unit)	57.7	56.3	

ARI Performance		Compressors		Refrigerant		Condensate Drain	
ARI Cooling	46.0 MBH	Cooling Stages	Single	Type	R-410A	Qty	2
		Compressor Qty	1	Cond Suction Line	7/8	Size	0.75 in.
				Cond Liquid Line	3/8	Pipe Thread	fpt
				Coil Suction Line	7/8		
				Coil Liquid Line	3/8		

HEATING

Heating Performance		Temperatures (DB/WB °F)		Specifications	
Output	85.6 / MBH	Leaving	61.0	Thermal Efficiency	96.0%
(High/Low)	88.0 / MBH			Gas Line Size	0.5 in.
Input (High/Low)	61.0 °F			Heat Exchange Type	Aluminum
Heat Rise					

VENTILATION

Air Flow (cfm)		Supply Fan		Air Resistance (in.WC)	
Supply	1,299	Nominal Power	0.75hp	Total	0.71
Outdoor	225	Drive Type	ECM Multi Speed Constant Torque	Ext Supply	0.50
		Speed	Medium-Low	Wet Coil	0.21
		Orientation	Upflow/Horizontal		

ELECTRICAL

Condenser		Furnace	
Voltage	480 Volt 3 Phase / 60Hz	Voltage	120V / 1Ph / 60Hz
MCA	8 amp	MCA	LESS THAN 12 amp
MOCP	10 amp	MOCP	15 amp
Condenser Oper Range-Nom Volt	+/- 10%		
Oper Range-Nom Volt	+/- 10%		

ADDITIONAL DATA

Condenser		Furnace		Evaporator Coil	
Dimensions	28.25 in. x 28.25 in. x 37.25 in.	Dimensions	28.75 in. x 21.00 in. x 33.00 in.	Dimensions	31.50 in. x 21.50 in. x 21.00 in.
Total Weight	218 lb	Total Weight	152 lb	Total Weight	70 lb



Project Submittal

Tag:

F-2:6, CU-1:6

Field Installed Accessories

Catalog Number	Qty	Description
17G74	5	CS7500 Comm'I Programmable T-stat w/ FDD Field Installed
93G35	5	Freezestat 3/8 Field Installed
34M72	5	Low Ambient Control (30 Deg) Fan Cycling Field Installed
87L97	5	Air Fltr And Rack Kit Horz (C Width) Field Installed
60L46	5	3" Concentric Vent Kit Field Installed
51W10	5	Furnace Horizontal Suspension Kit Field Installed

Product Features

Cabinet

Heavy gauge galvanized steel cabinet
Non-corrosive drain pan
Fully Insulated heavy gauge steel cabinet
Heavy Gauge Cold Rolled Steel Cabinet

Cooling System

Non Chlorine, Ozone Friendly Refrigerant, R410A
RFC IV Metering Device furnished (easily removed for expansion valve use)
High Pressure Switch (Manual Reset)
Scroll Compressor
Quantum Coil / Fortified aluminum allow tube/enhanced fin coil
Hi-Capacity Drier factory installed in liquid line
Low Pressure Switch
Twin Coils assembled in an "A" configuration
Check and Expansion Valve is factory installed

Heating System

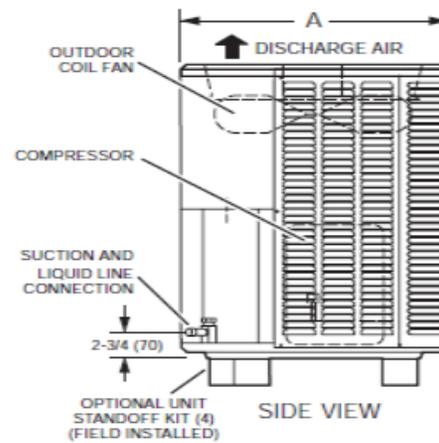
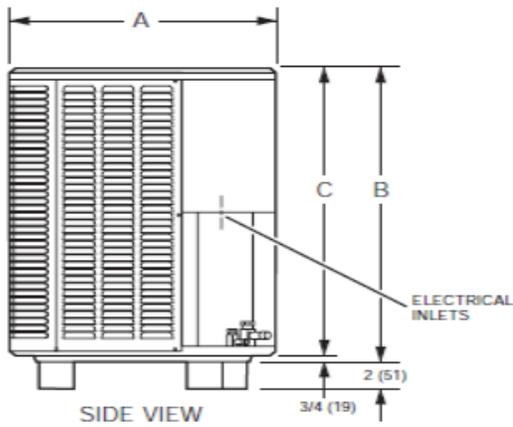
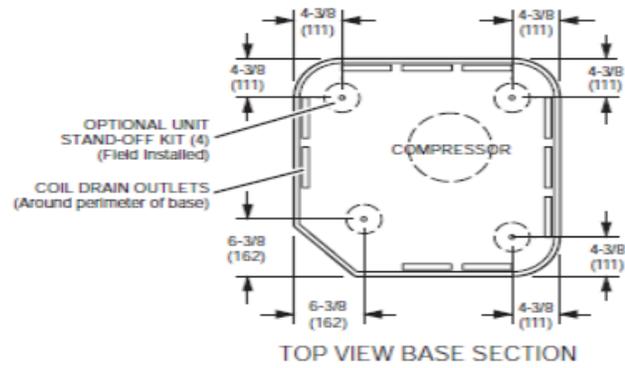
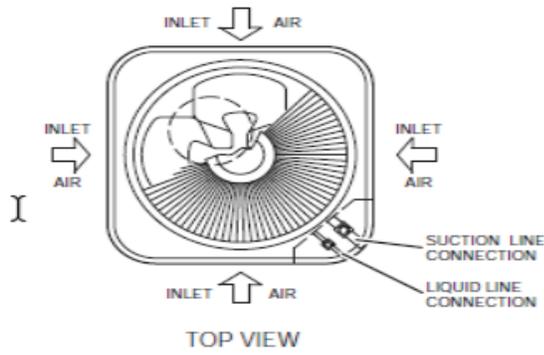
Aluminized Steel Inshot Burners
Aluminized Steel Tubular Heat Exchanger
SureLight(R) Hot Surface Ignition

Warranty

Condenser Limited compressor warranty of 5 years for Residential Installations
Condenser See Limited Warranty Certificate included with unit for details
Condenser Limited compressor warranty of 5 years for Non-Residential Installations
Coil See Limited Warranty Certificate included with unit for details
Coil Limited warranty on all other covered components of 1 year (Comm Use)
Furnace See Limited Warranty Certificate included with unit for details
Furnace Limited warranty on heat exchanger of 20 years
Furnace Limited warranty on all other covered components of 1 year (Comm Use)
Furnace Limited warranty on Surelight ignition control system of 1 Year (Comm Use)

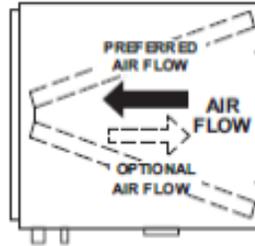


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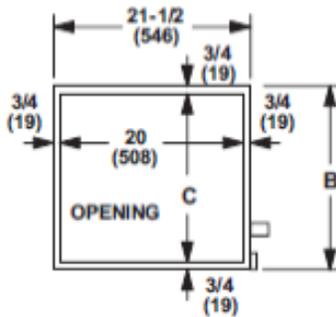


Model	A		B		C	
	inches	mm	inches	mm	inches	mm
018	24-1/4	616	29-1/4	743	28-1/2	724
024	28-1/4	718	29-1/4	743	28-1/2	724
030	28-1/4	718	37-1/4	946	36-1/2	927
036	28-1/4	718	33-1/4	845	32-1/2	826
041	28-1/4	718	37-1/4	946	36-1/2	927
042	28-1/4	718	37-1/4	946	36-1/2	927
047	32-1/4	817	33-1/4	845	32-1/2	826
048	28-1/4	718	37-1/4	946	36-1/2	927
059	32-1/4	817	43-1/4	1099	42-1/2	1080
060	32-1/4	817	43-1/4	1099	42-1/2	1080

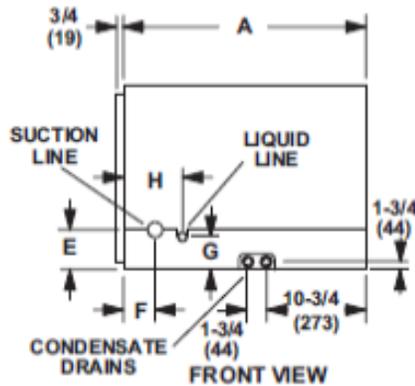
¹ Optional right-hand airflow requires a field fabricated 6 in. (152 mm) spacer in-between the furnace and coil.



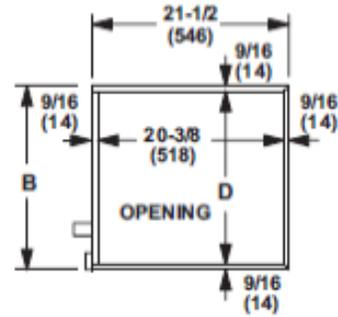
TOP VIEW



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
CHX35-18A-6F	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
CHX35-24A-6F	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
CHX35-24B-6F	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
CHX35-30A-6F	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
CHX35-30B-6F	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
CHX35-36A-6F	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
CHX35-36B-6F	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
CHX35-36C-6F	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
CHX35-42B-6F	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
CHX35-42C-6F	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
CHX35-48B-6F	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
CHX35-48C-6F	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
CHX35-51/61C-6F	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
CHX35-60D-6F	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

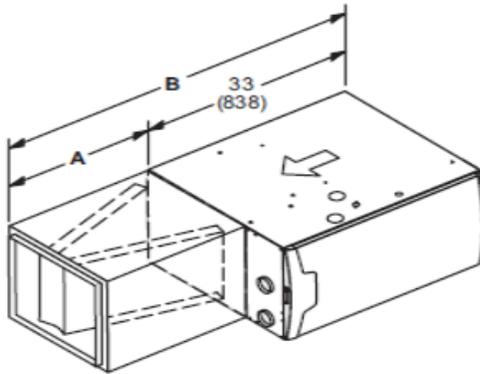
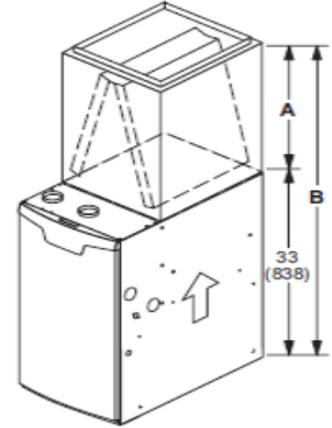


Project Submittal

DIMENSIONS - FURNACE/COIL COMBINED DIMENSIONS

UPFLOW POSITION

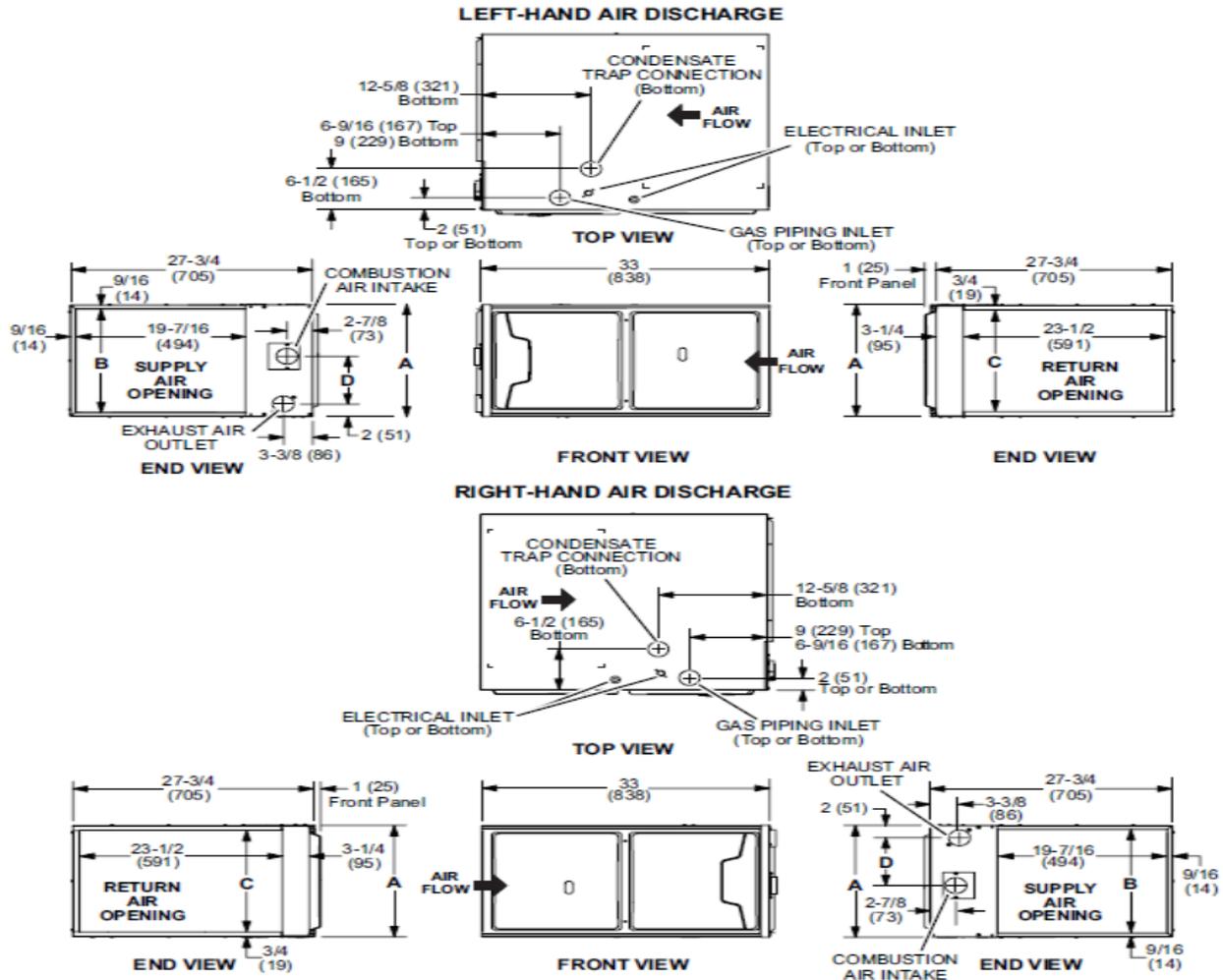
Model Number	C35/CX35 Cased				C35 Uncased			
	A		B		A		B	
	in.	mm	in.	mm	in.	mm	in.	mm
C35/CX35-18/24B	16-1/2	419	49-1/2	1257	14-1/8	359	47-1/8	1197
C35/CX35-24B	18-1/2	470	51-1/2	1308	16-3/8	416	49-3/8	1254
C35/CX35-30B	22-1/2	572	55-1/2	1410	20-3/4	527	53-3/4	1365
C35/CX35-30/36B	24-1/2	622	57-1/2	1461	22-1/4	565	55-1/4	1403
C35/CX35-30/36C								
C35/CX35-36B	24-1/2	622	57-1/2	1461	22-3/8	568	55-3/8	1407
C35/CX35-48B	27-1/2	699	60-1/2	1537	26-1/4	667	59-1/4	1505
C35/CX35-48C								
C35/CX35-49C	29-1/2	749	62-1/2	1588	28-1/2	724	61-1/2	1562
C35/CX35-50/60C	27-1/2	699	60-1/2	1537	25-7/8	657	58-7/8	1495
C35/CX35-60C	31-1/2	800	64-1/2	1638	30-5/8	778	63-5/8	1616
C35/CX35-60D	29-1/2	749	62-1/2	1588	28	711	61	1549



HORIZONTAL POSITION

Model Number	CH35/CHX35			
	A		B	
	in.	mm	in.	mm
CH35/CHX35-24B	26-1/2	673	59-1/2	1511
CH35/CHX35-30B				
CH35/CHX35-36B				
CH35/CHX35-36C				
CH35/CHX35-42C				
CH35/CHX35-48C	31-1/2	880	64-1/2	1638
CH35/CHX35-42B				
CH35/CHX35-48B				
CH35/CHX35-51C				
CH35/CHX35-60D				

DIMENSIONS - UNIT - HORIZONTAL POSITION



Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
ML196UH030XE36B ML196UH045XE36B ML196UH070XE36B ML196UH070XE48B	17-1/2	446	16-3/8	416	16	406	7-5/8	194
ML196UH090XE36C ML196UH090XE48C ML196UH090XE60C ML196UH110XE60C	21	533	19-7/8	505	19-1/2	495	9-3/8	238
ML196UH135XE60D	24-1/2	622	23-3/8	594	23	584	11-1/8	283



ComfortSense[®]

4 Heat / 2 Cool Universal Multi-Stage



Project Submittal

Tag: F-7:9, CU-7:9
Condenser: ML14XC1-048-463
Evaporator Coil: CHX35-51/61C-6F
Furnace: ML196UH090XE48C

UNIT OVERVIEW AHRI Reference - 207742097

Voltage	SEER EER	Tons	Gross Cooling Ttl/Sens (MBH)	Net Cooling Ttl/Sens (MBH)	Supply Air Flow (cfm)	ESP/TSP (in.WC)	EAT DB/WB (°F)	LAT DB/WB (°F)
480 Volt 3 Phase / 60Hz	14.25 12	4.0	45.7 / 33.5	43.3 / 31.1	1,299	0.5 / 0.7	80.0 / 67.0	56.0 / 55.7

COOLING

Cooling Performance			Temperatures (DB/WB °F)		
Gross Cooling (Ttl/Sens)	45.7 / 33.5 MBH		Ambient	95.0	95.0
Net Cooling (Ttl/Sens)	43.3 / 31.1 MBH		Entering	80.0	67.0
Coil Moisture Removal	11.46 lb/hr		Leaving – (Coil)	56.0	55.7
			Leaving – (Unit)	57.7	56.3

ARI Performance		Compressors		Refrigerant		Condensate Drain	
ARI Cooling	46.0 MBH	Cooling Stages	Single	Type	R-410A	Qty	2
		Compressor Qty	1	Cond Suction Line	7/8	Size	0.75 in.
				Cond Liquid Line	3/8	Pipe Thread	fpt
				Coil Suction Line	7/8		
				Coil Liquid Line	3/8		

HEATING

Heating Performance		Temperatures (DB/WB °F)		Specifications	
Output	85.6 / MBH	Leaving	61.0	Thermal Efficiency	96.0%
(High/Low)	88.0 / MBH			Gas Line Size	0.5 in.
Input (High/Low)	61.0 °F			Heat Exchange Type	Aluminum
Heat Rise					

VENTILATION

Air Flow (cfm)		Supply Fan		Air Resistance (in.WC)	
Supply	1,299	Nominal Power	0.75hp	Total	0.71
Outdoor	200	Drive Type	ECM Multi Speed Constant Torque	Ext Supply	0.50
		Speed	Medium-Low	Wet Coil	0.21
		Orientation	Upflow/Horizontal		

ELECTRICAL

Condenser		Furnace	
Voltage	480 Volt 3 Phase / 60Hz	Voltage	120V / 1Ph / 60Hz
MCA	8 amp	MCA	LESS THAN 12 amp
MOCP	10 amp	MOCP	15 amp
Condenser Oper Range-Nom Volt	+/- 10%		
Oper Range-Nom Volt	+/- 10%		

ADDITIONAL DATA

Condenser		Furnace		Evaporator Coil	
Dimensions	28.25 in. x 28.25 in. x 37.25 in.	Dimensions	28.75 in. x 21.00 in. x 33.00 in.	Dimensions	31.50 in. x 21.50 in. x 21.00 in.
Total Weight	218 lb	Total Weight	152 lb	Total Weight	70 lb



Project Submittal

Tag:

F-7:9, CU-7:9

Field Installed Accessories

Catalog Number	Qty	Description
17G74	3	CS7500 Comm'I Programmable T-stat w/ FDD Field Installed
93G35	3	Freezestat 3/8 Field Installed
34M72	3	Low Ambient Control (30 Deg) Fan Cycling Field Installed
87L97	3	Air Fltr And Rack Kit Horz (C Width) Field Installed
60L46	3	3" Concentric Vent Kit Field Installed
51W10	3	Furnace Horizontal Suspension Kit Field Installed

Product Features

Cabinet

Heavy gauge galvanized steel cabinet
Non-corrosive drain pan
Fully Insulated heavy gauge steel cabinet
Heavy Gauge Cold Rolled Steel Cabinet

Cooling System

Non Chlorine, Ozone Friendly Refrigerant, R410A
RFC IV Metering Device furnished (easily removed for expansion valve use)
High Pressure Switch (Manual Reset)
Scroll Compressor
Quantum Coil / Fortified aluminum allow tube/enhanced fin coil
Hi-Capacity Drier factory installed in liquid line
Low Pressure Switch
Twin Coils assembled in an "A" configuration
Check and Expansion Valve is factory installed

Heating System

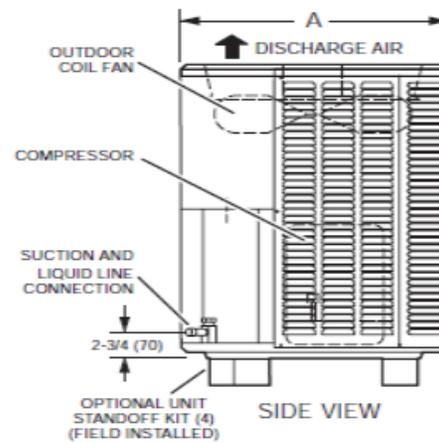
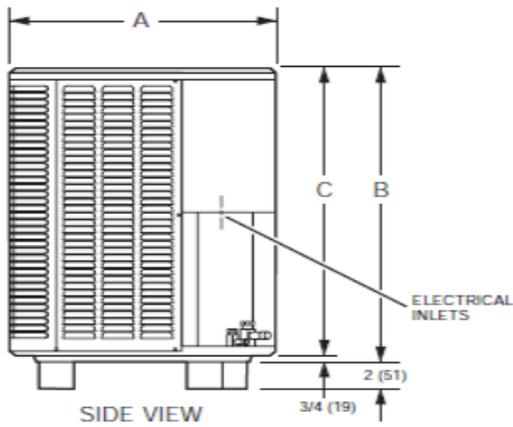
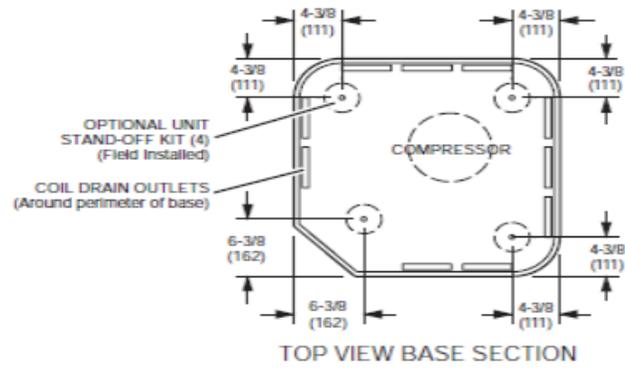
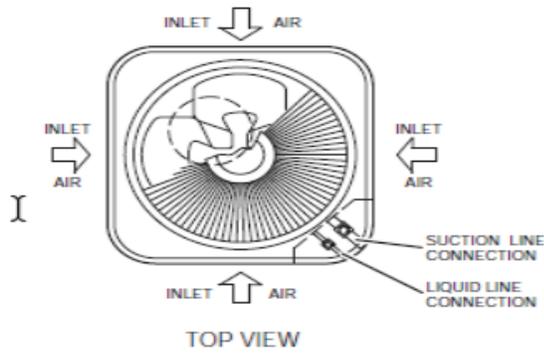
Aluminized Steel Inshot Burners
Aluminized Steel Tubular Heat Exchanger
SureLight(R) Hot Surface Ignition

Warranty

Condenser Limited compressor warranty of 5 years for Residential Installations
Condenser See Limited Warranty Certificate included with unit for details
Condenser Limited compressor warranty of 5 years for Non-Residential Installations
Coil See Limited Warranty Certificate included with unit for details
Coil Limited warranty on all other covered components of 1 year (Comm Use)
Furnace See Limited Warranty Certificate included with unit for details
Furnace Limited warranty on heat exchanger of 20 years
Furnace Limited warranty on all other covered components of 1 year (Comm Use)
Furnace Limited warranty on Surelight ignition control system of 1 Year (Comm Use)

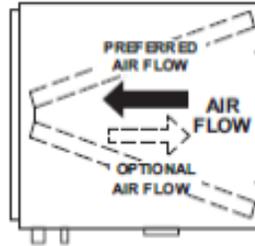


Project Submittal

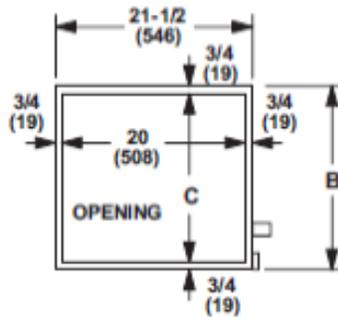


Model	A		B		C	
	inches	mm	inches	mm	inches	mm
018	24-1/4	616	29-1/4	743	28-1/2	724
024	28-1/4	718	29-1/4	743	28-1/2	724
030	28-1/4	718	37-1/4	946	36-1/2	927
036	28-1/4	718	33-1/4	845	32-1/2	826
041	28-1/4	718	37-1/4	946	36-1/2	927
042	28-1/4	718	37-1/4	946	36-1/2	927
047	32-1/4	817	33-1/4	845	32-1/2	826
048	28-1/4	718	37-1/4	946	36-1/2	927
059	32-1/4	817	43-1/4	1099	42-1/2	1080
060	32-1/4	817	43-1/4	1099	42-1/2	1080

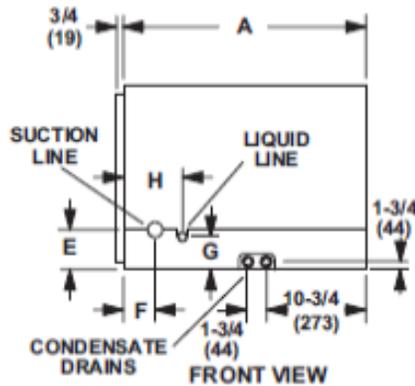
¹ Optional right-hand airflow requires a field fabricated 6 in. (152 mm) spacer in-between the furnace and coil.



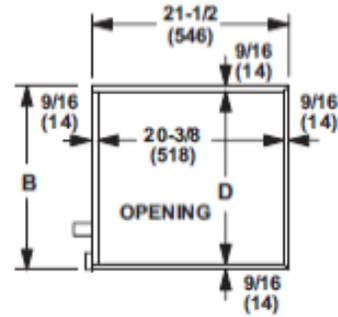
TOP VIEW



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
CHX35-18A-6F	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
CHX35-24A-6F	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
CHX35-24B-6F	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
CHX35-30A-6F	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
CHX35-30B-6F	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
CHX35-36A-6F	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
CHX35-36B-6F	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
CHX35-36C-6F	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
CHX35-42B-6F	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
CHX35-42C-6F	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
CHX35-48B-6F	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
CHX35-48C-6F	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
CHX35-51/61C-6F	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
CHX35-60D-6F	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

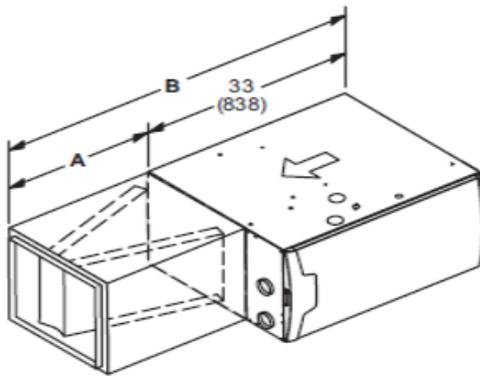
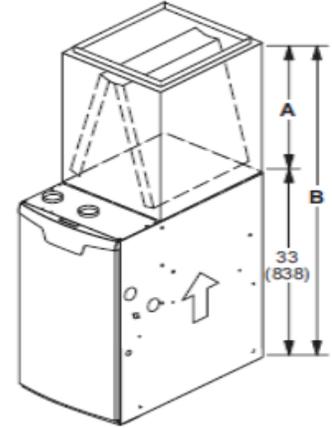


Project Submittal

DIMENSIONS - FURNACE/COIL COMBINED DIMENSIONS

UPFLOW POSITION

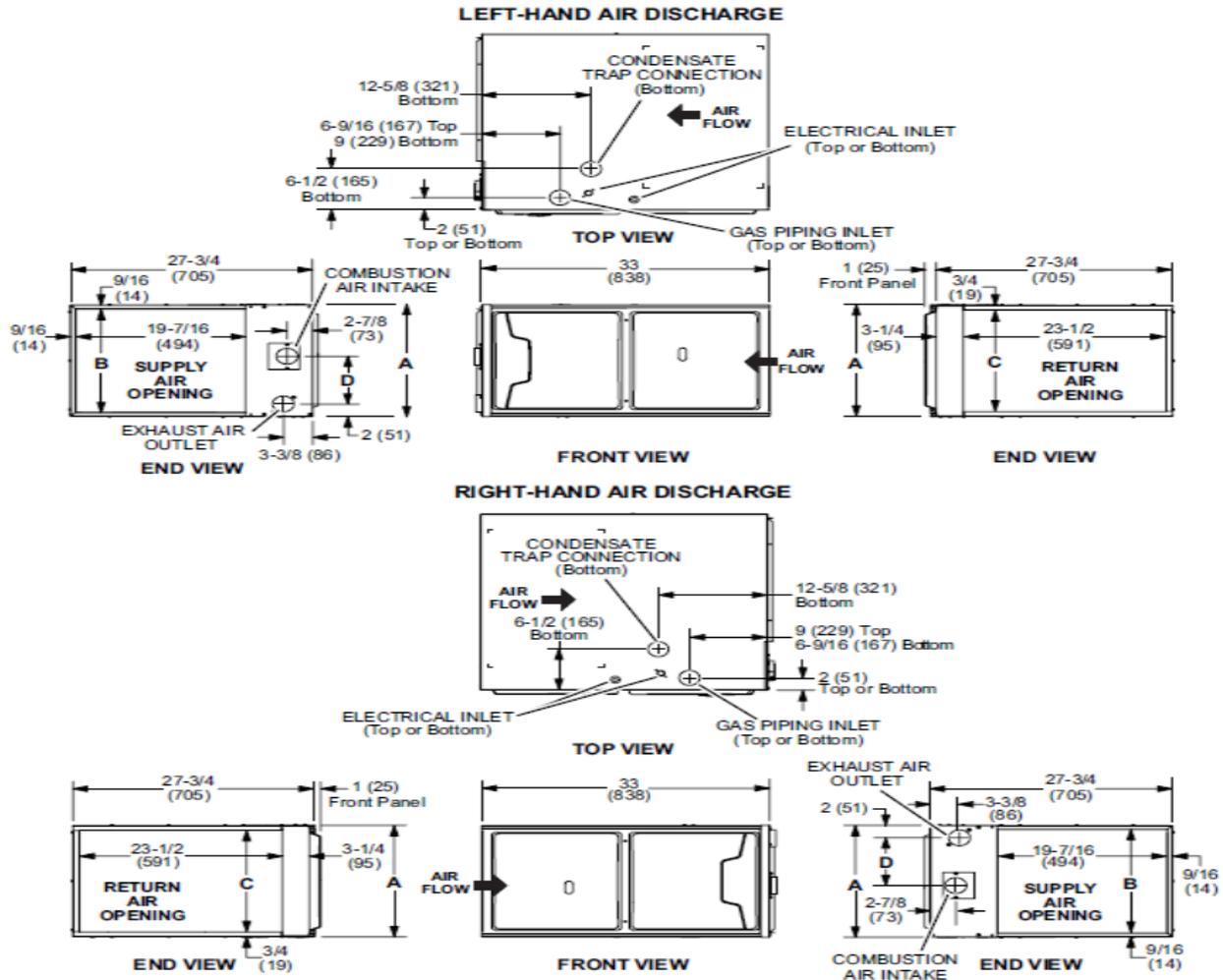
Model Number	C35/CX35 Cased				C35 Uncased			
	A		B		A		B	
	in.	mm	in.	mm	in.	mm	in.	mm
C35/CX35-18/24B	16-1/2	419	49-1/2	1257	14-1/8	359	47-1/8	1197
C35/CX35-24B	18-1/2	470	51-1/2	1308	16-3/8	416	49-3/8	1254
C35/CX35-30B	22-1/2	572	55-1/2	1410	20-3/4	527	53-3/4	1365
C35/CX35-30/36B	24-1/2	622	57-1/2	1461	22-1/4	565	55-1/4	1403
C35/CX35-30/36C								
C35/CX35-36B	24-1/2	622	57-1/2	1461	22-3/8	568	55-3/8	1407
C35/CX35-48B	27-1/2	699	60-1/2	1537	26-1/4	667	59-1/4	1505
C35/CX35-48C								
C35/CX35-49C	29-1/2	749	62-1/2	1588	28-1/2	724	61-1/2	1562
C35/CX35-50/60C	27-1/2	699	60-1/2	1537	25-7/8	657	58-7/8	1495
C35/CX35-60C	31-1/2	800	64-1/2	1638	30-5/8	778	63-5/8	1616
C35/CX35-60D	29-1/2	749	62-1/2	1588	28	711	61	1549



HORIZONTAL POSITION

Model Number	CH35/CHX35			
	A		B	
	in.	mm	in.	mm
CH35/CHX35-24B	26-1/2	673	59-1/2	1511
CH35/CHX35-30B				
CH35/CHX35-36B				
CH35/CHX35-36C				
CH35/CHX35-42C				
CH35/CHX35-48C	31-1/2	880	64-1/2	1638
CH35/CHX35-42B				
CH35/CHX35-48B				
CH35/CHX35-51C				
CH35/CHX35-60D				

DIMENSIONS - UNIT - HORIZONTAL POSITION



Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
ML196UH030XE36B ML196UH045XE36B ML196UH070XE36B ML196UH070XE48B	17-1/2	446	16-3/8	416	16	406	7-5/8	194
ML196UH090XE36C ML196UH090XE48C ML196UH090XE60C ML196UH110XE60C	21	533	19-7/8	505	19-1/2	495	9-3/8	238
ML196UH135XE60D	24-1/2	622	23-3/8	594	23	584	11-1/8	283



ComfortSense[®]

4 Heat / 2 Cool Universal Multi-Stage



Project Submittal

Tag: UH-1
Unit Heater / Duct Furnace: LF25-105A

Unit Heater / Duct Furnace			
Voltage	V / 1Ph	Dimensions	29.00 in. x 28.88 in. x 23.00 in.
Unit Type	UNIT	Total Weight	120 lb
Heat Size	105K	Thermal Efficiency	83.0%
Output	87.7 MBH	Gas Line Size	0.5 in.
Input	105.0 MBH		



Project Submittal

Tag: UH-1

Field Installed Accessories

Catalog Number	Qty	Description
51M32	1	LN COMFORTSENSE 3000 L3011C Tstat Field Installed

Product Features

Cabinet

Burner Assembly is removable from the unit as a single component

Heating System

Aluminized Steel Tubular Heat Exchanger

Solid State Electronic Direct Spark Ignition Control. Spark is intermittent and occurs only when required.

Aluminized Steel Inshot Burners

Warranty

Furnace See Limited Warranty Certificate included with unit for details

Furnace Limited warranty on aluminized heat exchanger of 10 years

Furnace Limited warranty on solid-state ignition modules of 3 years

Furnace Limited warranty on all other covered components of 1 year (Comm Use)

DIGITAL NON-PROGRAMMABLE THERMOSTATS



- One-Stage Heating / Cooling Conventional Systems
- Intuitive Interface
- Automatic Changeover
- Backlit Display
- Simple Up and Down Temperature Control.





SPECIFICATIONS

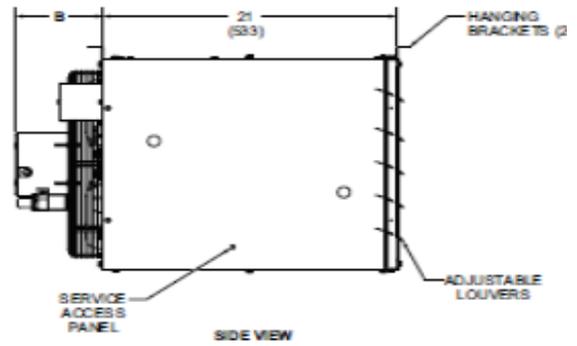
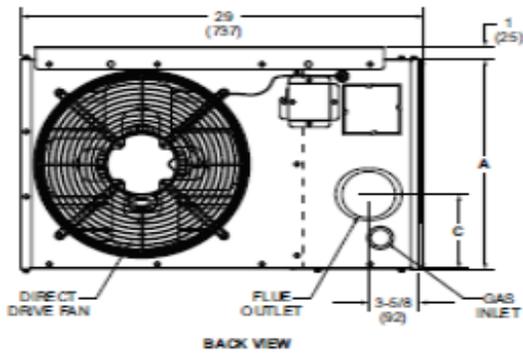
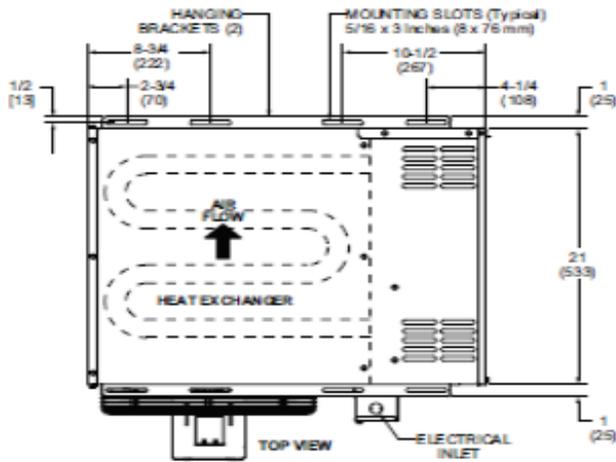
Gas Heating Performance		Model No.	LF25-030A	LF25-045A	LF25-060A	LF25-075A	LF25-090A	LF25-105A
Heating Capacity Input Btuh			30,000	45,000	60,000	75,000	90,000	105,000
Heating Capacity Output Btuh - Natural			25,020	37,665	50,220	62,550	75,420	87,675
Steady State Efficiency - Natural			83.4%	83.7%	83.7%	83.4%	83.8%	83.5%
Temperature rise - °F			37	52	47	65	43	59
Connections in.	Flue size (round)		4	4	4	4	4	4
	Gas Piping Size - in.		1/2	1/2	1/2	1/2	1/2	1/2
Fan Data	Number of fans		1	1	1	1	1	1
	Fan Diameter - in.		10	10	14	14	16	16
	Number of blades		4	4	4	4	4	4
	Motor Output - hp		1/25	1/25	1/15	1/15	1/10	1/10
	rpm		1550	1550	1075	1075	1075	1075
	Air Volume - cfm		625	665	1000	1200	1600	1500
Air throw at 8 ft. mounting height - ft.			27	29	34	41	46	43
Weight Data	Net Weight - lbs. (kg)		55 (25)	60 (27)	85 (39)	90 (41)	115 (52)	120 (54)
	Shipping Weight - lbs. (kg)		60 (27)	65 (29)	90 (41)	95 (43)	120 (54)	125 (57)

ELECTRICAL DATA

Voltage		115 volts - 60 hertz - 1 phase					
Fan motor full load amps		2.0	2.0	2.0	2.0	2.0	3.0
Maximum overcurrent protection		15	15	15	15	15	15



Project Submittal



Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
LF25-030A LF25-045A	12-3/8	314	6-1/2	165	3-7/8	98
LF25-060A LF25-075A	17-1/2	445	6-1/4	159	6-1/8	156
LF25-090A LF25-105A	23	584	7-7/8	200	9-1/8	232



1 Heat / 1 Cool Single Stage
2 Heat / 1 Cool Multi-Stage or Heat Pump



Project Submittal

Tag: Miscellaneous Items

Miscellaneous Items

Tag	Catalog Number	Qty	Description
D-1	Y6455	1	H/C HCWHD3-130 Whole Home Dehumidifier