



COMMERCIAL SPLIT - SYSTEM EVAPORATOR UNIT

MODEL: WIAXF-120CS4(2)
Nominal 10-ton Capacity
with Two 5-ton circuits.

MODEL: WIAXF-090CS4(2)
Nominal 7.5-ton Capacity
with Two 4-ton circuits.



DESCRIPTION

This completely assembled, dual circuit evaporator blower includes a well-insulated cabinet, a DX cooling coil with copper tubes and aluminum fins, two TXVs, two distributors, cleanable filters, a centrifugal blower, a blower motor, an adjustable belt drive, a blower motor contactor, a small holding charge of refrigerant-R410A and a 24-volt control transformer.

The unit is shipped in the vertical position ready for field installation. For horizontal mounting, reverse the solid bottom panel and the return air duct flange on the front of the unit.

FEATURES

- 1. Flexible installation** - Horizontal installation as default, Vertical installation is available
- 2. Fan & Motor** - Fans are forward curve double inlet double width centrifugal type, statically and dynamically balanced, mounted on a single heavy duty shaft with permanently lubricated bearings and driven by V-belt with an adjustable variable pitch motor pulley. The motor is a totally enclosed fan cooled and wired to unit control panel.
- 3. Control Panel** - The evaporator unit is provided with waterproof control panel enclosure comparing all electrical control devices except for field supplied room thermostat assembly and shall include: 24-volt control transformer, fan motor contactor and terminal block connectors.
- 4. Washable Filters** - Four (4) grade G3 washable filters are built into the unit with easy access and removal for maintenance.
- 5. Evaporator Coil** - The coil is made of unique cross fin coil type with copper tubes mechanically bonded into waffle louver aluminium fins to optimise heat transfer.
- 6. Thermal Expansion Valves** - TXV for R-410A refrigerant is installed as standard for a precise flow of refrigerant to the unit.

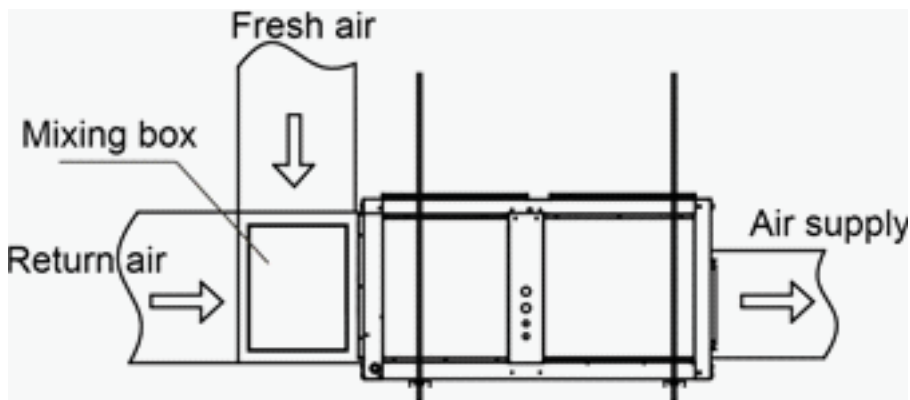
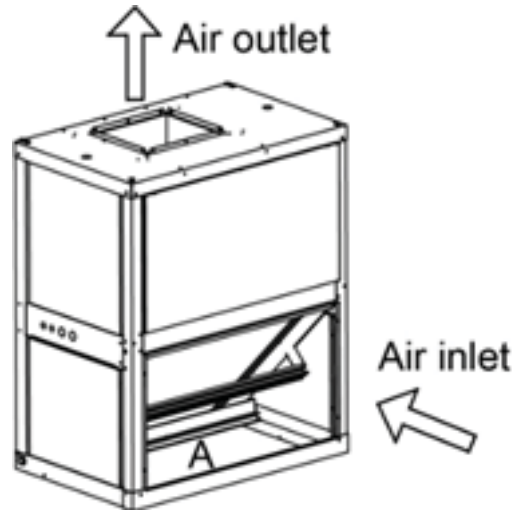
GENERAL SPECIFICATIONS

Model Number			WIAXF-090CS4(2)	WIAXF-120CS4(2)
Power Supply		V-Ph-Hz	208-230V / 3Ph / 60Hz	
Nominal Capacity		Btu/h	90,000	120,000
		Ton	7.5	10
Air Flow @ 0.5 inch WC		CFM	2,500	3,300
Motor		Kw	1.2	1.2
	Rated Current	Amps.	6.1	6.1
		IP Rate	IP 55	IP 55
Fan		Type	Centrifugal	Centrifugal
	Size (DØ x W)	mm	309 x 308	309 x 308
Coil	Fin	Type	Hydrophilic	Hydrophilic
	Tube	Type	Inner Groove	Inner Groove
	Tube Size	mm	7	7
	Face Area	ft ²	8.2	8.2
	No. of Circuit	NOC	10 + 10	10 + 10
	No. of Rows		3	3
Refrigerant		Type	R-410A	R-410A
		Control	TXV	TXV
Filter	Size (L x W)	Inch	21 x 15-7/8	21 x 15-7/8
	Thickness	Inch	3/4	3/4
	Quantity	No.	4	4
Refrigerant Pipe	Liquid	Inch	3/8	3/8
	Gas	Inch	3/4	3/4
Drain Pipe	NPT	Inch	1	1
Dimension	Unit	Inch	54-3/4 x 28-1/3 x 42	54-3/4 x 28-1/3 x 42
	Packing	Inch	58-1/3 x 34-1/3 x 45	58-1/3 x 34-1/3 x 45
Weight	Net	Kgs	170	170
	Gross	Kgs	200	200

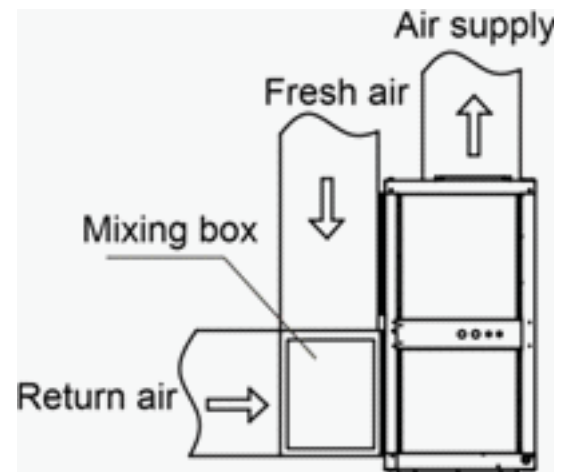
Specifications and illustrations subject to change without notice and without incurring obligations.

APPLICATION FLEXIBILITY

Flexible installation, horizontal installation as default, vertical installation is available. As default, the airflow intake is from the rear of the unit. Then the unit can be installed as horizontal type. When panel A is moved to rear side, the airflow intake is changed to rear-top side. The unit could be installed as vertical type.

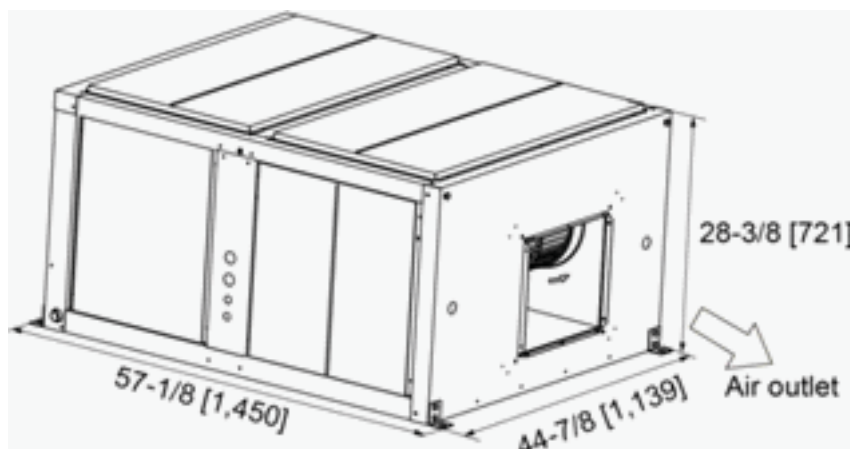


HORIZONTAL POSITION



VERTICAL POSITION

DIMENSION



BLOWER PERFORMANCE DATA

MODEL: WIAXF-090CS4(2)

Air Volume	STATIC PRESSURE EXTERNAL TO UNIT-Inches Water Gauge											
	0.1		0.2		0.3		0.4		0.5		0.6	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600											766	0.72
1650											770	0.74
1700											775	0.76
1750											779	0.78
1800											784	0.81
1850											789	0.84
1900									755	0.79	795	0.86
1950									757	0.81	801	0.88
2000									766	0.84	807	0.88
2050									772	0.86	814	0.91
2100									778	0.9	821	0.94
2150							739	0.83	783	0.93	827	0.97
2200							749	0.88	790	0.96	837	1.02
2250							762	0.92	798	0.98	844	1.05
2300							768	0.95	807	0.99	859	1.09
2350							773	0.99	818	1.04		
2400					740	0.93	780	1.03	827	1.08		
2450					753	0.97	791	1.05	836	1.11		
2500					765	1.01	804	1.07	845	1.15		
2550					772	1.06	811	1.12				
2600					779	1.1	818	1.15				
2650			748	1.03	785	1.14	828	1.17				
2700			764	1.08	794	1.16	840	1.23				
2750			770	1.12	807	1.2	850	1.26				
2800			776	1.16	817	1.24						
2850	746	1.10	783	1.22	827	1.29						
2900	764	1.17	792	1.24								
2950	768	1.23	806	1.28								
3000	771	1.27	818	1.3								
3050	784	1.31	830	1.37								
3100	801	1.34	840	1.43								
3150	811	1.39										
3200	820	1.44										
3250	835	1.51										

B H P: Brake Horsepower

R P M: Blower Speed

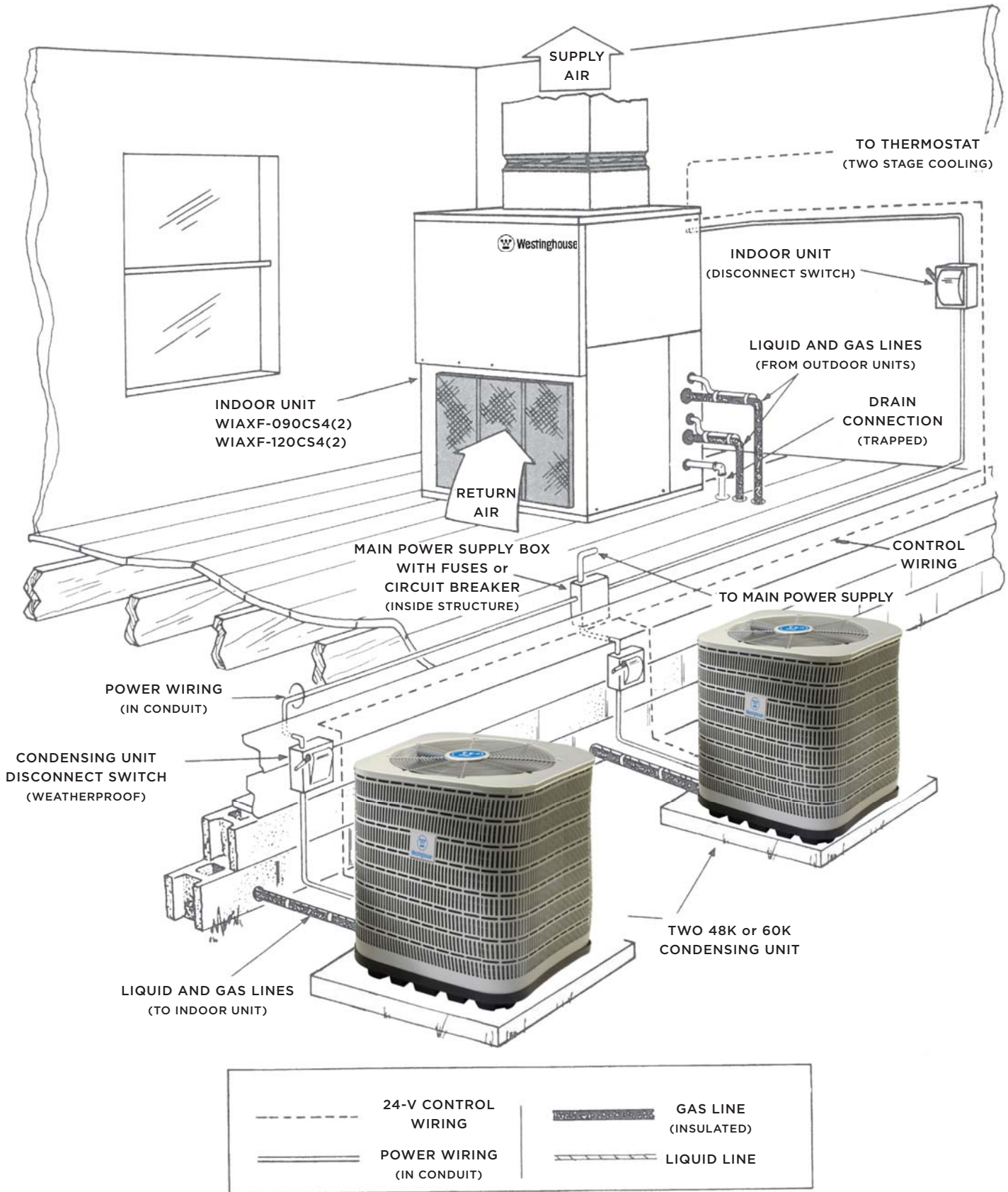
MODEL: WIAXF-120CS4(2)

Air Volume	STATIC PRESSURE EXTERNAL TO UNIT-Inches Water Gauge															
	0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
CFM	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1850																
1900															880	0.96
1950													830	0.9	883	0.98
2000													849	0.93	886	1
2050													852	0.95	888	1.03
2100													854	0.98	891	1.04
2150													859	1.01	895	1.05
2200													865	1.04	903	1.07
2250											826	1.02	874	1.09	905	1.13
2300											840	1.05	883	1.14	913	1.15
2350											848	1.08	890	1.19	919	1.21
2400											856	1.11	895	1.21	926	1.25
2450											864	1.14	899	1.23	933	1.29
2500									832	1.13	876	1.18	903	1.25	937	1.31
2550									837	1.16	886	1.24	910	1.28	945	1.35
2600									852	1.19	892	1.28	917	1.3		
2650									860	1.23	900	1.32	926	1.35		
2700							826	1.21	874	1.29	906	1.34	933	1.39		
2750							839	1.23	884	1.35	912	1.38	940	1.43		
2800							850	1.28	890	1.38	916	1.43				
2850							860	1.32	898	1.42	923	1.47				
2900					828	1.32	871	1.38	901	1.44	931	1.53				
2950					842	1.36	881	1.45	909	1.49	940	1.55				
3000					852	1.4	889	1.49	917	1.53						
3050			822	1.39	865	1.45	897	1.53	927	1.59						
3100			836	1.42	875	1.51	904	1.56	935	1.65						
3150			846	1.47	883	1.54	911	1.63								
3200	820	1.47	857	1.51	891	1.6	921	1.7								
3250	834	1.5	868	1.57	900	1.66	929	1.74								
3300	844	1.54	880	1.65	910	1.71	937	1.78								
3350	855	1.59	893	1.74	920	1.76										
3400	866	1.66	900	1.77	930	1.82										
3450	878	1.74	908	1.8												
3500	888	1.79	918	1.86												
3550	898	1.84	928	1.91												
3600	908	1.9														
3650	918	1.96														
3700	930	2.02														

B H P: Brake Horsepower

R P M: Blower Speed

TYPICAL INSTALLATION



WIAXF INDOOR UNIT WITH TWO 48K or 60K CONDENSING UNITS

WIRING DIAGRAM

CODE	TITLE
TFMR	TRANSFORMER
KM1	CONTACTOR
FAN_IN	INDOOR FAN
XT1	4-WAY TERMINAL
XT2	11-WAY TERMINAL
XT3, XT4	2-WAY TERMINAL
K1, K2	INDOOR PIPE TEMP PROTECTION SWITCH

