

ACUM-L + CADX-L Series

Split Air Conditioners



50Hz



Range 4 TR to 21 TR
(15 kW to 74 kW)



Contents

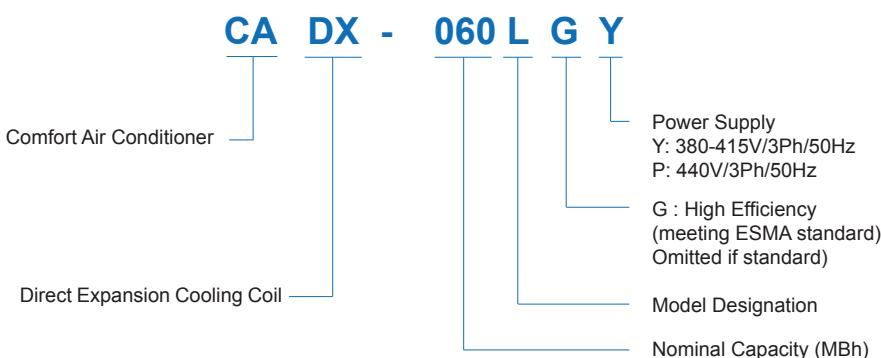
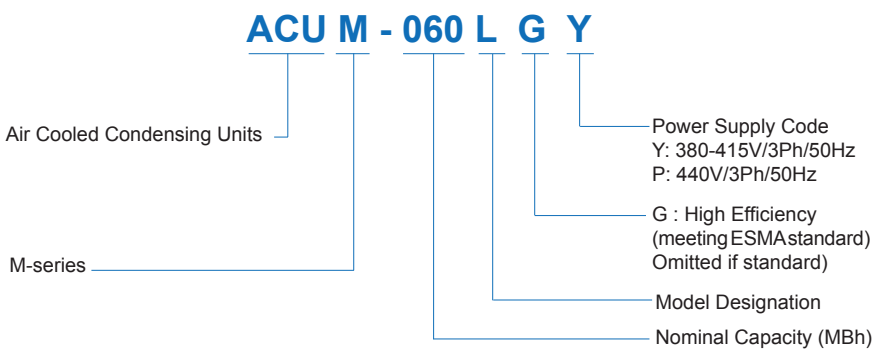
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Legend

The following legends are used throughout this manual:

AFR.....	Air Flow Rate	L/s.....	Liters per second
BPF.....	By Pass Factor	MBh.....	BTUH x 1000
CFM.....	Cubic feet per minute	Pa.....	Pascal
EER.....	Energy Efficiency Ratio	Ph.....	Phase
ESP.....	External Static Pressure	PI.....	Power Input of Compressor
Hz.....	Hertz	RPM.....	Revolutions per Minute
in. wg.....	Inch water gauge	RPS.....	Rated Power Supply
kW.....	Kilowatts	TR.....	Tons of Refrigeration
kg.....	Kilogram	V.....	Volts
lbs.....	Pounds		
EWB.....	Evaporator Wet Bulb air entering temperature		

Nomenclature



Introduction

The new series of SKM air cooled split system air conditioner has been developed to satisfy the needs in air conditioning practices, meet high quality of job requirements every time and to deliver the best in split system performance.

SKM air cooled split air conditioners consist of ceiling suspended indoor air handler (**CADX-L**) matched with floor mounted outdoor air cooled condensing unit (**ACUM-L**) series.

ACUM-L + CADX-L series is also designed to perform as per ESMA regulation to achieve high efficiency levels in Gulf countries.

SKM air cooled split air conditioners available in 14 variations to cover the range from 4 to 21 TR (**15 to 74 kW**) in 50Hz at nominal AHRI conditions. It is suitable to operate in a wide range of ambient temperatures from 50 °F (**10°C**) to 125°F (**51.7°C**), based on specific conditions & model applies.

SKM split units are internally wired and all that is required to be done on site is ducting, refrigerant piping, power wiring for **CADX-L** motor from **ACUM-L**, thermostat wiring and power supply connection which reduces installation work and consequently keeps costs to a minimum. Two independent refrigeration circuits are provided when two compressors are used.

SKM provides qualified service and stock of replacement parts in all major cities of the G.C.C. countries, Egypt, Jordan, and Pakistan. See back cover for details or call SKM.

SKM Air Conditioning LLC



You name it.....We cool it



GENERAL FEATURES

SKM split system air conditioners incorporate many features and benefits in both the air handler and condensing units, which together provides a heavy duty, robust and long lasting commercial unit's application.

SKM split air conditioners combined high efficiency components to provide an extremely rugged and energy efficient split system that will provide cooling with higher efficiency for a long and extended period of time.

SKM split system is **ACUM-L+ CADX-L** is yet another model in the top class range of SKM products which uses the following basic components:

- High efficiency totally sealed hermetic scroll compressors utilizing the most current state of the art technology and provides smooth, efficient and quiet operation.
- Totally enclosed, Class F insulated, condenser and evaporator fan motors.
- Heavy duty condenser and evaporator coils optimized and designed for a long life maintenance free operation.
- Cabinet construction specifically for gulf climate condition.
- Electronic control board for the unit operation.
- Factory matched performance and reliable output to minimize field decisions.
- Many standard features which are not included in residential domestic type split systems.
- Typically, much heavier gauge tubing and thicker fins for ruggedness and long life.
- Standard Factory Installed Suction & Liquid Service valves.

COMPONENT FEATURES

ACUM-L CONDENSING UNIT

Compressor

Compressors used in the **ACUM-L** series condensing units are hermetically sealed, hi-efficiency, low noise, and compact scroll with the following features:

- High efficiency.
- Quiet operation, low sound levels.
- Better debris handling.
- Self compensating of wear ("wear-in vs. wear-out").
- 70% fewer moving parts than comparably sized reciprocating compressors.
- Internal motor protection / Advanced scroll temperature protection.
- Suction gas motor cooling.
- Suction screen.
- Disc type check valve.
- Centrifugal force for oil lubrication.
- Brazed fittings as standard, rotalock as an option.

Condenser Coils

Condenser coils are manufactured from corrugated aluminium fin and Hi-X seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All coils are tested against leakage by air pressure 525psig (3620 kPa) under water. An integral subcooling circuit is incorporated in the lower section of the condenser to increase system capacity. The additional condenser surface provides more cooling using less energy at no additional cost.

Condenser Fans

Condenser fans are propeller type with aluminium alloy blades and are directly driven by electric motors. Motors are Totally Enclosed Air Over (TEAO), six pole or four pole with Class F insulation and minimum IP-54 protection. The TEAO and Class F insulation features ensure long life and are unique to SKM.

Motors are wired to the control panel to control the operation of these motors along with the compressors.

Control Panel

The **ACUM-L** condensing are provided with IP-54 control panel enclosure comprising all starting, operating and safety controls. The panel is factory wired in accordance with NEC 430 & 440, labelled, tagged and features 220V / 240V controls.

- Starting contactors for compressors and motors.
- Internal overload protection for compressors.
- Internal OR External overload protection for the motors (depending on the model).
- Electronic control board for unit operation.
- Diagnostic LEDs on the control board for easy troubleshooting .
- Compressor short cycling protection.
- Control switch for unit on/off.
- Control circuit breaker.
- Power and control circuit terminal blocks.
- High pressure protection.
- Low pressure protection.
- Starter (contactor & overload relay) for **CADX-L** evaporator fan motor.

(Power wiring from **ACUM-L** control panel to **CADX-L** motor to be done at site by others)

Unit Casing

The unit casing used in the **ACUM-L** condensing unit is made of zinc coated galvanised steel sheets conforming to JIS-G 3302 and ASTM A653 which is phosphatized and baked after an electrostatic powder coating in RAL7032 color scheme of approximately 60 microns. This finish and coating can pass a 1000 hour in 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117.

CADX AIR HANDLING UNIT

Evaporator Coils

All evaporator coils are made from seamless copper tubes mechanically bonded into corrugated aluminum fins to ensure optimum heat transfer. Coils conform to AHRI-410. All evaporator coils are tested against leakage by air pressure of 300 psig (2068 kPa) under water. Each evaporator coil is supplied with a factory sized and matched thermostatic expansion valves and 4 mounting holes for ceiling suspension.

Evaporator Fan & Drive

Evaporator fans are forward curved centrifugal double inlet, double width, statically and dynamically balanced. Bearings used in the fans are self aligning and lubricated for life. Evaporator fans are belt driven and use "V" belts with an adjustable variable pitch motor pulley resulting in an accurate fan air flow adjustment.

Fans are driven by Totally Enclosed, IP55 Protected, 4 Pole Class F insulated electric motors which conform to relevant IEC standards.

Filter

All CADX-L units are supplied as standard with 1" (25mm) thick permanent washable expanded aluminum flat filter having average dust arrestance 54% according to ASHRAE standard 52-76.

Casing \ Structure (CADX-L):

The unit casing for CADX-L is made of zinc coated galvanized steel sheets conforming to JIS-G3302 and ASTM A653 which is phosphatized and baked after an electrostatic powder coating in RAL7032 color scheme of approximately 60 microns. This finish and coating can pass a 1000 hour in 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117. Panels and casing are insulated with 1" (25mm) thick fiberglass (with BGT coating) thermal and acoustic insulation having density of 2 lb/ft³. (32 kg/m³) and thermal conductivity of 0.23 BTU.in/ft²°Fh (0.033 W/m²K). Insulation meets the requirements of NFPA 90A and 90B for fire resistance.

OPTIONAL FEATURES

Alternative Condenser Material

"Made of copper tubes and alternative fin material and/or protective coating

- Pre Coated aluminum fins (FAP).
- Aluminum Fins with Aeris post Coat Protection (FAA).
- Copper Fins (FC).
- Copper Fins with Aeris post Coat Protection (FCA).

Double Skin Insulation (DSI)

Inner skin in the evaporator section is provided with foam board insulation.

2" (50mm) Flat Filter Section (FSIP2)

For heavy filtration need a section can be provided without or with aluminium cleanable filter.

Alternate Evaporator Material

Made of copper tubes and alternative fin material and/or protective coating

- Pre Coated aluminum fins (EFAP).
- Aluminum Fins with Aeris post Coat Protection (EFAA).
- Copper Fins (EFC).
- Copper Fins with Aeris post Coat Protection (EFCA).

Stainless Steel Drain Pan (Grade 304) (SDP)

Stainless steel drain pan(Grade 304). Insulation under drain pan as per SKM standard.

Stainless Steel Drain Pan (SSP)

Heavy gauge 316 stainless steel drain pan under the entire cooling coil. Insulation under drain pan as per SKM standard.

Up Size Evaporator Motor** (USM)

Unit with one up size evaporator motor.

(Not available for High Efficiency models)

Anti-Freeze Thermostat (AFT)

For evaporator coil freeze -up protection.

Electric Heating (HTR1)

Electric heating batteries are made up of finned heating elements, constructed from high quality 80/20 nickel chrome resistance wire centred in metal tube by compressed magnesium oxide. Helical fins are tightly wound around the tubular heating element.

Heater batteries when ordered comes with stage contactors, primary auto reset thermal safety cut-out, secondary manual reset thermal safety cut-out and air flow switch. Power fuses / circuit breaker are provided for heaters with total ampere exceeding 48 amperes.

For smaller heaters, power fuses can be provided if specified. Control of the heaters will be from the unit cotroller.

Following are the optional kW ratings for electric heater. Ratings other than those specified here can be supplied on request. Consult SKM for details. Following are the optional kW ratings for electric heater. Ratings other than those specified here can be supplied on request. Consult SKM for details.

(Not available for High Efficiency models)

ACUM	CADX	Heater (kW)	Stages
050L	050L	6	1
060L	060L		
070L	070L	7.5	
085L	085L	9	
100L	100L		
110L	120L	12	
120L	120L		
130L	150L	15	
145L	150L		
160L	150L	18	
180L	180L		
205L	180L	24	2
240L	240L		
260L	240L		

Table 1

Western Make Scroll Compressor (WMSC)

Western make scroll compressor.

Compressor Run Hour Meter (RHM)

To monitor operating hours of each compressor.



Circuit Breaker for compressor (CBC)

For those electrical specification which requires additional short circuit and overload protection for the compressors.

Rotalock Valves on compressors (RVC)

For additional facilitation of maintenance of unit.

External Overload Protection (EOP)

For those electrical specification requires additional overload protection for the compressors. **(Not required with CBC option)**

Advanced Micro Processor Control System (AMCS)

An advanced microprocessor based controller can be provided for the units as option, in case required. This controller will be with built-in display keypad and has many features. For this feature, additional options can be provided and to be specified during time of order:

- **DTS – Duct Temperature Sensor ***

(In order to control the unit based on return/supply air duct temperature.) **(This is not required with CHTS Option).**

- **BMSP – BMS Protocol ***

(For interfacing the units with major BMS protocols such as BACnet, Modbus or LON. An extra hardware may be required depending on the protocol)

Pump Down Facility (PD)

The compressor will switch off each time with a Pump Down Cycle in order to prevent Liquid refrigerant migration to the compressor during off Cycle periods.

With this option, each circuit will be provided with an additional discharge check valve (if required) to prevent Refrigerant Migration from High side to Low side when the compressor is off.

Applicable for models from ACUM -050LG to 260LG

Hot Gas Bypass System (GBP)

With solenoid to enable operation of a large sized unit at very low loads, during low load demand due to application requirements or where unit is selected to work on 100% fresh air applications.

Liquid Line Controls (CRSP)

Refrigeration specialties comprising solenoid valve, filter drier, sight glass and ball valve. Factory sizing and selection ensures correctly sized and selected components to complete the field installation.

Extra Ball Valve (XFV)

Extra ball valve can be incorporated in the liquid line.

Pressure relief valve (PRV)

To protect the unit from being over - pressurized.

Pressure Gauges (SDG1)

Suction and discharge indication of each refrigerant circuit. Gauges mounted outside the Control Panel.

Manual Reset Type High Pressure Switch (MHP)

To replace standard auto reset, capsule type pressure switch.

Main Isolator (without door interlock) (ISO)

For main power isolation. **(consult SKM)**

IP 55 Control Panel (ICP)

Control Panel for special applications to meet IP55 requirements.

Condenser Coil Guard (CGP)

Wire mesh guard, in painted finish for condensers coils. Recommended on ground level installation where coil needs to be protected against vandalism.

Circuit breaker for Motors** (CBM)

For those electrical specification which requires additional short circuit and overload protection for the fan motors.

Control Transformer (CXT)

This option is necessary and available for unit models rated for 440V/3PH/50Hz or power supplies without neutral. When ordering for these voltages, this option must be ordered.

(Not available for High Efficiency models)

BMS Interface Volt Free Contacts (BMVF)

Volt free contacts for run status, common fault status, auto modestatus and provision for remote on/off shall be provided as option.

For other volt-free contact requirements, please contact SKM.

Voltage Monitor Module (VMM)

Provides protection in the event of:

- Phase burn-out.
- Phase reversal.
- Under / over voltage on the incoming line voltage.

Voltage Monitoring Module as per DEWA (DVM)

Under voltage relay as per DEWA regulations. This option is available for Dubai, UAE only. **(VMM option is not required if this option is opted)**

Options for Field Installation

Low Voltage Thermostat (CHTS)

For wall mounting and for cooling /heating operation with 1 or 2 stages as per model. **(Not required with AMCS option).**

Pump Down Facility with solenoid valve (PDS)

The compressors will switch off each time with a Pump down Cycle in order to prevent Liquid refrigerant migration to the compressor during Off Cycle periods.

Applicable for models from 050L up to 260L. **(Not applicable for High efficiency model)**

Note:

1. * DTS and BMSP options are only available along with AMCS Option.
2. ** If CBM combined with USM option please consult SKM as component might changed.
3. Whenever multiple options related to unit control, please consult SKM for the drawings, as the size of the control panel might change.
4. Solenoid valve is provided as standard feature for High Efficiency models.

CONDENSING UNIT SPECIFICATIONS

Condensing Unit	ACUML	050L	060L	070L	085L	100L	110L	120L	
Matched Air Handling Unit	CADXL	050L	060L	070L	085L	100L	120L	120L	
Cooling Capacity (1)	MBh	48.7	61.6	69.7	82.2	93.5	110.8	121.6	
	kW	14.3	18.1	20.4	24.1	27.4	32.5	35.6	
Cooling Capacity (2)	MBh	44.8	56.5	63.9	75.5	86.3	102.0	111.7	
	kW	13.1	16.5	18.7	22.1	25.3	29.9	32.7	
Capacity Steps	%	100-0	100-0	100-0	100-0	100-0	100-50-0	100-50-0	
Compressor	Type	Hermetic - Scroll							
	Qty.	1	1	1	1	1	2	2	
Outdoor Coil	Type	Corrugated Fins and Hi-X tubes 3/8" OD							
	Qty.	1	1	1	1	1	2	2	
	Face Area	ft ²	20	26.7	26.7	26.7	26.7	40	40
		m ²	1.86	2.48	2.48	2.48	2.48	3.72	3.72
No. Refrigerant Circuits		1	1	1	1	1	2	2	
Connections (3)	Liquid	in	1/2	1/2	1/2	1/2	1/2 (x2)	1/2 (x2)	
	Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	7/8 (x2)	7/8 (x2)
Outdoor Fan	Type	Propeller Direct Drive							
	Code/Qty	550 / 1	710 / 1	710 / 1	710 / 1	710 / 1	550 / 2	630 / 2	
Motor	Type	Totally Enclosed Air Over, Class-F Insulation, 4-Pole or 6-Pole, IP54 / IP55 protected							
Refrigerant Operating Charge R-22 (4)	lbs	6.9	8.6	8.6	13.9	14.3	22.1	22.1	
	kg	3.1	3.9	3.9	6.3	6.5	10.0	10.0	
Operating Weight Approximate	lbs	321	354	362	446	454	688	708	
	kg	146	161	163	203	207	312	322	

Condensing Unit	ACUML	130L	145L	160L	180L	205L	240L	260L	
Matched Air Handling Unit	CADXL	150L	150L	150L-4	180L	180L	240L	240L	
Cooling Capacity (1)	MBh	128.5	140.7	151.2	167.5	183.3	226.3	245.2	
	kW	37.7	41.2	44.3	49.1	53.7	66.3	71.9	
Cooling Capacity (2)	MBh	118.4	129.3	139.0	153.6	169.3	208.3	224.3	
	kW	34.7	37.9	40.7	45.0	49.6	61.0	65.8	
Capacity Steps	%	100-50-0	100-50-0	100-50-0	100-50-0	100-50-0	100-50-0	100-50-0	
Compressor	Type	Hermetic - Scroll							
	Qty.	2	2	2	2	2	2	2	
Outdoor Coil	Type	Corrugated Fins and Hi-X tubes 3/8" OD							
	Qty.	2	2	2	2	2	2	2	
	Face Area	ft ²	40	40	40	40	48	54.7	54.7
		m ²	3.72	3.72	3.72	3.72	4.5	5.1	5.1
No. Refrigerant Circuits		2	2	2	2	2	2	2	
Connections (3)	Liquid	in	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	5/8 (x2)	5/8 (x2)
	Suction	in	7/8 (x2)	7/8 (x2)	7/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	1 1/8 (x2)
Outdoor Fan	Type	Propeller Direct Drive							
	Code/Qty	630 / 2	630 / 2	710 / 2	710 / 2	710 / 2	800 / 2	800 / 2	
Motor	Type	Totally Enclosed Air Over, Class-F Insulation, 4-Pole or 6-Pole, IP54 / IP55 protected							
Refrigerant Operating Charge R-22 (4)	lbs	22.1	22.3	22.9	23.1	25.5	31.7	31.7	
	kg	10.0	10.1	10.4	10.5	11.6	14.4	14.4	
Operating Weight Approximate	lbs	708	712	780	860	946	996	1000	
	kg	322	324	354	390	430	452	454	

Table 2

Notes:

- (1) The capacity ratings are based on AHRI standard 210/240 & 340/360. Evaporator entering air conditions of 80°F/67°F (26.7°C/19.5°C) dry bulb / wet bulb and condenser entering air temperature of 95°F (35°C) dry bulb.
- (2) Evaporator entering air conditions of 80°F/67°F (26.7°C/19.5°C) dry bulb / wet bulb and condenser entering air temperature of 114.8°F(46°C) dry bulb.
- (3) Connections are based on 25 ft maximum linear distance between the outdoor & indoor unit and 66 ft maximum lift.
- (4) Refrigerant operating charge is for combined condensing unit with the matching air handling unit and 25 ft (7.6m) of interconnecting refrigerant lines.

Capacity for condition (1) & (2) are gross which doesn't include the effect of evaporator fan motor heat.



AIR HANDLING UNIT SPECIFICATIONS

Air Handling Unit	CADXL	050L	060L	070L	085L	100L	120L	120L	
Matched Condensing Unit	ACUML	050L	060L	070L	085L	100L	110L	120L	
Cooling Capacity (1)	MBh	48.7	61.6	69.7	82.2	93.5	110.8	121.6	
	kW	14.3	18.1	20.4	24.1	27.4	32.5	35.6	
Cooling Capacity (2)	MBh	44.8	56.5	63.9	75.5	86.3	102.0	111.7	
	kW	13.1	16.5	18.7	22.1	25.3	29.9	32.7	
Indoor Coil	Type	Hi-X tubes 3/8" OD							
	Face Area	ft ²	4.2	5.8	5.8	6.3	8	8	8
		m ²	0.4	0.5	0.5	0.6	0.7	0.7	0.7
Refrigerant Controls		Thermostatic Expansion Valve(s)							
Connections (3)	Liquid	in	1/2	1/2	1/2	1/2	1/2	1/2 (x2)	
	Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	7/8 (x2)	
Indoor Fan	Type	Centrifugal DIDW Belt Drive							
	Code		10/10	10/10	10/10	12/12	12/12	12/12	
	Air Flow	cfm	1700	2000	2400	2800	3000	3600	
l/s		802	944	1133	1321	1416	1699		
Motor	Type	Totally Enclosed Fan Cooled, Class-F Insulation. 4-Pole, IP55 protected							
	Size / Qty	kW / #	0.55 / 1	0.55 / 1	0.75 / 1	1.1 / 1	1.1 / 1	1.5 / 1	
Operating Weight Approximate	lbs	205	226	226	264	310	333	333	
	kg	93	103	103	119	141	151	151	

Air Handling Unit	CADXL	150L	150L	150L-4	180L	180L	240L	240L
Matched Condensing Unit	ACUML	130L	145L	160L	180L	205L	240L	260L
Cooling Capacity (1)	MBh	128.5	140.7	151.2	167.5	183.3	226.3	245.2
	kW	37.7	41.2	44.3	49.1	53.7	66.3	71.9
Cooling Capacity (2)	MBh	118.4	129.3	139.0	153.6	169.3	208.3	224.3
	kW	34.7	37.9	40.7	45.0	49.6	61.0	65.8
Indoor Coil	Type	Hi-X tubes 3/8" OD						
	Face Area	ft ²	11.7	11.7	11.7	14.2	14.2	19.4
		m ²	1.1	1.1	1.1	1.3	1.3	1.8
Refrigerant Controls		Thermostatic Expansion Valve(s)						
Connections (3)	Liquid	in	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	5/8 (x2)
	Suction	in	7/8 (x2)	7/8 (x2)	7/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	1 1/8 (x2)
Indoor Fan	Type	Centrifugal DIDW Belt Drive						
	Code		15/15	15/15	15/15	12/12 R2	12/12 R2	15/15 R2
	Air Flow	cfm	4200	4800	4800	5800	6200	8000
l/s		1982	2265	2265	2737	2926	3775	
Motor	Type	Totally Enclosed Fan Cooled, Class-F Insulation. 4-Pole, IP55 protected						
	Size / Qty	kW / #	1.5 / 1	1.5 / 1	1.5 / 1	2.2 / 1	2.2 / 1	2.2 / 1
Operating Weight Approximate	lbs	442	442	458	470	470	641	641
	kg	200	200	208	213	213	291	291

Table 3

Notes:

- (1) The capacity ratings are based on AHRI standard 210/240 & 340/360. Evaporator entering air conditions of 80°F/67°F (26.7°C/19.5°C) dry bulb / wet bulb and condenser entering air temperature of 95°F (35°C) dry bulb.
- (2) Evaporator entering air conditions of 80°F/67°F (26.7°C/19.5°C) dry bulb / wet bulb and condenser entering air temperature of 114.8°F(46°C) dry bulb.
- (3) Connections are based on 25 ft maximum linear distance between the outdoor & indoor unit and 66 ft maximum lift.

Capacity for condition (1) & (2) are gross which doesn't include the effect of evaporator fan motor heat.

CONDENSING UNIT SPECIFICATIONS (HIGH EFFICIENCY)

Condensing Unit	ACUML	050LG	060LG	070LG	085L G	100LG	110LG	120LG	
Matched Air Handling Unit	CADXL	060LG	060LG	070L G	100L G	100LG	120LG	120LG	
Cooling Capacity (1)	MBh	46.9	55.4	65.4	74.1	84.1	96.6	107.7	
	kW	13.7	16.2	19.2	21.7	24.7	28.3	31.6	
	EER	8.2	8.3	8.2	8.1	8.3	8.1	8.1	
Capacity Steps	%	100-0	100-0	100-0	100-0	100-0	100-50-0	100-50-0	
Compressor	Type	Hermetic - Scroll							
	Qty.	1	1	1	1	1	2	2	
Outdoor Coil	Type	Corrugated Fins and Hi-X tubes 3/8" OD							
	Qty.	1	1	1	1	1	2	2	
	Face Area	ft ²	27.3	32.0	32.0	32.0	32.0	56.0	56.0
		m ²	2.5	3.0	3.0	3.0	3.0	5.2	5.2
No. Refrigerant Circuits		1	1	1	1	1	2	2	
Connections (2)	Liquid	in	1/2	1/2	1/2	1/2	1/2	1/2 (x2)	
	Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	7/8 (x2)	
Outdoor Fan	Type	Propeller Direct Drive							
	Code/Qty	630 /1	710 /1	710 /1	710 /1	710 /1	630 /2	630 /2	
Motor	Type	Totally Enclosed Air Over, Class-F Insulation. 4-Pole or 6-Pole, IP54/IP55 protected							
Refrigerant Operating Charge R-22 (3)	lbs	20.5	21.7	21.7	23.5	23.5	36.6	36.6	
	kg	9.3	9.8	9.8	10.6	10.6	16.6	16.6	
Operating Weight Approximate	lbs	419	509	509	554	562	872	882	
	kg	190	230	230	252	255	395	400	

Condensing Unit	ACUML	130LG	160LG	180LG	205L G	240LG	260L G	
Matched Air Handling Unit	CADXL	150LG	150LG	180LG	180L G	240L G	240L G	
Cooling Capacity (1)	MBh	117.6	130.5	150.1	166.9	209.2	228.5	
	kW	34.5	38.2	44.0	48.9	61.3	67.0	
	EER	8.3	8.3	8.2	8.1	8.1	8	
Capacity Steps	%	100-50-0	100-50-0	100-50-0	100-50-0	100-50-0	100-50-0	
Compressor	Type	Hermetic - Scroll						
	Qty.	2	2	2	2	2	2	
Outdoor Coil	Type	Corrugated Fins and Hi-X tubes 3/8" OD						
	Qty.	2	2	2	2	2	2	
	Face Area	ft ²	56.0	56.0	56.0	56.0	54.7	54.7
		m ²	5.2	5.2	5.2	5.2	5.1	5.1
No. Refrigerant Circuits		2	2	2	2	2	2	
Connections (2)	Liquid	in	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	5/8 (x2)	
	Suction	in	7/8 (x2)	7/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	
Outdoor Fan	Type	Propeller Direct Drive						
	Code/Qty	710 / 2	710 / 2	710 / 2	710 / 2	800 / 2	800 / 2	
Motor	Type	Totally Enclosed Air Over, Class-F Insulation. 4 pole or 6 pole, IP54 /IP55 protected						
Refrigerant Operating Charge R-22 (3)	lbs	38.0	38.0	40.1	40.1	60.5	60.5	
	kg	17.2	17.2	18.2	18.2	27.4	27.4	
Operating Weight Approximate	lbs	962	963	1054	1056	1331	1331	
	kg	436	437	478	479	604	604	

Table 4

Notes:

- 1) Evaporator entering air conditions of 84.2°F/66.2°F(29.0°C/19.0°C) dry bulb/wet bulb and condenser entering air temperature of 114.8°F(46°C) dry bulb. (Net Capacity)
- 2) Connections are based on 25 ft maximum linear distance between the outdoor & indoor unit and 66 ft maximum lift.
- 3) Refrigerant operating charge is for combined condensing unit with the matching air handling unit and 25 ft (7.6m) of interconnecting refrigerant lines.



AIR HANDLING UNIT SPECIFICATIONS ((HIGH EFFICIENCY))

Air Handling Unit	CADXL	060LG	060LG	070L G	100L G	100LG	120LG	120LG	
Matched Condensing Unit	ACUML	050LG	060LG	070LG	085L G	100LG	110LG	120LG	
Cooling Capacity (1)	MBh	46.9	55.4	65.4	74.1	84.1	96.6	107.7	
	kW	13.7	16.2	19.2	21.7	24.7	28.3	31.6	
Indoor Coil	Type		Hi-X tubes 3/8" OD						
	Face Area	ft ²	5.8	5.8	5.8	8	8	8	8
		m ²	0.5	0.5	0.5	0.7	0.7	0.7	0.7
Refrigerant Controls		Thermostatic Expansion Valve(s)							
Connections (3)	Liquid	in	1/2	1/2	1/2	1/2	1/2	1/2 (x2)	
	Suction	in	7/8	7/8	7/8	1 1/8	1 1/8	7/8 (x2)	
Indoor Fan	Type		Centrifugal DIDW Belt Drive						
	Code		10/10	10/10	10/10	12/12	12/12	12/12	12/12
	Air Flow	cfm	1700	2000	2400	2800	3000	3600	3600
		l/s	802	944	1133	1321	1416	1699	1699
Motor	Type		Totally Enclosed Fan Cooled, Class-F Insulation. 4-Pole, IP55 protected						
	Size / Qty	kW / #	0.55 / 1	0.55 / 1	0.75 / 1	1.1 / 1	1.1 / 1	1.5 / 1	1.5 / 1
Operating Weight Approximate	lbs		236	236	236	324	324	348	348
	kg		107	107	107	147	147	158	158

Air Handling Unit	CADXL	150LG	150LG	180LG	180L G	240L G	240L G	
Matched Condensing Unit	ACUML	130LG	160LG	180LG	205L G	240LG	260L G	
Cooling Capacity (1)	MBh	117.6	130.5	150.1	166.9	209.2	228.5	
	kW	34.5	38.2	44.0	48.9	61.3	67.0	
Indoor Coil	Type		Hi-X tubes 3/8" OD					
	Face Area	ft ²	11.7	11.7	14.2	14.2	19.4	19.4
		m ²	1.1	1.1	1.3	1.3	1.8	1.8
Refrigerant Controls		Thermostatic Expansion Valve(s)						
Connections (3)	Liquid	in	1/2 (x2)	1/2 (x2)	1/2 (x2)	1/2 (x2)	5/8 (x2)	
	Suction	in	7/8 (x2)	7/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	1 1/8 (x2)	
Indoor Fan	Type		Centrifugal DIDW Belt Drive					
	Code		15/15	15/15	12/12 R2	12/12 R2	15/15 R2	15/15 R2
	Air Flow	cfm	4200	4800	5800	6200	8000	8000
		l/s	1982	2265	2737	2926	3775	3775
Motor	Type		Totally Enclosed Fan Cooled, Class-F Insulation. 4-Pole, IP55 protected					
	Size / Qty	kW / #	1.5 / 1	1.5 / 1	2.2 / 1	2.2 / 1	2.2 / 1	2.2 / 1
Operating Weight Approximate	lbs		464	464	495	495	703	703
	kg		211	211	225	225	319	319

Table 5

Notes:

- 1) Evaporator entering air conditions of 84.2°F/66.2°F (29.0°C/19.0°C) dry bulb/wet bulb and condenser entering air temperature of 114.8°F (46°C) dry bulb. (Net Capacity)
- 2) Connections are based on 25 ft maximum linear distance between the outdoor & indoor unit and 66 ft maximum lift.



CAPACITY RATINGS

ACUML + CADXL	AFR			Condenser Entering Air Temperature																													
	cfm	EWB		95°F (35°C)						105°F (40.6°C)						114.8°F (46°C)						118.4°F (48°C)						125°F (51.7°C)					
		/s	°F	°C	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
					MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW		
(BPF)																																	
130L + 150L	3208	62	16.7	113.2	33.2	97.4	28.5	8.4	108.5	31.8	95.3	27.9	9.6	103.0	30.2	93.0	27.3	11.0	100.8	29.6	92.0	27.0	11.4	96.9	28.4	90.4	26.5	12.3					
	1514	67	19.4	122.6	36.9	81.1	23.8	8.6	117.9	34.6	79.3	23.2	9.8	113.1	33.1	77.4	22.7	11.1	111.3	32.6	76.7	22.5	11.6	108.1	31.7	75.5	22.1	12.4					
	0.17	72	22.2	132.7	38.9	64.8	19.0	8.8	127.6	37.4	63.0	18.5	10.0	122.4	35.9	61.2	17.9	11.3	120.5	35.3	60.5	17.7	11.8	116.9	34.3	59.3	17.4	12.6					
	4200	62	16.7	117.4	34.4	111.5	32.7	8.5	111.4	32.7	109.0	31.9	9.7	105.6	30.9	105.6	30.9	11.0	103.5	30.3	103.5	30.3	11.5	99.8	29.3	99.8	29.3	12.3					
	1982	67	19.4	128.5	37.7	91.9	26.9	8.7	123.5	36.2	90.0	26.4	10.0	118.4	34.7	88.1	25.8	11.2	116.5	34.1	87.4	25.6	11.7	113.0	33.1	86.2	25.3	12.5					
	0.2	72	22.2	138.8	40.7	71.5	21.0	8.9	133.3	39.1	69.7	20.4	10.2	127.5	37.4	67.8	19.9	11.5	125.3	36.7	67.1	19.7	11.9	121.5	35.6	65.9	19.3	12.7					
	6417	62	16.7	121.4	36.6	121.4	36.6	8.6	115.9	34.0	115.9	34.0	9.8	110.3	32.3	110.3	32.3	11.1	108.3	31.7	108.3	31.7	11.6	104.7	30.7	104.7	30.7	12.3					
	3028	67	19.4	136.4	40.0	113.2	33.2	8.9	130.9	38.4	111.2	32.6	10.1	124.1	36.4	108.9	31.9	11.4	121.6	35.6	108.0	31.7	11.8	117.2	34.3	106.5	31.2	12.6					
	0.26	72	22.2	146.6	43.0	84.8	24.9	9.1	140.4	41.1	82.9	24.3	10.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	3208	62	16.7	121.8	35.7	101.2	29.7	9.7	116.6	34.2	98.9	29.0	11.0	111.3	32.6	96.5	28.3	12.3	109.3	32.0	95.7	28.0	12.8	105.8	31.0	94.2	27.6	13.6					
145L + 150L	1514	67	19.4	131.3	38.5	84.6	24.8	9.9	126.1	37.0	82.5	24.2	11.2	120.8	35.4	80.4	23.6	12.5	118.9	34.8	79.7	23.4	13.0	115.4	33.8	78.3	23.0	13.8					
	0.17	72	22.2	141.9	41.6	68.0	19.9	10.2	136.4	40.0	66.1	19.4	11.5	130.7	38.3	64.1	18.8	12.8	128.7	37.7	63.4	18.6	13.3	125.1	36.7	62.1	18.2	14.1					
	4800	62	16.7	129.9	38.1	123.9	36.3	9.9	123.0	36.0	121.0	35.5	11.2	116.2	34.1	116.2	34.1	12.4	113.8	33.4	113.8	33.4	12.9	109.7	32.1	109.7	32.1	13.7					
	2265	67	19.4	140.7	41.2	101.4	29.7	10.2	135.1	39.6	99.4	29.1	11.5	129.3	37.9	97.2	28.5	12.8	127.2	37.3	96.5	28.3	13.2	123.5	36.2	95.2	32.9	14.1					
	0.22	72	22.2	151.6	44.4	78.7	23.1	10.3	145.4	42.6	76.7	22.5	11.7	139.1	40.8	74.6	21.9	13.1	136.8	40.1	73.9	21.7	13.6	--	--	--	--	--					
	6417	62	16.7	132.3	38.8	132.3	38.8	10.0	125.7	36.8	125.7	36.8	11.2	119.2	35.0	119.2	35.0	12.5	117.0	34.3	117.0	34.3	13.0	113.0	33.1	113.0	33.1	13.8					
	3028	67	19.4	146.4	42.9	116.6	34.2	10.3	140.4	41.1	114.5	33.6	11.6	134.3	39.4	112.4	32.9	12.9	132.1	38.7	111.6	32.7	13.4	127.8	37.5	110.2	32.3	14.2					
	0.26	72	22.2	157.1	46.1	88.1	25.8	10.4	150.5	44.1	86.0	25.2	11.8	143.8	42.1	84.0	24.6	13.4	141.4	41.5	83.2	24.4	13.9	--	--	--	--	--					
	3208	62	16.7	128.7	37.7	108.6	31.8	9.4	123.4	36.2	106.2	31.1	10.6	117.3	34.4	103.5	30.3	11.9	114.7	33.6	102.3	30.0	12.4	110.2	32.3	100.4	29.4	13.3					
	1514	67	19.4	139.2	40.8	90.9	26.6	9.6	133.9	39.3	88.8	26.0	10.9	128.3	37.6	86.5	25.4	12.2	126.3	37.0	85.7	25.1	12.6	122.6	35.9	84.2	24.7	13.5					
160L + 150L4	0.09	72	22.2	150.3	44.1	73.0	21.4	9.8	144.7	42.4	70.8	20.8	11.0	138.7	40.6	68.8	20.2	12.4	136.4	40.0	68.0	19.9	12.9	132.4	38.8	66.6	19.5	13.8					
	4800	62	16.7	136.0	39.9	134.1	39.3	9.5	129.6	38.0	129.6	38.0	10.8	123.2	36.1	123.2	36.1	12.1	120.8	35.4	120.8	35.4	12.5	116.7	34.2	116.7	34.2	13.4					
	2265	67	19.4	151.2	44.3	111.0	32.5	9.8	145.3	42.6	108.7	31.9	11.0	139.0	40.7	106.4	31.2	12.4	136.5	40.0	105.5	30.9	12.9	131.5	38.5	103.6	30.4	13.8					
	0.12	72	22.2	162.3	47.6	85.6	25.1	9.8	155.7	45.6	83.5	24.5	11.2	148.8	43.6	81.2	23.8	12.8	146.3	42.9	80.4	23.6	13.3	--	--	--	--	--					
	6417	62	16.7	140.5	41.2	140.5	41.2	9.6	134.3	39.4	134.3	39.4	10.9	127.9	37.5	127.9	37.5	12.2	125.5	36.8	125.5	36.8	12.6	121.4	35.6	121.4	35.6	13.5					
	3028	67	19.4	157.6	46.2	128.8	37.8	9.8	149.9	43.9	126.1	37.0	11.1	142.1	41.6	123.4	36.2	12.5	139.3	40.8	122.4	35.9	13.0	134.5	39.4	120.7	35.4	13.9					
	0.14	72	22.2	168.8	49.5	96.9	28.4	9.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	4604	62	16.7	149.0	43.7	132.0	38.7	11.2	142.3	41.7	129.2	37.9	12.7	134.2	39.3	125.7	36.8	14.4	131.1	38.4	124.4	36.5	15.0	125.8	36.9	122.2	35.8	16.0					
	2173	67	19.4	161.3	47.3	109.3	32.0	11.4	154.6	45.3	106.8	31.3	13.0	147.9	43.3	104.3	30.6	14.6	145.4	42.6	103.3	30.3	15.2	141.0	41.3	101.7	29.8	16.2					
	0.19	72	22.2	174.3	51.1	86.5	25.3	11.7	167.3	49.0	84.1	24.6	13.3	160.2	47.0	81.7	23.9	14.9	157.5	46.2	80.8	23.7	15.4	152.7	44.8	79.2	23.2	16.4					
5800	62	16.7	153.7	45.0	144.4	43.5	11.3	145.2	42.6	145.0	42.5	12.8	136.9	40.1	136.9	40.1	14.4	134.0	39.3	134.0	39.3	15.0	129.0	37.8	129.0	37.8	16.0						
180L + 180L	2737	67	19.4	167.5	49.1	121.7	35.7	11.6	160.6	47.1	119.2	34.9	13.1	153.6	45.0	116.6	34.2	14.7	151.1	44.3	115.7	33.9	15.3	146.4	42.9	114.1	33.4	16.3					
	0.22	72	22.2	180.9	53.0	94.4	27.7	11.9	173.4	50.8	91.9	26.9	13.5	165.8	48.6	89.4	26.2	15.0	163.0	47.8	88.5	26.0	15.6	157.9	46.3	86.9	25.5	16.5					
	7792	62	16.7	156.8	45.9	156.8	45.9	11.3	148.8	43.6	148.8	43.6	12.9	140.9	41.3	140.9	41.3	14.5	138.1	40.5	138.1	40.5	15.1	133.2	39.0	133.2	39.0	16.1					
	3677	67	19.4	174.5	51.1	140.5	41.2	11.7	167.2	49.0	138.0	40.4	13.3	159.8	46.8	135.4	39.7	14.9	157.0	46.0	134.4	39.4	15.4	150.9	44.2	132.3	38.8	16.3					
	0.26	72	22.2	187.9	55.1	106.1	31.1	12.1	179.9	52.7	103.6	30.4	13.7	171.7	50.3	101.1	29.6	15.2	168.7	49.5	100.2	29.4	15.8	--	--	--	--	--					
	4604	62	16.7	161.7	47.4	137.5	40.3	12.4	155.4	45.5	134.7	39.5	14.2	148.7	43.6	131.9	38.6	16.1	146.3	42.9	130.8	38.3	16.7	141.9	41.6	129.0	37.8	17.9					
	2173	67	19.4	174.3	51.1	114.4	33.5	12.7	167.8	49.2	111.9	32.8	14.5	161.3	47.3	109.3	32.0	16.3	158.8	46.6	108.4	31.8	16.9	154.4	45.3	106.7	31.3	18.0					
	0.19	72	22.2	188.3	55.2	91.4	26.8	13.0	181.4	53.2	88.9	26.1	14.8	174.3	51.1	86.5	25.3	16.5	171.6	50.3	85.6	25.1	17.1	166.8	48.9	83.9	24.6	18.2					
	6200	62	16.7	169.4	49.7	159.6	46.8	12.6	162.6	47.7	156.8	46.0	14.3	154.1	45.2	153.4	45.0	16.2	151.0	44.3	151.0	44.3	16.8	145.6	42.7								

CAPACITY RATINGS (HIGH EFFICIENCY)

ACUMLG + CADXLG	AFR cfm /s	EWB °F °C		Condenser Entering Air Temperature																													
				95°F (35°C)						105°F (40.6°C)						114.8°F (46°C)						118.4°F (48°C)						125°F (51.7°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI					
				MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW	MBh	kW	MBh	kW	kW					
050LG + 060LG	1146	62	16.7	46.2	13.5	44.4	13.0	3.2	44.2	13.0	43.5	12.8	3.7	42.3	12.4	42.3	12.4	4.1	41.6	12.2	41.6	12.2	4.3	40.3	11.8	40.3	11.8	4.6					
	541	66.2	19.0	50.8	14.9	39.6	11.6	3.3	49.0	14.4	38.8	11.4	3.7	46.9	13.8	38.0	11.1	4.2	46.0	13.5	37.6	11.0	4.4	44.4	13.0	37.0	10.8	4.7					
	0.07	72	22.2	55.7	16.3	32.0	9.4	3.4	53.6	15.7	31.3	9.2	3.8	51.5	15.1	30.5	8.9	4.3	50.6	14.8	30.2	8.8	4.5	49.1	14.4	29.6	8.7	4.8					
	1700	62	16.7	49.5	14.5	49.5	14.5	3.3	47.5	13.9	47.5	13.9	3.7	45.6	13.4	45.6	13.4	4.2	44.8	13.1	44.8	13.1	4.4	43.5	12.7	43.5	12.7	4.7					
	802	66.2	19.0	53.9	15.8	49.1	14.4	3.4	51.6	15.1	48.2	14.1	3.8	49.3	14.5	47.4	13.9	4.2	48.5	14.2	47.0	13.8	4.4	46.9	13.8	46.5	13.6	4.7					
	0.09	72	22.2	60.2	17.6	38.9	11.4	3.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	2292	62	16.7	52.1	15.3	52.1	15.3	3.3	50.0	14.7	50.0	14.7	3.8	49.9	14.6	49.9	14.6	4.3	49.0	14.4	49.0	14.4	4.4	47.4	13.9	47.4	13.9	4.7					
	1082	66.2	19.0	56.1	16.5	56.1	16.5	3.4	53.8	15.8	53.8	15.8	3.8	51.4	15.1	51.4	15.1	4.3	50.5	14.8	50.5	14.8	4.5	48.8	14.3	48.8	14.3	4.8					
	0.11	72	22.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	1597	62	16.7	56.6	16.6	56.6	16.6	3.8	54.4	15.9	54.4	15.9	4.3	51.8	15.2	51.8	15.2	4.8	50.9	14.9	50.9	14.9	5.1	49.1	14.4	49.1	14.4	5.5					
060LG + 060LG	754	66.2	19.0	62.8	18.4	51.1	15.0	3.8	60.6	17.8	50.2	14.7	4.3	57.6	16.9	49.0	14.4	4.9	56.3	16.5	48.5	14.2	5.1	54.2	15.9	47.7	14.0	5.5					
	0.09	72	22.2	68.8	20.2	40.9	12.0	3.9	66.2	19.4	40.0	11.7	4.4	63.4	18.6	39.0	11.4	5.0	62.3	18.3	38.6	11.3	5.2	60.5	17.7	38.0	11.1	5.6					
	2000	62	16.7	58.9	17.3	58.9	17.3	3.8	56.7	16.6	56.7	16.6	4.3	54.1	15.9	54.1	15.9	4.9	53.1	15.6	53.1	15.6	5.1	51.3	15.0	51.3	15.0	5.5					
	944	66.2	19.0	65.1	19.1	57.8	16.9	3.9	62.1	18.2	56.7	16.6	4.4	59.0	17.3	55.5	16.3	4.9	57.9	17.0	55.1	16.1	5.1	55.9	16.4	54.3	15.9	5.5					
	0.1	72	22.2	71.7	21.0	45.6	13.4	3.9	68.8	20.2	44.7	13.1	4.5	65.9	19.3	43.7	12.8	5.1	64.9	19.0	43.3	12.7	5.3	--	--	--	--	--					
	3193	62	16.7	63.5	18.6	63.5	18.6	3.8	61.0	17.9	61.0	17.9	4.3	60.7	17.8	60.7	17.8	5.0	59.6	17.5	59.6	17.5	5.2	57.5	16.9	57.5	16.9	5.6					
	1507	66.2	19.0	68.5	20.1	68.5	20.1	3.9	65.6	19.2	65.6	19.2	4.4	62.5	18.3	62.5	18.3	5.0	61.4	18.0	61.4	18.0	5.2	59.4	17.4	59.4	17.4	5.6					
	0.14	72	22.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	1597	62	16.7	64.3	18.8	60.9	17.8	4.5	61.2	17.9	59.5	17.4	5.1	58.1	17.0	58.1	17.0	5.7	57.0	16.7	57.0	16.7	6.0	54.9	16.1	54.9	16.1	6.4					
	754	66.2	19.0	69.3	20.3	53.8	15.8	4.6	66.8	19.6	52.7	15.5	5.2	64.1	18.8	51.6	15.1	5.9	63.0	18.5	51.2	15.0	6.1	61.2	17.9	50.4	14.8	6.5					
0.09	72	22.2	75.9	22.2	43.4	12.7	4.7	73.2	21.5	42.5	12.4	5.3	70.2	20.6	41.4	12.1	6.0	69.1	20.3	41.0	12.0	6.2	67.1	19.7	40.3	11.8	6.7						
2400	62	16.7	68.0	19.9	68.0	19.9	4.6	65.2	19.1	65.2	19.1	5.2	62.2	18.2	62.2	18.2	5.8	61.1	17.9	61.1	17.9	6.1	59.1	17.3	59.1	17.3	6.5						
1133	66.2	19.0	75.1	22.0	67.3	19.7	4.7	71.6	21.0	66.0	19.3	5.3	68.0	19.2	64.6	18.9	5.9	66.7	19.5	64.1	18.8	6.2	64.4	18.9	63.3	18.5	6.6						
0.12	72	22.2	82.1	24.1	52.8	15.5	4.7	79.0	23.2	51.8	15.2	5.3	75.6	22.2	50.7	14.9	6.1	74.3	21.8	50.3	14.7	6.4	72.0	21.1	49.5	14.5	6.9						
3193	62	16.7	70.8	20.8	70.8	20.8	4.6	68.0	19.9	68.0	19.9	5.2	64.9	19.0	64.9	19.0	5.9	63.8	18.7	63.8	18.7	6.1	61.7	18.1	61.7	18.1	6.5						
1507	66.2	19.0	76.9	22.5	76.9	22.5	4.7	73.6	21.6	73.6	21.6	5.3	70.2	20.6	70.2	20.6	6.0	68.9	20.2	68.9	20.2	6.2	66.6	19.5	66.6	19.5	6.7						
0.14	72	22.2	85.5	25.1	61.1	17.9	4.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
070LG + 070LG	1719	62	16.7	74.5	21.8	68.8	20.2	5.3	70.7	20.7	67.0	19.7	6.1	66.8	19.6	65.3	19.1	6.9	65.4	19.2	64.6	18.9	7.2	63.0	18.5	63.0	18.5	7.7					
	811	66.2	19.0	80.5	23.6	61.0	17.9	5.4	77.3	22.7	59.7	17.5	6.2	74.0	21.7	58.3	17.1	7.0	72.7	21.3	57.8	16.9	7.3	70.5	20.7	56.8	16.7	7.8					
	0.07	72	22.2	88.3	25.9	49.7	14.6	5.6	84.9	24.9	48.4	14.2	6.3	81.3	23.8	47.1	13.8	7.1	80.0	23.5	46.6	13.7	7.4	77.6	22.7	45.7	13.4	7.9					
	2800	62	16.7	80.4	23.6	80.4	23.6	5.4	76.8	22.5	76.8	22.5	6.2	73.1	21.4	73.1	21.4	7.0	71.8	21.0	71.8	21.0	7.3	69.4	20.3	69.4	20.3	7.8					
	1321	66.2	19.0	88.1	25.8	79.6	23.3	5.6	83.8	24.6	78.0	22.9	6.3	79.6	23.3	76.5	22.4	7.1	78.1	22.9	75.9	22.2	7.4	75.4	22.1	74.9	21.9	7.9					
	0.11	72	22.2	97.7	28.6	62.9	18.4	5.8	93.7	27.4	61.6	18.0	6.6	89.4	26.2	60.2	17.6	7.4	--	--	--	--	--	--	--	--	--	--					
	3438	62	16.7	83.1	24.4	83.1	24.4	5.5	79.5	23.3	79.5	23.3	6.2	75.7	22.2	75.7	22.2	7.0	74.3	21.8	74.3	21.8	7.3	71.8	21.0	71.8	21.0	7.8					
	1623	66.2	19.0	90.1	26.4	89.5	26.2	5.6	86.0	25.2	86.0	25.2	6.4	82.0	24.0	82.0	24.0	7.1	80.4	23.6	80.4	23.6	7.4	77.6	22.8	77.6	22.8	7.9					
	0.12	72	22.2	101.1	29.6	70.0	20.5	5.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
	2196	62	16.7	84.3	24.7	81.9	24.0	6.1	80.5	23.6	80.2	23.5	6.9	76.6	22.5	76.6	22.5	7.9	75.3	22.1	75.3	22.1	8.2	72.8	21.3	72.8	21.3	8.8					
085LG + 100LG	1036	66.2	19.0	91.8	26.9	72.5	21.2	6.3	88.3	25.9	71.1	20.8	7.1	84.8	24.9	69.6	20.4	8.0	83.5	24.5	69.1	20.3	8.3	80.9	23.7	68.1	19.9	8.9					
	0.09	72	22.2	100.3	29.4	58.3	17.1	6.4	96.5	28.3	56.9	16.7	7.3	92.5	27.1	55.5	16.3	8.2	91.0	26.7	55.0	16.1	8.5	88.3	25.9	54.0	15.8	9.1					
	3000	62	16.7	88.2	25.9	88.2	25.9	6.2	84.6	24.8	84.6	24.8	7.0	80.9	23.7	80.9	23.7	7.9	79.5	23.3	79.5	23.3	8.2	77.1	22.6	77.1	22.6	8.8					
	1416	66.2	19.0	97.3	28.5	86.0	25.2	6.4	92.7	27.2	84.3	24.7	7.2	88.1	25.8	82.6	24.2	8.1	86.5	25.4	82.0	24.0	8.4	83.6	24.5	80.9	23.7	8.9					
	0.11	72	22.2	106.4	31.2	67.7	19.8	6.6	102.0	29.9	66.2	19.4	7.5	97.4	28.5	64.7	19.0	8.4	95.7	28.0	64.1	18.8	8.7	--	--	--	--	--					
	4392	62	16.7	93.3	27.3	93.3	27.3	6.3	89.5	26.2	89.5	26.2	7.1	85.6	25.1	85.6	25.1	8.0	84.1	24.6	84.1	24.6	8.3	81.5	23.9	81.5	23.9	8.9					
	2073	66.2	19.																														

CAPACITY RATINGS (HIGH EFFICIENCY)

ACUMLG + CADXLG	AFR		Condenser Entering Air Temperature																													
	cfm	EWB	95°F (35°C)						105°F (40.6°C)						114.8°F (46°C)						118.4°F (48°C)						125°F (51.7°C)					
			Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI					
			MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW		MBh	kW	MBh	kW						
(BPF)	°F	°C																														
130LG + 150LG	3208	62	16.7	117.2	34.4	117.0	34.3	7.9	112.1	32.8	112.1	32.8	9.0	106.8	31.3	106.8	31.3	10.3	104.9	30.7	104.9	30.7	10.8	101.4	29.7	101.4	29.7	11.7				
	1514	66.2	19.0	129.0	37.8	103.8	30.4	8.1	124.2	36.4	101.9	29.9	9.2	119.2	34.9	99.8	29.3	10.5	116.7	34.2	98.8	29.0	10.9	112.4	32.9	97.1	28.5	11.8				
	0.09	72	22.2	141.4	41.5	83.3	24.4	8.3	136.3	39.9	81.5	23.9	9.4	130.7	38.3	79.5	23.3	10.7	128.5	37.7	78.7	23.1	11.1	124.6	36.5	77.4	22.7	12.0				
	4200	62	16.7	122.5	35.9	122.5	35.9	8.0	117.5	34.4	117.5	34.4	9.1	112.3	32.9	112.3	32.9	10.4	110.3	32.3	110.3	32.3	10.8	106.8	31.3	106.8	31.3	11.7				
	1982	66.2	19.0	135.1	39.6	120.4	35.3	8.2	128.9	37.8	118.0	34.6	9.3	122.6	35.9	115.7	33.9	10.5	120.4	35.3	114.8	33.7	11.0	116.3	34.1	113.3	33.2	11.8				
	0.11	72	22.2	149.2	43.7	95.1	27.9	8.4	143.4	42.0	93.2	27.3	9.5	137.2	40.2	91.1	26.7	10.8	134.8	39.5	90.3	26.5	11.3	--	--	--	--	--				
	6417	62	16.7	130.7	38.3	130.7	38.3	8.1	125.5	36.8	125.5	36.8	9.2	119.8	35.1	119.8	35.1	10.5	117.8	34.5	117.8	34.5	10.9	119.0	34.9	119.0	34.9	11.9				
	3028	66.2	19.0	141.4	41.4	141.4	41.4	8.3	135.5	39.7	135.5	39.7	9.4	129.3	37.9	129.3	37.9	10.6	127.0	37.2	127.0	37.2	11.1	122.7	36.0	122.7	36.0	11.9				
	0.14	72	22.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
	404	62	16.7	128.3	37.6	121.9	35.7	9.1	122.1	35.8	119.2	34.9	10.3	115.9	34.0	115.9	34.0	11.6	113.6	33.3	113.6	33.3	12.1	109.6	32.1	109.6	32.1	13.0				
160LG + 150LG	1514	66.2	19.0	138.6	40.6	107.7	31.6	9.3	133.4	39.1	105.6	31.0	10.5	127.9	37.5	103.4	30.3	11.8	125.9	36.9	102.5	30.1	12.3	122.1	35.8	101.0	29.6	13.2				
	0.09	72	22.2	151.6	44.4	87.0	25.5	9.5	146.1	42.8	85.0	24.9	10.7	140.2	41.1	82.9	24.3	12.1	138.0	40.4	82.1	24.1	12.6	133.9	39.2	80.6	23.6	13.5				
	4800	62	16.7	135.7	39.8	135.7	39.8	9.3	130.0	38.1	130.0	38.1	10.4	124.1	36.4	124.1	36.4	11.7	121.9	35.7	121.9	35.7	12.2	117.9	34.5	117.9	34.5	13.1				
	2265	66.2	19.0	149.7	43.9	134.4	39.4	9.5	142.6	41.8	131.8	38.6	10.7	135.5	39.7	129.1	37.8	12.0	132.9	38.9	128.1	37.6	12.4	128.3	37.6	126.4	37.0	13.3				
	0.12	72	22.2	163.9	48.0	105.6	30.9	9.5	157.5	46.2	103.4	30.3	10.8	150.7	44.2	101.2	29.7	12.3	148.1	43.4	100.4	29.4	12.9	143.6	42.1	98.9	29.0	13.9				
	6417	62	16.7	141.4	41.5	141.4	41.5	9.4	135.7	39.8	135.7	39.8	10.6	129.5	38.0	129.5	38.0	11.9	127.3	37.3	127.3	37.3	12.3	123.0	36.1	123.0	36.1	13.2				
	3028	66.2	19.0	153.4	45.0	153.4	45.0	9.5	146.8	43.0	146.8	43.0	10.7	139.9	41.0	139.9	41.0	12.1	137.4	40.3	137.4	40.3	12.6	132.9	38.9	132.9	38.9	13.5				
	0.14	72	22.2	170.6	50.0	122.3	35.9	9.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
	404	62	16.7	153.3	44.9	153.3	44.9	10.9	146.1	42.8	146.1	42.8	12.3	138.7	40.6	138.7	40.6	14.0	136.0	39.9	136.0	39.9	14.6	131.3	38.5	131.3	38.5	15.7				
	180LG + 180LG	2173	66.2	19.0	169.2	49.6	141.1	41.4	11.2	162.3	47.6	138.4	40.6	12.7	153.4	45.0	134.9	39.6	14.2	150.2	44.0	133.7	39.2	14.8	144.6	42.4	131.5	38.6	15.8			
0.1		72	22.2	185.2	54.3	112.3	32.9	11.5	177.6	52.1	109.7	32.2	13.0	169.9	49.8	107.0	31.4	14.6	167.0	49.0	106.1	31.1	15.2	161.8	47.4	104.3	30.6	16.2				
5800		62	16.7	159.0	46.6	159.0	46.6	11.0	151.8	44.5	151.8	44.5	12.5	144.5	42.3	144.5	42.3	14.1	141.8	41.6	141.8	41.6	14.7	137.0	40.2	137.0	40.2	15.7				
2737		66.2	19.0	174.6	51.2	160.2	46.9	11.3	166.0	48.6	156.9	46.0	12.7	157.5	46.2	153.7	45.1	14.3	154.5	45.3	152.6	44.7	14.9	149.2	43.7	149.2	43.7	15.9				
0.12		72	22.2	193.1	56.6	126.0	36.9	11.7	185.1	54.2	123.3	36.1	13.2	176.7	51.8	120.6	35.3	14.8	--	--	--	--	--	--	--	--	--	--	--			
7792		62	16.7	165.9	48.6	165.9	48.6	11.1	158.6	46.5	158.6	46.5	12.6	151.1	44.3	151.1	44.3	14.2	148.2	43.4	148.2	43.4	14.8	143.2	42.0	143.2	42.0	15.8				
3677		66.2	19.0	179.8	52.7	179.8	52.7	11.4	171.6	50.3	171.6	50.3	12.9	163.4	47.9	163.4	47.9	14.5	160.3	47.0	160.3	47.0	15.0	154.8	45.4	154.8	45.4	16.0				
0.14		72	22.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
4604		62	16.7	167.5	49.1	165.8	48.6	12.3	159.8	46.8	159.8	46.8	14.0	152.1	44.6	152.1	44.6	15.9	149.4	43.8	149.4	43.8	16.6	144.6	42.4	144.6	42.4	17.7				
205LG + 180LG		2173	66.2	19.0	182.1	53.4	146.4	42.9	12.6	175.3	51.4	143.6	42.1	14.4	168.3	49.3	140.8	41.3	16.1	165.7	48.6	139.8	41.0	16.8	160.7	47.1	137.7	40.4	17.8			
	0.1	72	22.2	199.0	58.3	117.2	34.4	13.0	191.5	56.1	114.5	33.6	14.7	183.6	53.8	111.8	32.8	16.5	180.6	52.9	110.7	32.5	17.2	175.1	51.3	108.9	31.9	18.3				
	6200	62	16.7	174.4	51.1	174.4	51.1	12.5	167.0	49.0	167.0	49.0	14.2	159.6	46.8	159.6	46.8	16.0	156.9	46.0	156.9	46.0	16.6	152.1	44.6	152.1	44.6	17.7				
	2926	66.2	19.0	192.9	56.5	172.7	50.6	12.9	183.5	53.8	169.1	49.6	14.5	174.4	51.1	165.7	48.6	16.3	171.1	50.2	164.5	48.2	16.9	165.3	48.5	162.3	47.6	17.9				
	0.12	72	22.2	210.1	61.6	135.3	39.6	13.3	201.4	59.0	132.4	38.8	15.1	192.3	56.4	129.4	37.9	16.9	189.0	55.4	128.3	37.6	17.6	183.0	53.6	126.3	37.0	18.7				
	7792	62	16.7	179.9	52.7	179.9	52.7	12.6	172.5	50.5	172.5	50.5	14.3	165.0	48.3	165.0	48.3	16.1	162.2	47.5	162.2	47.5	16.7	157.2	46.1	157.2	46.1	17.8				
	3677	66.2	19.0	196.1	57.5	195.4	57.3	13.0	187.2	54.9	187.2	54.9	14.6	178.4	52.3	178.4	52.3	16.4	175.2	51.3	175.2	51.3	17.0	169.5	49.7	169.5	49.7	18.0				
	0.14	72	22.2	216.8	63.5	151.7	44.5	13.5	207.4	60.8	148.6	43.6	15.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
	6292	62	16.7	211.7	62.0	211.7	62.0	14.1	203.0	59.5	203.0	59.5	16.1	193.7	56.8	193.7	56.8	18.3	190.3	55.8	190.3	55.8	19.2	184.2	54.0	184.2	54.0	20.6				
	240LG + 240LG	2969	66.2	19.0	232.9	68.3	198.5	58.2	14.5	222.0	65.1	194.2	56.9	16.5	211.0	61.9	189.9	55.7	18.6	207.1	60.7	188.4	55.2	19.4	200.1	58.6	185.7	54.4	20.8			
0.06		72	22.2	255.1	74.8	157.6	46.2	14.9	245.2	71.9	154.1	45.2	17.0	234.8	68.8	150.6	44.1	19.2	231.0	67.7	149.3	43.8	20.0	--	--	--	--	--				
8000		62	16.7	221.1	64.8	221.1	64.8	14.3	212.2	62.2	212.2	62.2	16.3	202.7	59.4	202.7	59.4	18.5	199.1	58.4	199.1	58.4	19.3	192.5	56.4	192.5	56.4	20.7				
3776		66.2	19.0	239.3	70.1	227.7	66.7	14.6	229.1	67.1	223.8	65.6	16.6	218.6	64.1	218.6	64.1															

Fan Performance

Model ACUML + CADXL	AirFlowRate		Internal Static Pressure		External Static Pressure - in.wg(Pa)														RPM Range
					0.2(50)		0.4(100)		0.5(125)		0.6(150)		0.8(200)		1.0(250)		1.25(313)		
	cfm	l/s	in.wg	Pa	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	
050L + 050L	1146	541	0.24	59.7	602	0.1	731	0.14	793	0.17	-	-	-	-	-	-	-	-	
	1700	802	0.51	127.8	777	0.27	869	0.32	914	0.35	958	0.38	1044	0.44	1128	0.51	1233	0.6	
	2292	1082	0.96	239.3	1000	0.62	1071	0.69	1105	0.72	1139	0.76	1205	0.83	1271	0.91	1351	1.01	
060L + 060L	1597	754	0.24	59.75	630	0.18	736	0.23	785	0.25	833	0.28	926	0.33	1017	0.39	1129	0.47	
	2000	944	0.36	90.18	731	0.31	821	0.37	863	0.4	905	0.43	984	0.5	1060	0.56	1153	0.65	
	3193	1507	0.96	239.18	1085	1.15	1145	1.24	1175	1.29	1204	1.34	1261	1.43	1315	1.53	1382	1.65	
070L + 070L	1597	754	0.24	59.75	630	0.18	736	0.23	785	0.25	833	0.28	926	0.33	1017	0.39	1129	0.47	
	2400	1133	0.53	131.35	844	0.51	922	0.58	960	0.62	996	0.66	1066	0.73	1133	0.8	1214	0.9	
	3193	1507	0.96	239.18	1085	1.15	1145	1.24	1175	1.29	1204	1.34	1261	1.43	1315	1.53	1382	1.65	
085L + 085L	1719	811	0.24	59.73	-	-	642	0.22	690	0.25	736	0.28	826	0.35	-	-	-	-	
	2800	1321	0.62	155.66	760	0.57	831	0.66	865	0.7	899	0.74	962	0.83	1024	0.93	1098	1.05	
	3438	1622	0.96	239.26	908	1.01	968	1.12	997	1.17	1025	1.22	1080	1.33	1133	1.44	1198	1.58	
100L + 100L	2196	1036	0.24	59.71	-	-	656	0.32	699	0.35	740	0.39	818	0.46	893	0.54	982	0.64	
	3000	1416	0.43	107.54	700	0.55	774	0.65	809	0.69	843	0.74	908	0.83	970	0.93	1045	1.05	
	4392	2073	0.96	239.14	973	1.6	1026	1.74	1052	1.8	1077	1.87	1127	2.01	1176	2.15	1234	2.32	
110L + 120L	2196	1036	0.28	69.69	-	-	674	0.33	716	0.37	756	0.4	834	0.48	907	0.55	996	0.66	
	3600	1699	0.74	185.52	851	0.97	913	1.09	942	1.14	972	1.2	1028	1.31	1082	1.42	1148	1.56	
	4392	2073	1.13	282.67	1019	1.72	1071	1.86	1096	1.92	1121	1.99	1170	2.13	1217	2.27	1274	2.44	
120L + 120L	2196	1036	0.28	69.69	-	-	674	0.33	716	0.37	756	0.4	834	0.48	907	0.55	996	0.66	
	3600	1699	0.74	185.52	851	0.97	913	1.09	942	1.14	972	1.2	1028	1.31	1082	1.42	1148	1.56	
	4392	2073	1.13	282.67	1019	1.72	1071	1.86	1096	1.92	1121	1.99	1170	2.13	1217	2.27	1274	2.44	
130L + 150L	3208	1514	0.24	59.71	472	0.35	549	0.45	585	0.5	619	0.55	683	0.65	744	0.76	817	0.92	
	4200	1982	0.4	98.55	568	0.7	632	0.82	662	0.88	691	0.94	746	1.06	799	1.2	862	1.37	
	6417	3028	0.96	239.21	816	2.29	861	2.46	882	2.55	904	2.64	946	2.82	986	3.0	1035	3.24	
145L + 150L	3208	1514	0.24	59.71	472	0.35	549	0.45	585	0.5	619	0.55	683	0.65	744	0.76	817	0.92	
	4800	2265	0.52	130.04	632	1	690	1.14	717	1.21	744	1.27	795	1.42	844	1.56	903	1.75	
	6417	3028	0.96	239.21	816	2.29	861	2.46	882	2.55	904	2.64	946	2.82	986	3.0	1035	3.24	
160L + 150L	3208	1514	0.28	69.69	489	0.37	564	0.47	599	0.52	632	0.57	696	0.67	756	0.79	829	0.94	
	4800	2265	0.61	152.71	659	1.06	715	1.2	741	1.27	767	1.34	817	1.48	865	1.63	924	1.82	
	6417	3028	1.14	282.75	855	2.44	898	2.62	920	2.71	940	2.8	981	2.98	1020	3.2	1068	3.41	
180L + 180L	4604	2173	0.29	71.1	621	0.62	714	0.78	758	0.86	799	0.93	879	1.09	955	1.26	1045	1.49	
	5800	2737	0.46	114.71	739	1.14	817	1.34	854	1.43	890	1.53	959	1.72	1025	1.92	1103	2.18	
	7792	3677	0.87	215.67	954	2.6	1015	2.86	1044	2.99	1073	3.12	1129	3.39	1183	3.65	1249	3.97	
205L + 180L	4604	2173	0.29	71.1	621	0.62	714	0.78	758	0.86	799	0.93	879	1.09	955	1.26	1045	1.49	
	6200	2926	0.53	132.42	781	1.37	855	1.58	891	1.68	925	1.79	991	1.99	1054	2.2	1129	2.47	
	7792	3677	0.87	215.67	954	2.6	1015	2.86	1044	2.99	1073	3.12	1129	3.39	1183	3.65	1249	3.97	
240L + 240L	6292	2969	0.29	71.09	513	0.77	593	0.98	629	1.08	665	1.19	732	1.42	796	1.67	873	2	
	8000	3775	0.47	117	614	1.45	680	1.7	712	1.83	742	1.96	800	2.22	855	2.5	921	2.87	
	10649	5025	0.87	215.67	785	3.23	837	3.55	863	3.72	887	3.88	935	4.22	981	4.56	-	-	
260L + 240L	6292	2969	0.29	71.09	513	0.77	593	0.98	629	1.08	665	1.19	732	1.42	796	1.67	873	2	
	8000	3775	0.47	117	614	1.45	680	1.7	712	1.83	742	1.96	800	2.22	855	2.5	921	2.87	
	10649	5025	0.87	215.67	785	3.23	837	3.55	863	3.72	887	3.88	935	4.22	981	4.56	-	-	

Table 10

Notes:

1. Areas shaded in blue indicate factory setting of rpm.
2. Areas shaded in gray indicate operating range outside the standard motor. Shift one step larger motor size in this area.
3. Internal static pressure is based on pressure drops through evaporator coil, fan casing & 1" washable flate filter.
4. The shown rpm range is with standard pulleys combination.



Fan Performance (HIGH EFFICIENCY)

Model ACUML G + CADXL G	AirFlowRate		Internal Static Pressure		External Static Pressure - in.wg (Pa)													
					0.2 (50)		0.4 (100)		0.5 (125)		0.6 (150)		0.8 (200)		1 (250)		1.2 (300)	
	cfm	l/s	in.wg	Pa	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW
050L G + 060L G	1146	541	0.19	47.2	0	0	699	0.13	762	0.16	824	0.18	-	-	-	-	-	-
	1700	802	0.31	77.56	678	0.22	777	0.27	823	0.3	868	0.32	957	0.38	1043	0.44	1128	0.51
	2292	1082	0.56	139.95	847	0.48	-	-	-	-	-	-	-	-	-	-	-	-
060L G + 060L G	1597	754	0.24	59.75	630	0.18	736	0.23	785	0.25	833	0.28	926	0.33	1017	0.39	1107	0.46
	2000	944	0.36	90.18	731	0.31	821	0.37	863	0.4	905	0.43	984	0.5	1060	0.56	-	-
	3193	1507	0.96	239.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
070L G + 070L G	1597	754	0.28	69.73	652	0.19	756	0.24	804	0.26	852	0.29	945	0.34	1035	0.4	1125	0.47
	2400	1133	0.62	154.27	881	0.54	957	0.62	993	0.65	1028	0.69	-	-	-	-	-	-
	3193	1507	1.13	282.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
085L G + 100L G	1719	811	0.28	69.71	-	-	661	0.23	708	0.26	754	0.3	843	0.37	-	-	-	-
	2800	1321	0.73	183.08	800	0.62	869	0.7	902	0.75	934	0.79	997	0.88	1057	0.98	1115	1.07
	3438	1622	1.14	282.81	960	1.1	-	-	-	-	-	-	-	-	-	-	-	-
100L G + 100L G	2196	1036	0.28	69.69	-	-	674	0.33	716	0.37	756	0.4	834	0.48	907	0.55	979	0.64
	3000	1416	0.51	126.11	728	0.59	800	0.68	834	0.73	868	0.77	932	0.87	993	0.96	1052	1.06
	4392	2073	1.13	282.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-
110L G + 120L G	2196	1036	0.32	79.66	602	0.28	691	0.35	732	0.38	772	0.42	849	0.49	922	0.57	993	0.66
	3600	1699	0.86	213.33	886	1.04	946	1.15	975	1.21	1003	1.26	1059	1.37	1112	1.49	-	-
	4392	2073	1.31	326.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
120L G + 120L G	2196	1036	0.32	79.66	602	0.28	691	0.35	732	0.38	772	0.42	849	0.49	922	0.57	993	0.66
	3600	1699	0.86	213.33	886	1.04	946	1.15	975	1.21	1003	1.26	1059	1.37	1112	1.49	-	-
	4392	2073	1.31	326.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
130L G + 150L G	3208	1514	0.28	69.69	489	0.37	564	0.47	599	0.52	632	0.57	696	0.67	756	0.79	814	0.91
	4200	1982	0.46	115.49	590	0.74	652	0.86	682	0.92	710	0.98	765	1.11	816	1.24	866	1.38
	6417	3028	1.14	282.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
160L G + 150L G	3208	1514	0.28	69.69	489	0.37	564	0.47	599	0.52	632	0.57	696	0.67	756	0.79	814	0.91
	4800	2265	0.61	152.71	659	1.06	715	1.2	741	1.27	767	1.34	817	1.48	-	-	-	-
	6417	3028	1.14	282.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
180L G + 180L G	4604	2173	0.34	84.79	648	0.67	738	0.82	781	0.9	822	0.98	900	1.14	975	1.31	1047	1.5
	5800	2737	0.55	137.14	775	1.23	851	1.42	887	1.52	922	1.62	989	1.81	1054	2.01	1116	2.22
	7792	3677	1.04	259.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
205L G + 180L G	4604	2173	0.34	84.79	648	0.67	738	0.82	781	0.9	822	0.98	900	1.14	975	1.31	1047	1.5
	6200	2926	0.64	158.44	820	1.48	892	1.69	926	1.79	960	1.89	1024	2.1	-	-	-	-
	7792	3677	1.04	259.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
240L G + 240L G	6292	2969	0.4	98.48	558	0.88	633	1.09	668	1.2	702	1.32	767	1.55	830	1.81	891	2.09
	8000	3775	0.65	162.78	675	1.68	737	1.94	767	2.07	796	2.2	-	-	-	-	-	-
	10649	5025	1.22	302.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
260L G + 240L G	6292	2969	0.4	98.48	558	0.88	633	1.09	668	1.2	702	1.32	767	1.55	830	1.81	891	2.09
	8000	3775	0.65	162.78	675	1.68	737	1.94	767	2.07	796	2.2	-	-	-	-	-	-
	10649	5025	1.22	302.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 11

Notes:

1. Areas shaded in blue indicate factory setting of rpm.
2. Areas shaded in grey indicate operating range outside the standard motor.
3. Internal static pressure is based on pressure drops through evaporator coil, fan casing & 1" washable flate filter.

ELECTRICAL DATA

Power Supply: 380~415V/3PH/50Hz

Model (ACUM-L)	Unit Characteristic			Compressor			Condenser Fan Motor			Model (CADX-L)	Evaporator Fan Motor	
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA		FLA	LRA
050L	25	13	66	1	8	62	1	0.9	2.6	050L	1.4	7.3
060L	32	17	84	1	10	74	1	2.2	9.0	060L	1.4	7.3
070L	32	20	112	1	12	101	1	2.2	9.0	070L	1.9	9.7
085L	40	25	107	1	16	95	1	2.2	9.0	085L	2.6	14.8
100L	50	27	123	1	17	111	1	2.2	9.0	100L	2.6	14.8
110L	40	28	83	2	10	66	2	0.9	2.6	120L	3.4	18.8
120L	40	29	92	2	10	74	2	1.2	3.6	120L	3.4	18.8
130L	40	29	92	2	10	74	2	1.2	3.6	150L	3.4	18.8
145L	50	33	121	2	12	101	2	1.2	3.6	150L	3.4	18.8
160L	50	35	128	2	12	101	2	2.2	9.0	150L	3.4	18.8
180L	63	46	127	2	16	95	2	2.2	9.0	180L	4.8	27.1
205L	80	48	144	2	17	111	2	2.2	9.0	180L	4.8	27.1
240L	80	56	162	2	19	118	2	4.0	16.5	240L	4.8	27.1
260L	100	63	165	2	22	118	2	4.0	16.5	240L	4.8	27.1

Table 12

Power Supply: 440V/3PH/50Hz

Model (ACUM-L)	Unit Characteristic			Compressor			Condenser Fan Motor			Model (CADX-L)	Evaporator Fan Motor	
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA		FLA	LRA
050L	25	13	66	1	8	62	1	0.9	2.6	050L	1.3	6.7
060L	32	17	84	1	10	74	1	2.5	8.8	060L	1.3	6.7
070L	32	20	112	1	12	101	1	2.5	8.8	070L	1.7	8.8
085L	40	25	106	1	16	95	1	2.5	8.8	085L	2.3	13.5
100L	50	27	122	1	17	111	1	2.5	8.8	100L	2.3	13.5
110L	40	28	83	2	10	66	2	0.9	2.6	120L	3.1	17.0
120L	40	28	92	2	10	74	2	1.2	3.6	120L	3.1	17.0
130L	40	28	92	2	10	74	2	1.2	3.6	150L	3.1	17.0
145L	50	33	121	2	12	101	2	1.2	3.6	150L	3.1	17.0
160L	50	36	127	2	12	101	2	2.5	8.8	150L	3.1	17.0
180L	63	46	127	2	16	95	2	2.5	8.8	180L	4.4	24.6
205L	80	48	144	2	17	111	2	2.5	8.8	180L	4.4	24.6
240L	80	55	159	2	19	118	2	3.7	14.0	240L	4.4	24.6
260L	100	62	162	2	22	118	2	3.7	14.0	240L	4.4	24.6

Table 13

Power Supply: 380-415V/3PH/50Hz

Model (ACUM-LG)	Unit Characteristic			Compressor			Condenser Fan Motor			Model (CADX-LG)	Evaporator Fan Motor	
	MFA	MCA	ICF	QTY	RLA	LRA	QTY	FLA	LRA		FLA	LRA
050L G	25	13	67	1	8	62	1	1.2	3.6	060L G	1.4	7.3
060L G	32	17	84	1	10	74	1	2.2	9.0	060L G	1.4	7.3
070L G	32	20	112	1	12	101	1	2.2	9.0	070L G	1.9	9.7
085L G	40	25	107	1	16	95	1	2.2	9.0	100L G	2.6	14.8
100L G	50	27	123	1	17	111	1	2.2	9.0	100L G	2.6	14.8
110L G	40	29	84	2	10	66 + 66	2	1.2	3.6	120L G	3.4	18.8
120L G	40	29	92	2	10	74 + 74	2	1.2	3.6	120L G	3.4	18.8
130L G	40	31	99	2	10	74 + 74	2	2.2	9.0	150L G	3.4	18.8
160L G	50	35	128	2	12	101 + 101	2	2.2	9.0	150L G	3.4	18.8
180L G	63	46	127	2	16	95 + 95	2	2.2	9.0	180L G	4.8	27.1
205L G	80	48	144	2	17	111 + 111	2	2.2	9.0	180L G	4.8	27.1
240L G	80	56	162	2	19	118 + 118	2	3.4	13.0	240L G	4.8	27.1
260L G	100	63	165	2	22	118 + 118	2	3.4	13.0	240L G	4.8	27.1

Table 14

Legend

MFA Maximum Fuse Amps (for fuse/circuit breaker sizing), complies with NEC Article 440-22 & 430-52.

MCA Minimum Circuit Amps.(for wire sizing), complies with NEC article 440-33.

ICF Maximum Instantaneous Current Flow

Note :

Voltage imbalance not to exceed ± 2 % of the rated voltage

RLA Rated Load Amps. (at worst operating condition)

LRA Locked Rotor Amps

FLA Full Load Amps

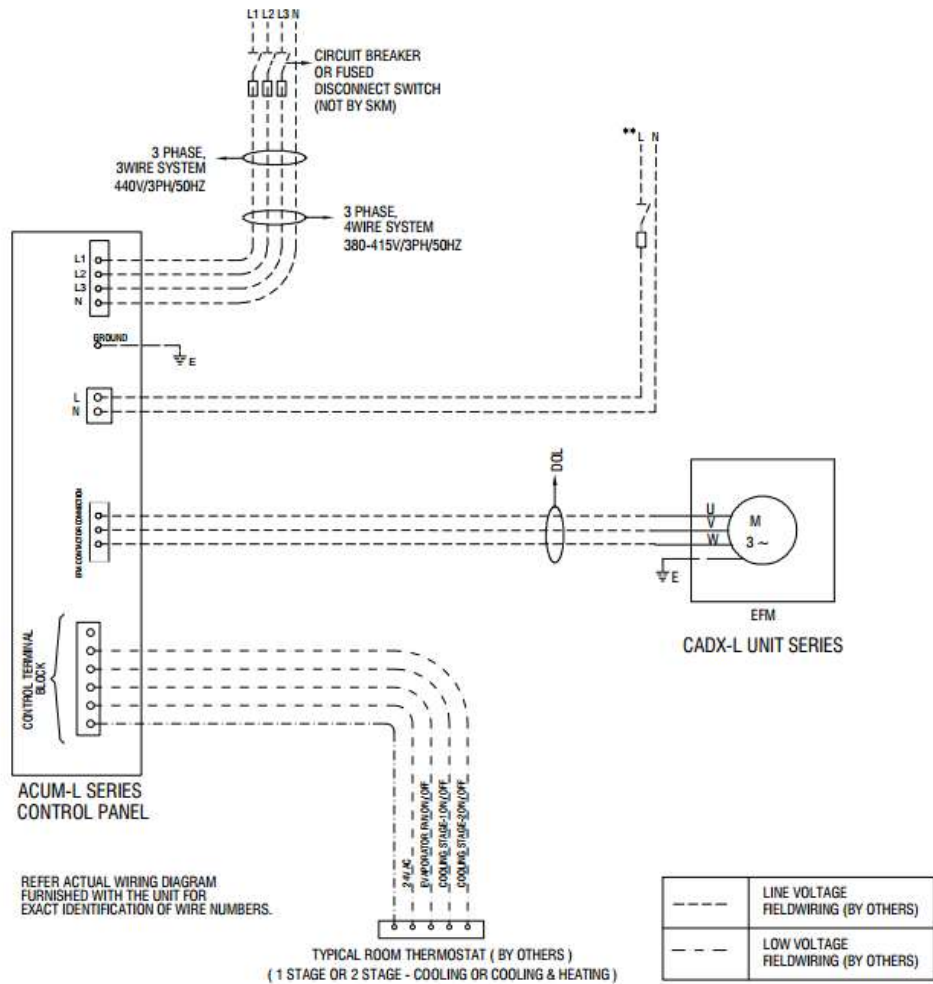


Field Connections

SKMACUM-L + CADX-L series split units require at most field supplied and field installed fused disconnect switches or circuit breakers for power & control and a low/voltage temperature controller (room thermostat) as shown in field wiring diagram.

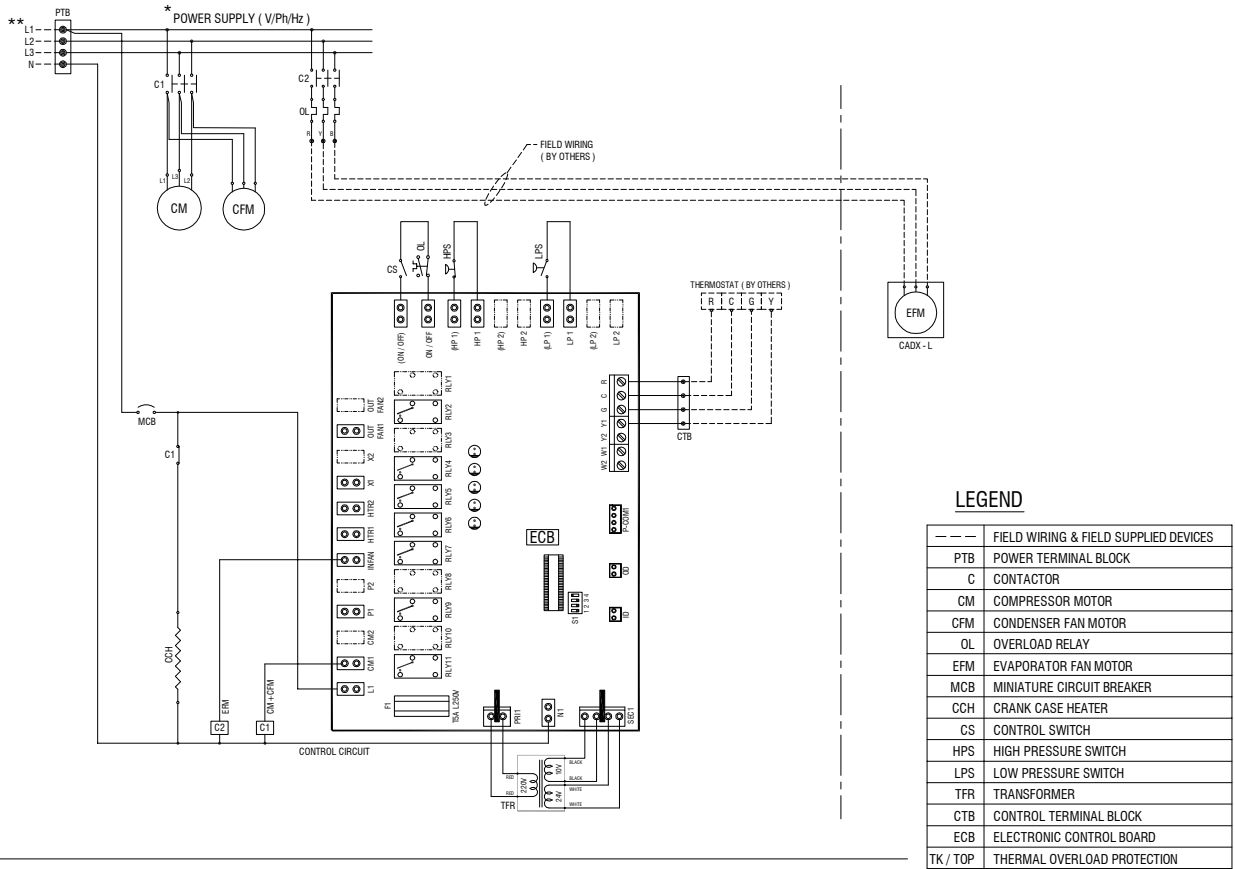
Each Split unit is supplied with electrical wiring diagrams placed inside the control panel of the unit.

Field Wiring Requirement Schematic

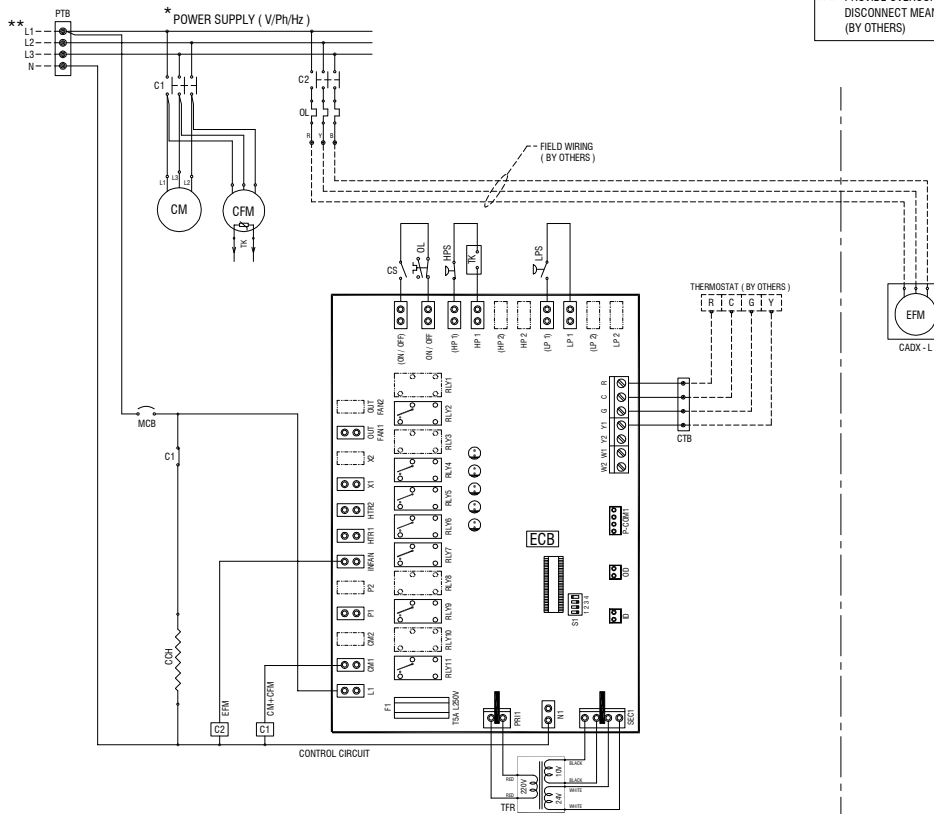


**The ACUM-L series units rated for 440V/3Ph/50Hz or power supplies without neutral require separate source of control power supply through field supplied and installed 15A/220v fused control disconnect switch or order with factory built in option 'CXT'.

Typical Wiring Diagram ACUM Models: 050L



ACUM- Models: 060L - 100L



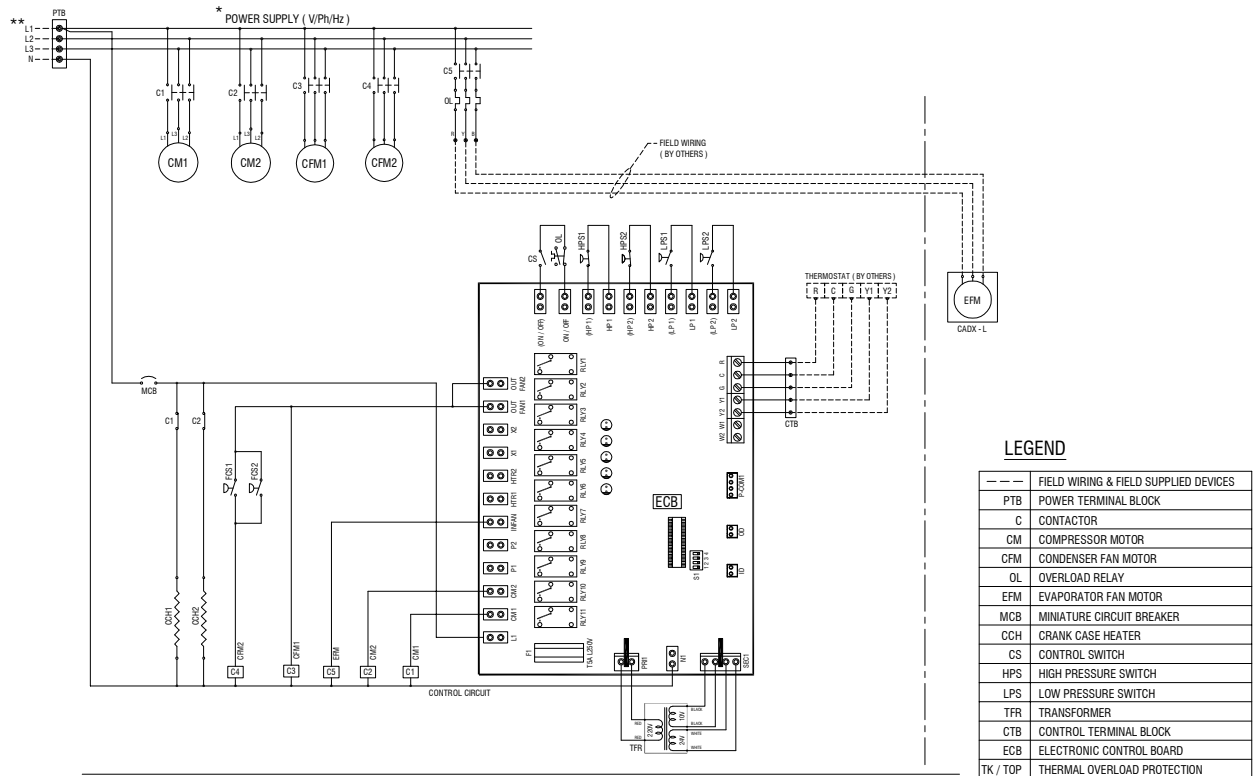
* TYPICAL WIRING DIAGRAM SHOWN IS SUITABLE FOR 380-415V/3Ph/50Hz ONLY. FOR 440V/3Ph/50Hz, PLEASE CONSULT SKM.

** PROVIDE OVERCURRENT, EARTH FAULT PROTECTION, SHORT CIRCUIT AND DISCONNECT MEANS AS REQUIRED BY LOCAL & NATIONAL ELECTRIC CODE. (BY OTHERS)

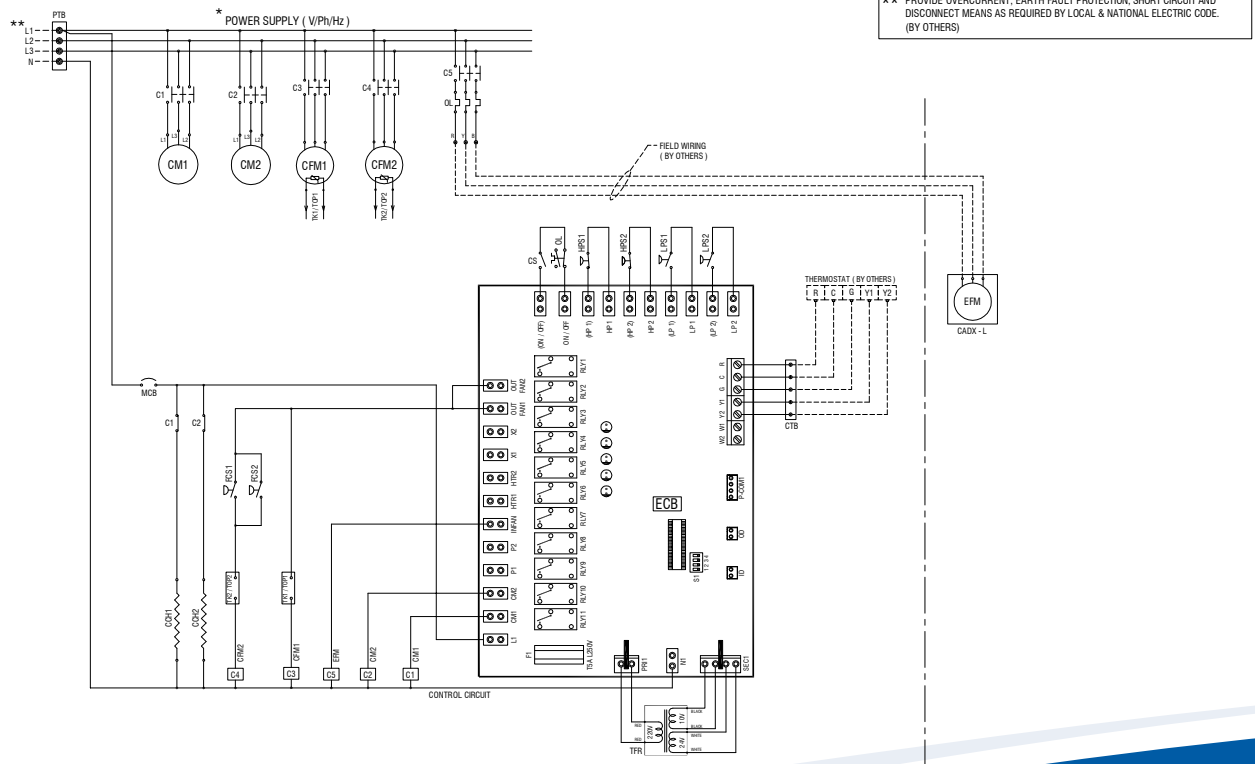


Typical Wiring Diagram

ACUM Models: 110L - 145L



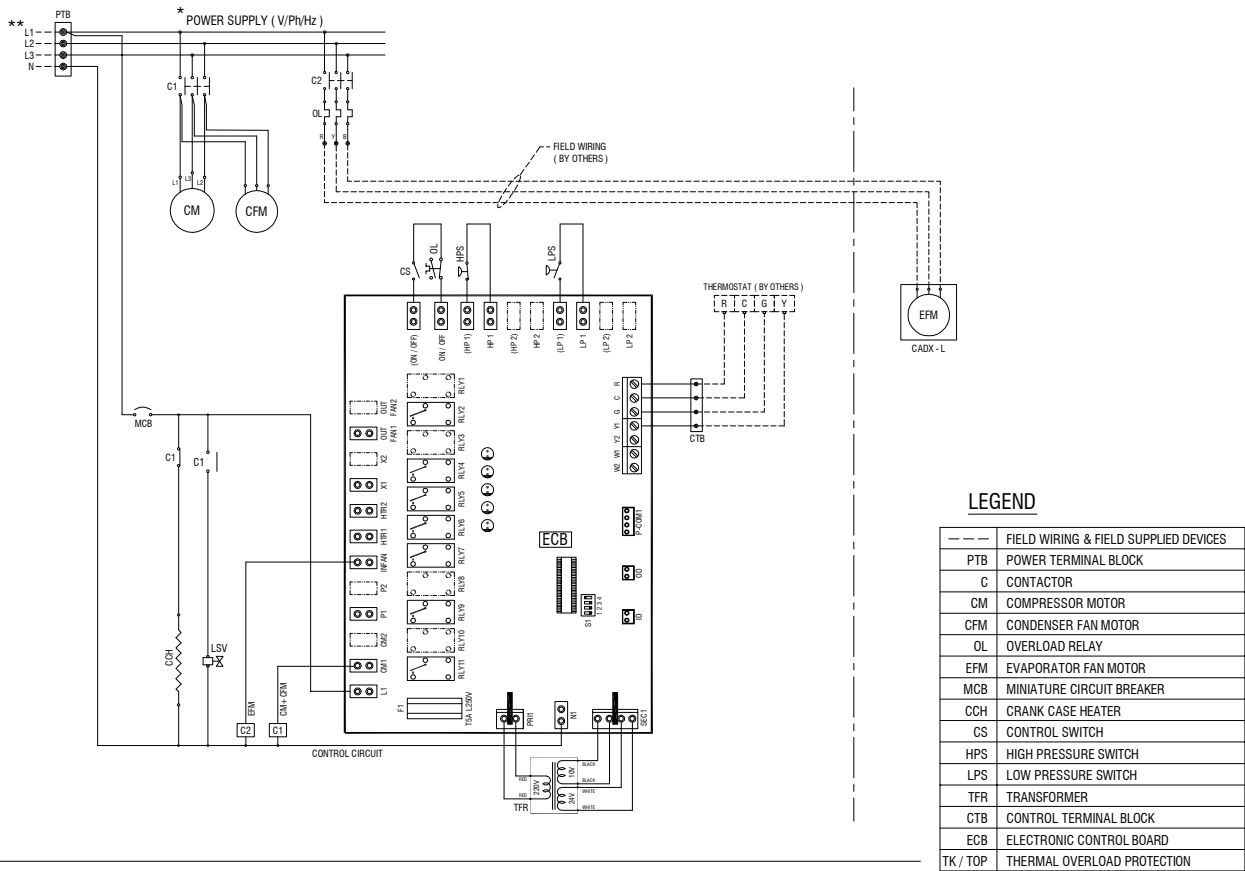
ACUM- Models: 160L - 260L



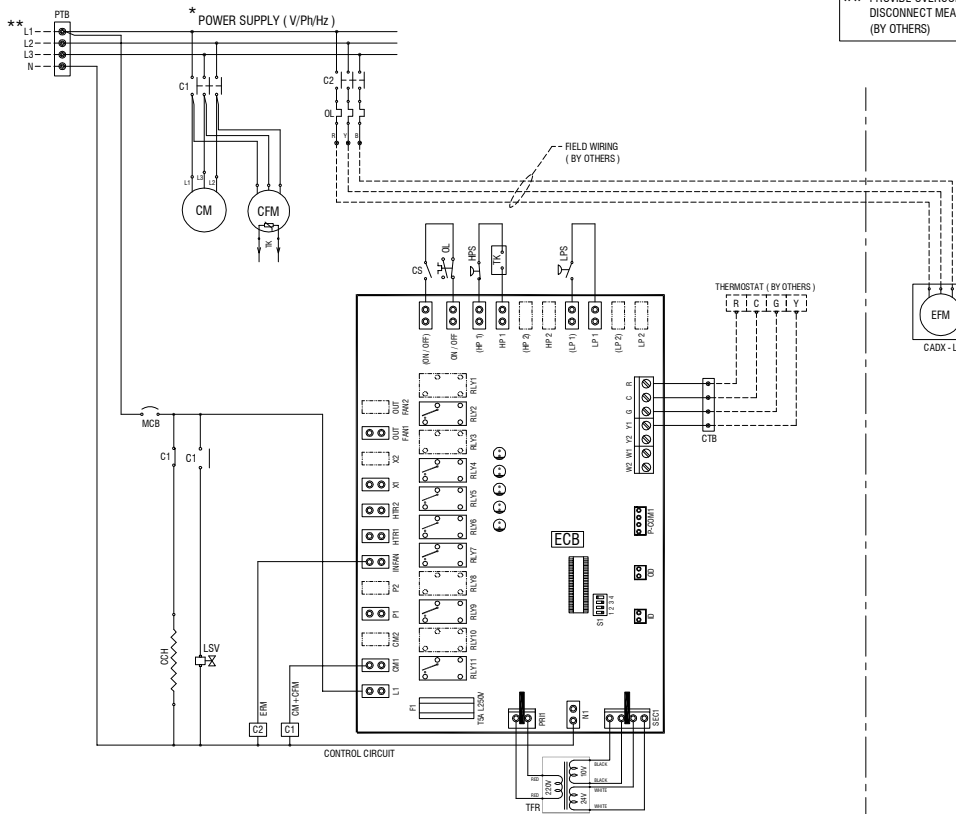
* TYPICAL WIRING DIAGRAM SHOWN IS SUITABLE FOR 380-415V/3PH/50HZ ONLY. FOR 440V/3PH/50HZ, PLEASE CONSULT SKM.

** PROVIDE OVERCURRENT, EARTH FAULT PROTECTION, SHORT CIRCUIT AND DISCONNECT MEANS AS REQUIRED BY LOCAL & NATIONAL ELECTRIC CODE. (BY OTHERS)

Typical Wiring Diagram (HIGH EFFICIENCY) ACUM Models: 050LG



ACUM Models: 060LG - 100LG

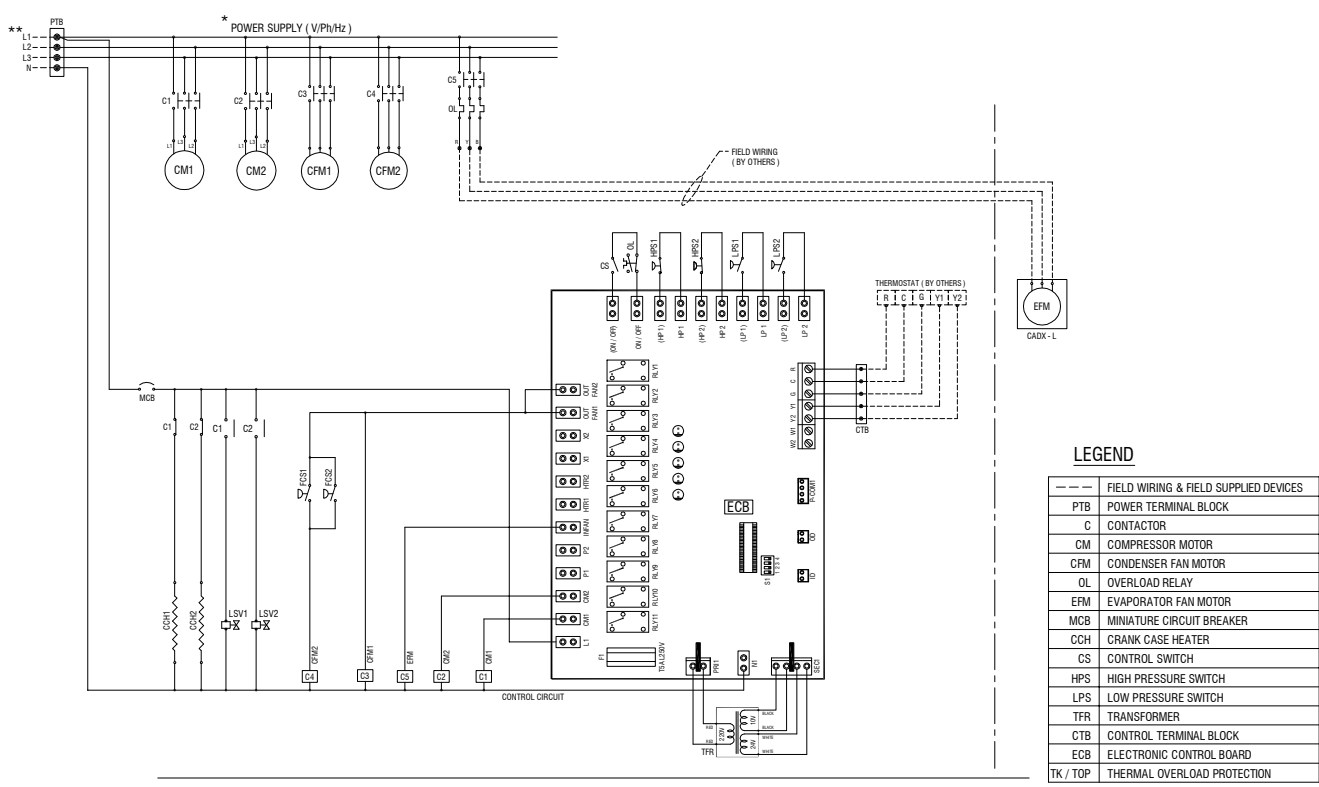


* TYPICAL WIRING DIAGRAM SHOWN IS SUITABLE FOR 380-415V/3Ph/50Hz ONLY. FOR 440V/3Ph/50Hz, PLEASE CONSULT SKM.

** PROVIDE OVERCURRENT, EARTH FAULT PROTECTION, SHORT CIRCUIT AND DISCONNECT MEANS AS REQUIRED BY LOCAL & NATIONAL ELECTRIC CODE. (BY OTHERS)



Typical Wiring Diagram (HIGH EFFICIENCY) ACUM Models: 110LG & 120LG



LEGEND

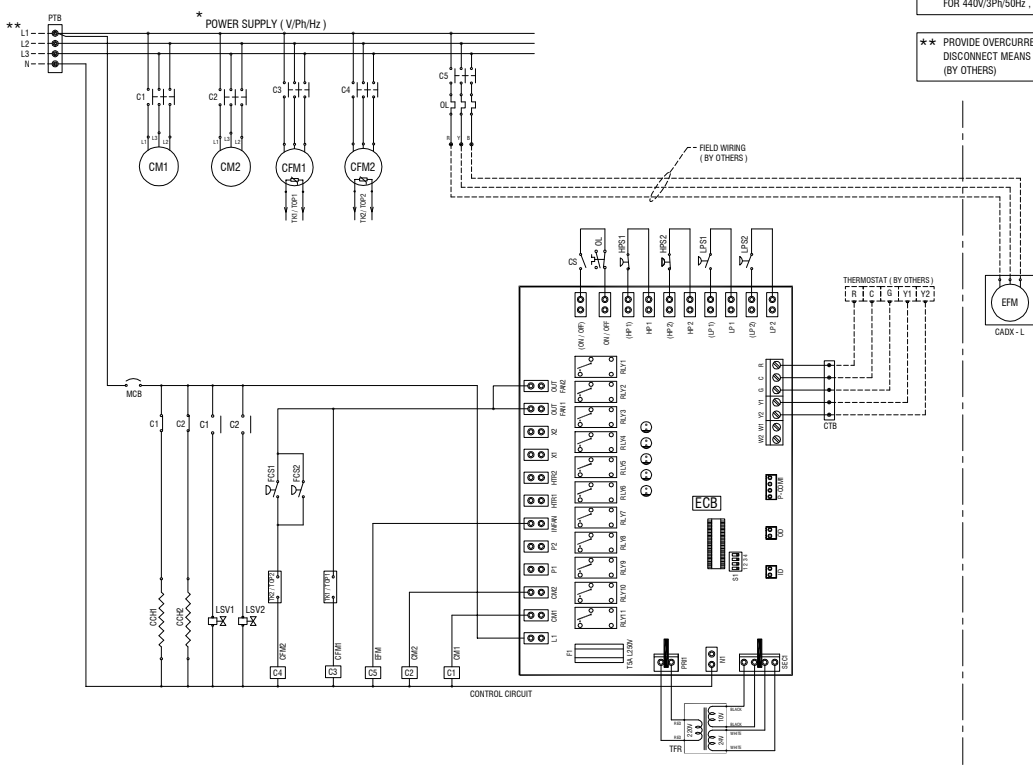
---	FIELD WIRING & FIELD SUPPLIED DEVICES
PTB	POWER TERMINAL BLOCK
C	CONTACTOR
CM	COMPRESSOR MOTOR
CFM	CONDENSER FAN MOTOR
OL	OVERLOAD RELAY
EFM	EVAPORATOR FAN MOTOR
MCB	MINIATURE CIRCUIT BREAKER
CCH	CRANK CASE HEATER
CS	CONTROL SWITCH
HPS	HIGH PRESSURE SWITCH
LPS	LOW PRESSURE SWITCH
TFR	TRANSFORMER
CTB	CONTROL TERMINAL BLOCK
ECB	ELECTRONIC CONTROL BOARD
TK / TOP	THERMAL OVERLOAD PROTECTION

ACUM Models: 130LG - 260LG

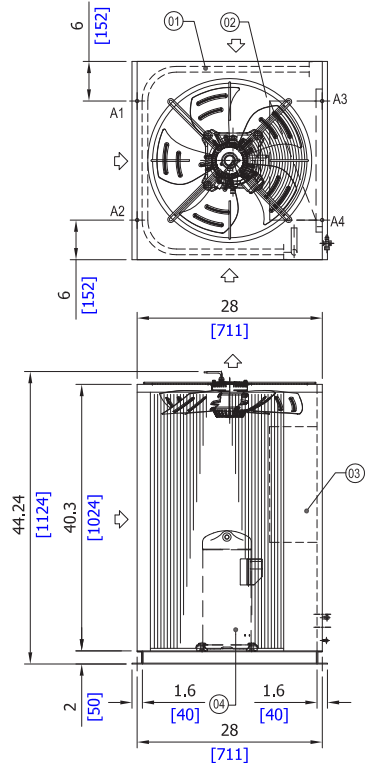
NOTE: *TOP* IS APPLICABLE FOR MODELS 240LG & 260LG.

* TYPICAL WIRING DIAGRAM SHOWN IS SUITABLE FOR 380-415V/3PH/50HZ ONLY. FOR 440V/3PH/50HZ, PLEASE CONSULT SKM.

** PROVIDE OVERCURRENT, EARTH FAULT PROTECTION, SHORT CIRCUIT AND DISCONNECT MEANS AS REQUIRED BY LOCAL & NATIONAL ELECTRIC CODE. (BY OTHERS)



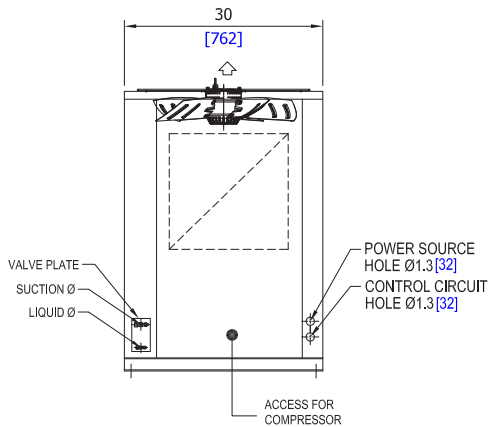
Condensing Unit Dimensional Data
Models: ACUM- 050L



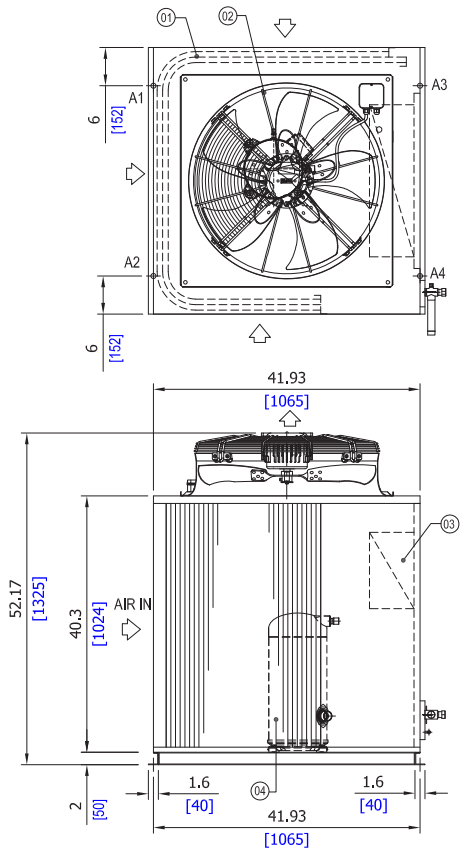
LEGEND

- ① - CONDENSER COIL
- ② - CONDENSER FAN
- ③ - CONTROL PANEL
- ④ - COMPRESSOR

ALL DIMENSIONS ARE IN INCHES [mm]
 A1-A4 ARE LOADING POINTS



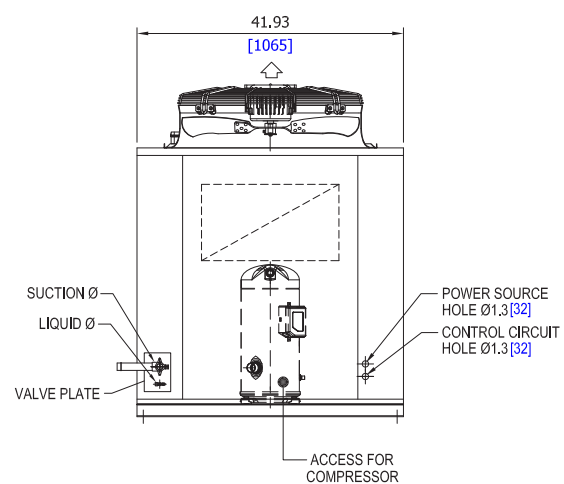
Models: ACUM- 060L, 070L, 085L & 100L



LEGEND

- ① - CONDENSER COIL
- ② - CONDENSER FAN
- ③ - CONTROL PANEL
- ④ - COMPRESSOR

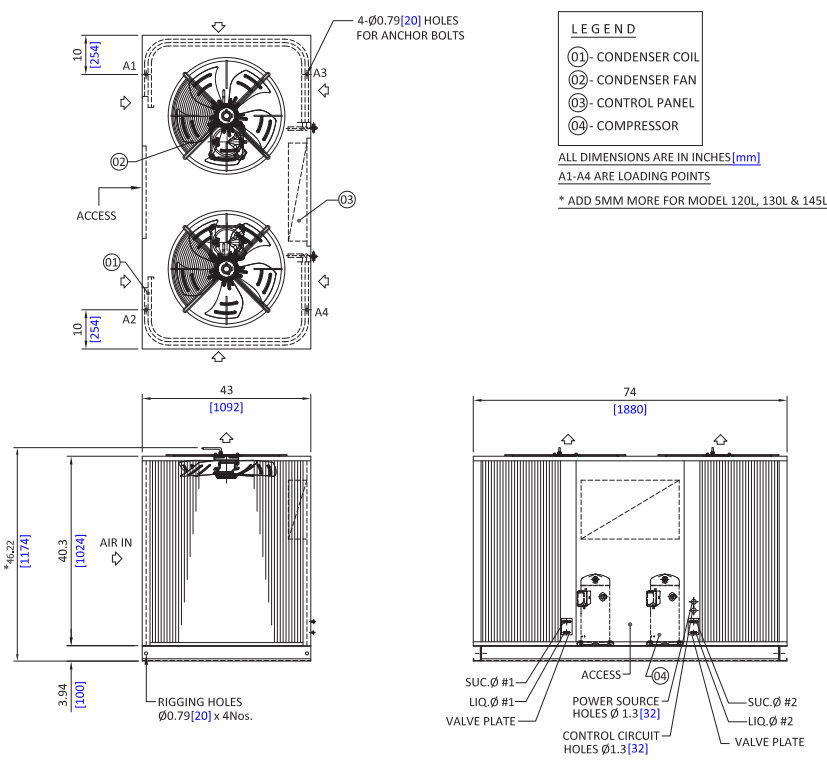
ALL DIMENSIONS ARE IN INCHES [mm]
 A1-A4 ARE LOADING POINTS



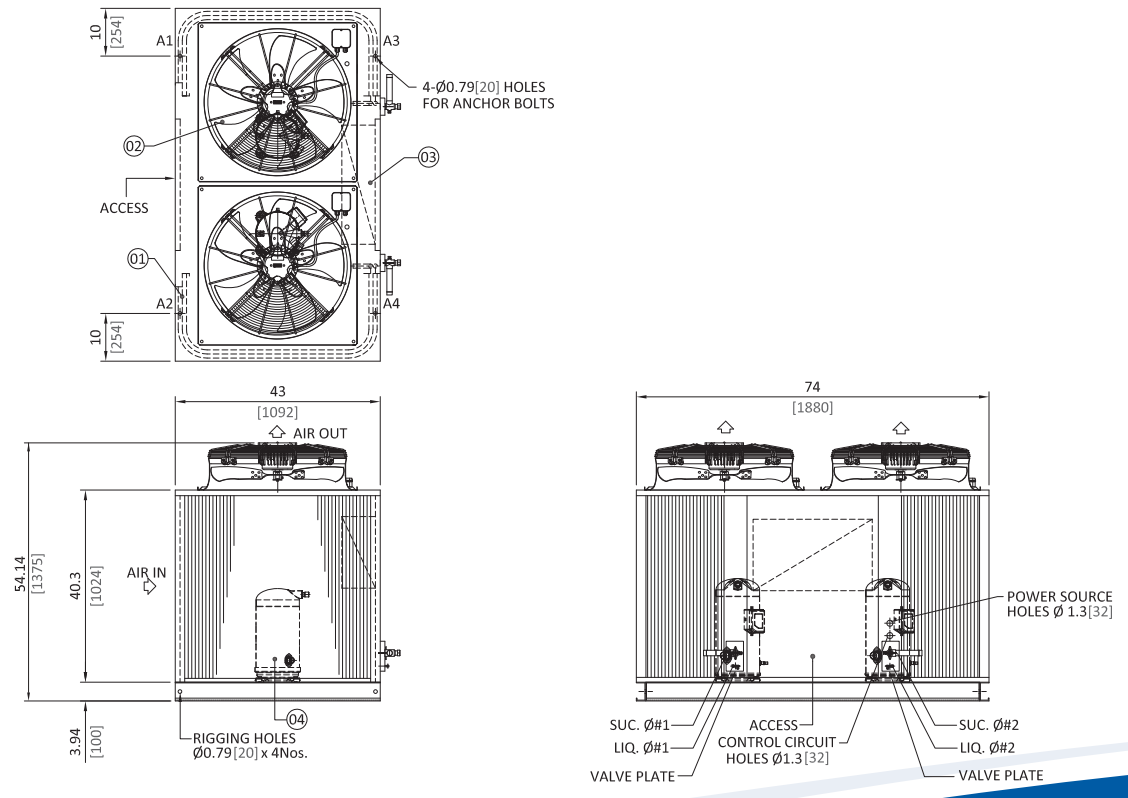


Condensing Unit Dimensional Data

Models: ACUM- 110L, 120L, 130L & 145L

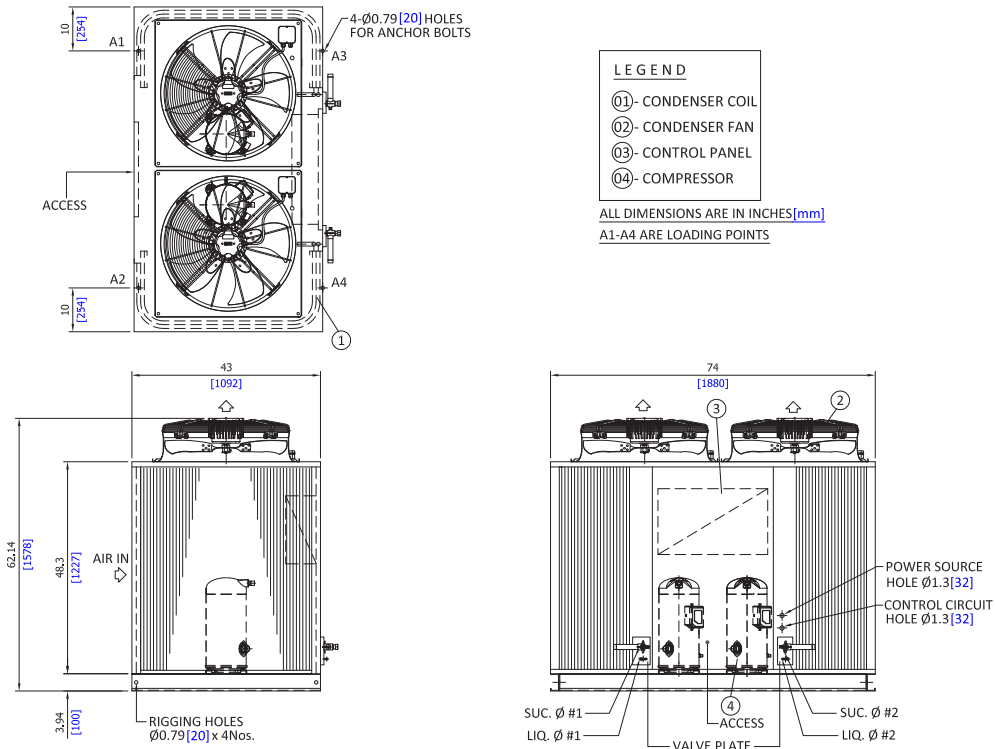


Models: ACUM- 160L & 180L

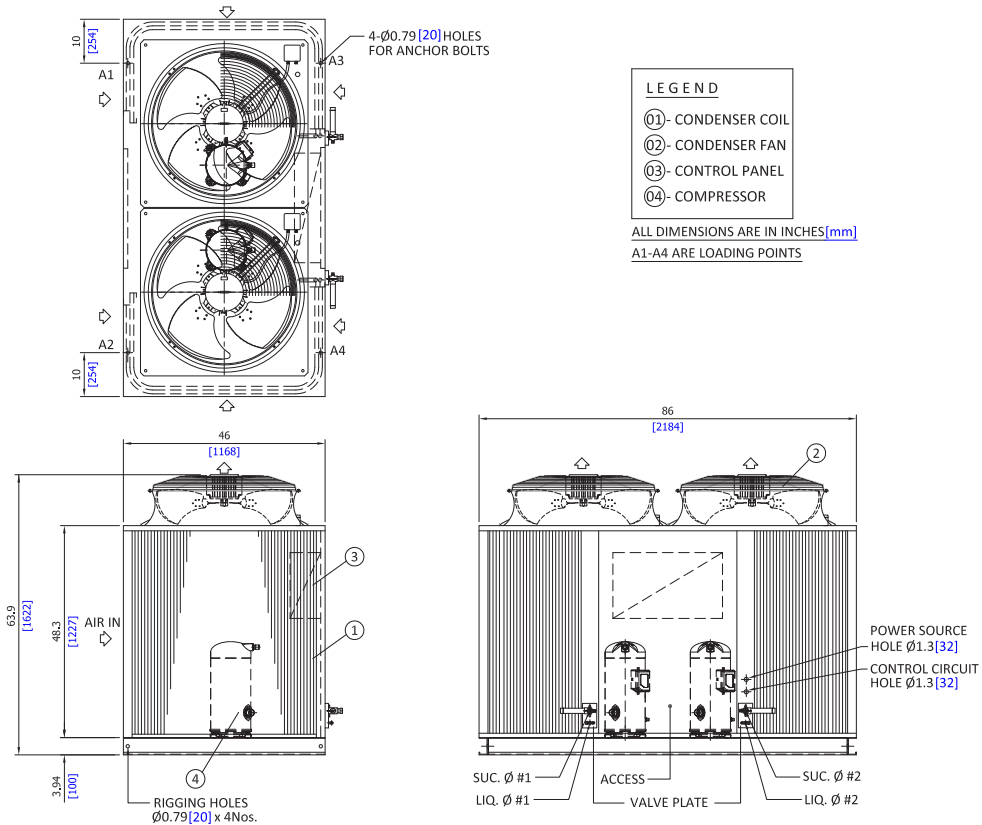


Condensing Unit Dimensional Data

Models: ACUM- 205L



Models: ACUM- 240L & 260L





Air Handling Unit Dimensional Data

Models: CADX-050L to 150L

Model CADX-L	DIMENSIONS										
	L	W	H	A	B	C	D	E	J	G	F
050L	45 [1143]	48 [1219]	21.2 [538]	20 [508]	39.14 [994]	17.5 [443]	17.48 [444]	17.48 [444]	11.38 [289]	13.03 [331]	1.6 [41]
060L	45 [1143]	48 [1219]	25.2 [640]	24 [610]	39.2 [996]	21.4 [544]	17.48 [444]	17.48 [444]	11.38 [289]	13.03 [331]	1.7 [43]
070L	45 [1143]	48 [1219]	25.2 [640]	24 [610]	39.2 [996]	21.4 [544]	17.48 [444]	17.48 [444]	11.38 [289]	13.03 [331]	1.7 [43]
085L	45 [1143]	55 [1397]	25.2 [640]	24 [610]	47 [1194]	21.4 [544]	19.72 [501]	19.72 [501]	13.43 [341]	15.55 [395]	2.2 [57]
100L	50 [1270]	56 [1422]	27.2 [690]	26 [660]	47 [1194]	23.3 [592]	20.2 [514]	20.2 [514]	13.43 [341]	15.55 [395]	3.5 [89]
*120L	50 [1270]	56 [1422]	27.2 [690]	26 [660]	47 [1194]	23.3 [592]	20.2 [514]	20.2 [514]	13.43 [341]	15.55 [395]	3.5 [89]
*150L / 150L-4	58 [1474]	70 [1778]	30.2 [767]	29 [737]	62.6 [1589]	25.4 [646]	25.7 [653]	25.7 [653]	15.91 [404]	18.54 [471]	2.5 [63]

*MODELS WITH DOUBLE CIRCUITS USE DRAIN 1/2" FOR MODEL 150L. ALL DIMENSIONS ARE IN INCHES (MM). A1-A4 ARE LOADING POINTS.

LEGEND

- ①- EVAPORATOR FAN
- ②- EVAPORATOR FAN MOTOR
- ③- EVAPORATOR COIL
- ④- 1" THK. FLAT FILTER

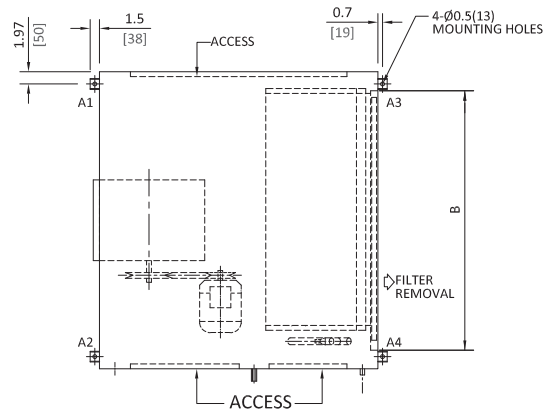
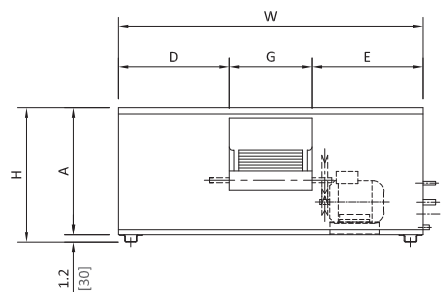
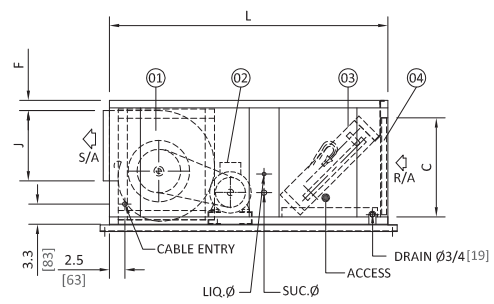


Table 15



Models: CADX-180L & 240L

Model CADX-L	DIMENSIONS										
	L	W	H	A	H1	B	D	E	F	J	G
180L	60 [1524]	70 [1778]	33.2 [843]	32 [813]	1.2 [30]	62.6 [1589]	13.2 [334]	13.2 [334]	9 [228]	13.43 [341]	43.7 [1109]
240L	61.4 [1560]	92 [2337]	35.2 [895]	33.5 [850]	1.8 [45]	81.6 [2074]	19.86 [504]	19.86 [504]	6 [152]	15.91 [404]	52.28 [1328]

ALL DIMENSIONS ARE IN INCHES (MM).

LEGEND

- ①- EVAPORATOR FAN
- ②- EVAPORATOR FAN MOTOR
- ③- EVAPORATOR COIL
- ④- 1" THK. FLAT FILTER

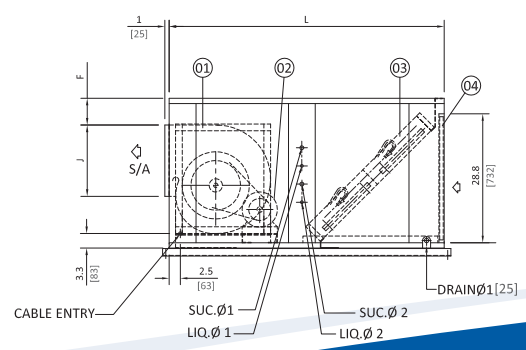
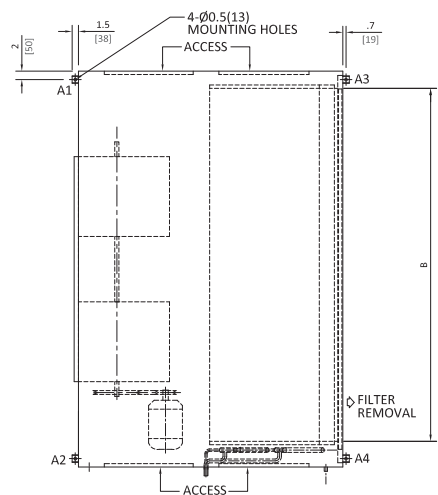
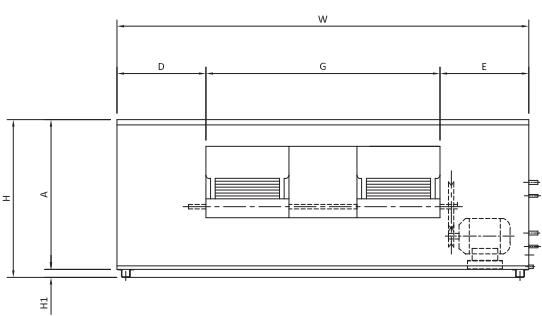


Table 16

WEIGHTS & LOADING POINTS

MODEL	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT	MODEL	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT
	A1	A2	A3	A4			A1	A2	A3	A4	
050L	79 [36]	82 [37]	79 [36]	81 [37]	321 [146]	130L	176 [80]	176 [80]	178 [81]	178 [81]	708 [322]
060L	87 [40]	91 [41]	87 [40]	89 [40]	354 [161]	145L	177 [81]	177 [81]	179 [81]	179 [81]	712 [324]
070L	89 [40]	93 [42]	89 [40]	91 [41]	362 [163]	160L	194 [88]	194 [88]	196 [89]	196 [89]	780 [354]
085L	110 [50]	114 [52]	110 [50]	112 [51]	446 [203]	180L	214 [97]	214 [97]	216 [98]	216 [98]	860 [390]
100L	112 [51]	116 [53]	112 [51]	114 [52]	454 [207]	205L	235 [107]	235 [107]	238 [108]	238 [108]	946 [430]
110L	171 [78]	171 [78]	173 [78]	173 [78]	688 [312]	240L	248 [113]	248 [113]	250 [113]	250 [113]	996 [452]
120L	176 [80]	176 [80]	178 [81]	178 [81]	708 [322]	260L	249 [113]	249 [113]	251 [114]	251 [114]	1000 [454]

Table 17

MODEL	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT	MODEL	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT
	A1	A2	A3	A4			A1	A2	A3	A4	
050L	59 [27]	55 [25]	48 [22]	43 [19]	205 [93]	150L-4	119 [54]	124 [56]	108 [49]	107 [49]	458 [208]
060L	65 [30]	61 [28]	53 [24]	47 [21]	226 [103]	150L	115 [52]	120 [54]	104 [47]	103 [47]	442 [200]
070L	65 [30]	61 [28]	53 [24]	47 [21]	226 [103]	180L	119 [54]	133 [60]	105 [48]	113 [51]	470 [213]
085L	76 [34]	71 [32]	62 [28]	55 [25]	264 [119]	240L	160 [73]	183 [83]	143 [65]	155 [70]	641 [291]
100L	81 [37]	84 [38]	73 [33]	72 [33]	310 [141]						
120L	87 [38]	90 [41]	78 [36]	78 [36]	333 [151]						

Table 18

Recommended Suction and Liquid Line Sizes:

Models		PIPE LENGTH - FEET (m)															
		25 (7.6)				50 (15.2)				75 (22.9)				100 (30.5)			
		ACUM	CADX	Circuit A		Circuit B		Circuit A		Circuit B		Circuit A		Circuit B		Circuit A	
Liquid	Suction			Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction
050L	050L	1/2	7/8	-	-	1/2	7/8	-	-	1/2	7/8	-	-	1/2	1 1/8	-	-
060L	060L	1/2	7/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-
070L	070L	1/2	7/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-	5/8	1 1/8	-	-
085L	085L	1/2	1 1/8	-	-	1/2	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 3/8	-	-
100L	100L	1/2	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 3/8	-	-
110L	120L	1/2	7/8	1/2	7/8	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
120L	120L	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
130L	150L	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8
145L	150L	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8
160L	150L	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8
180L	180L	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8
205L	180L	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8
240L	240L	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8	5/8	1 3/8	5/8	1 3/8
260L	240L	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8	3/4	1 3/8	3/4	1 3/8

Table 19

Notes :

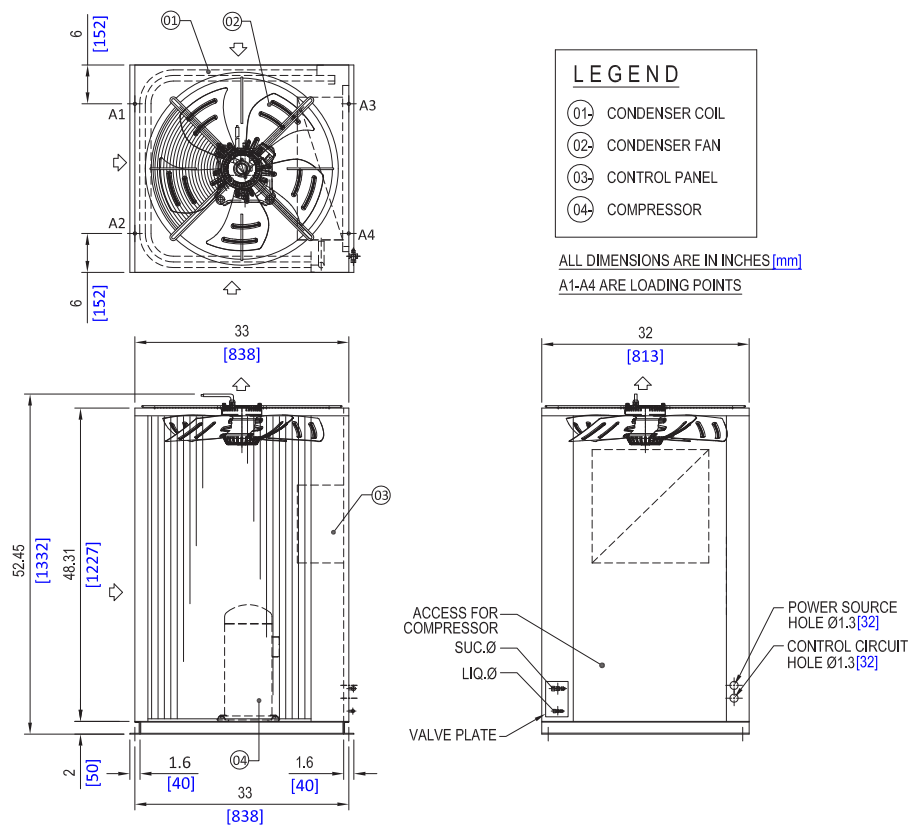
1. Pipe diameters are based on equivalent length of copper tubing sizes.
2. Pipe sizes are based on 2°F (1.1°C) or less temperature losses for liquid and suction line in equivalent pipe length.
3. If the condensing unit is below the evaporating unit, the maximum lift should not exceed to 66 feet.
4. Do not exceed 100 feet piping length without checking with SKM.
5. These sizes are for guidance only. For detailed proper piping, refer to recognized piping references like ASHRAE Guide and Data Book.

The recommended or required suction and liquid line sizes do not necessarily correspond with the refrigerant connections available on the outdoor or indoor unit. Necessary transformation may be required and it's field performed.

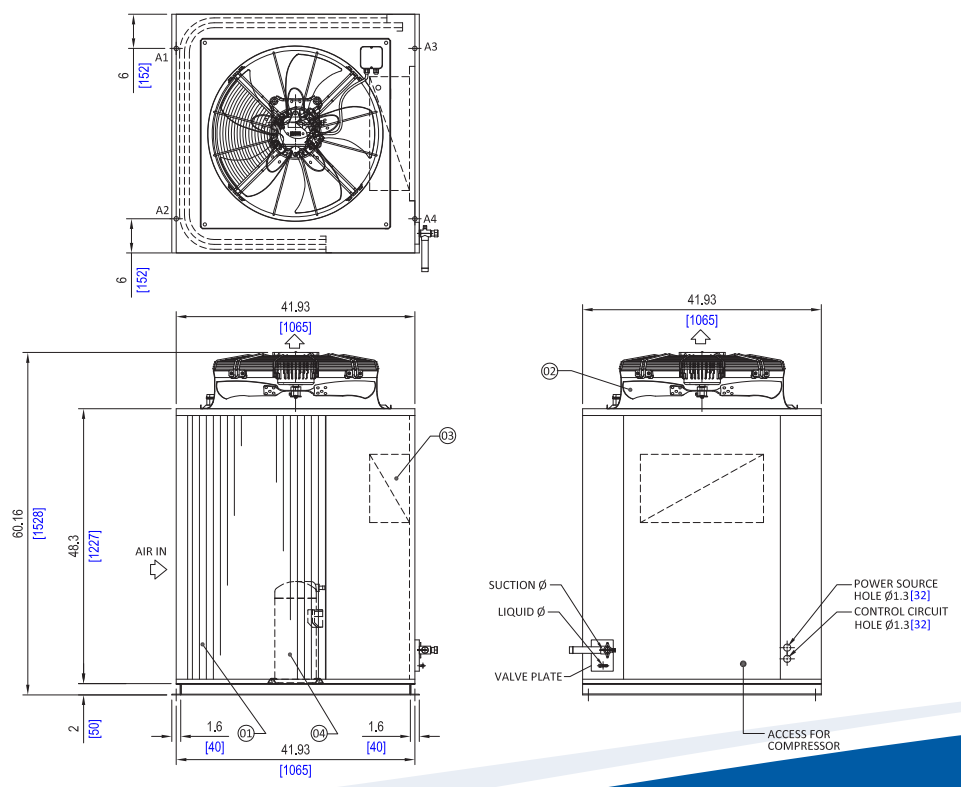


Condensing Unit Dimensional Data (HIGH EFFICIENCY)

Model: ACUM- 050L G

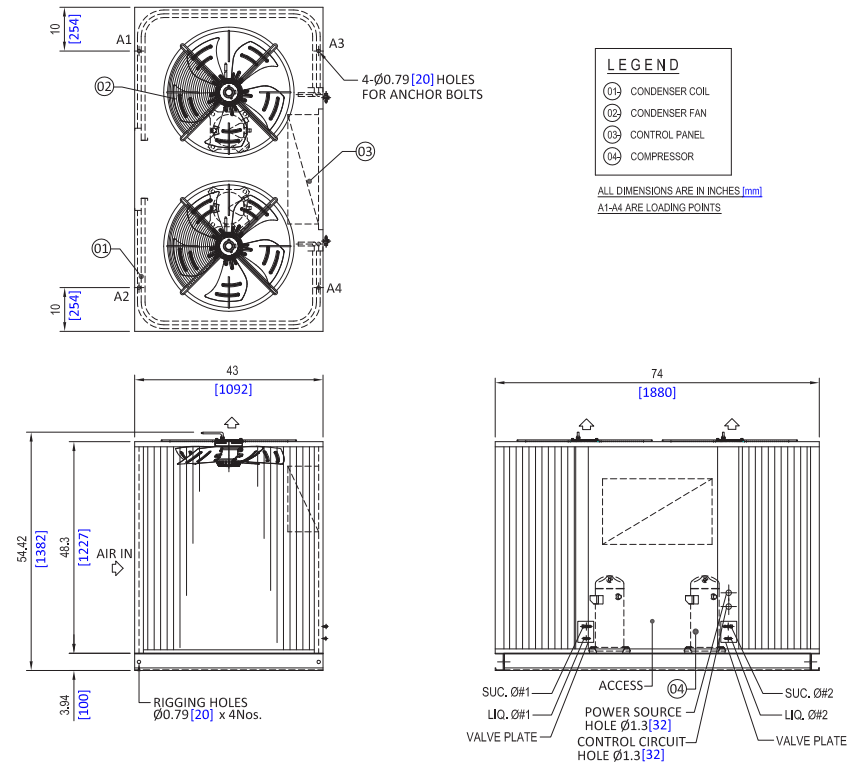


Models: ACUM- 060L G ,070L G ,085L G &100L G

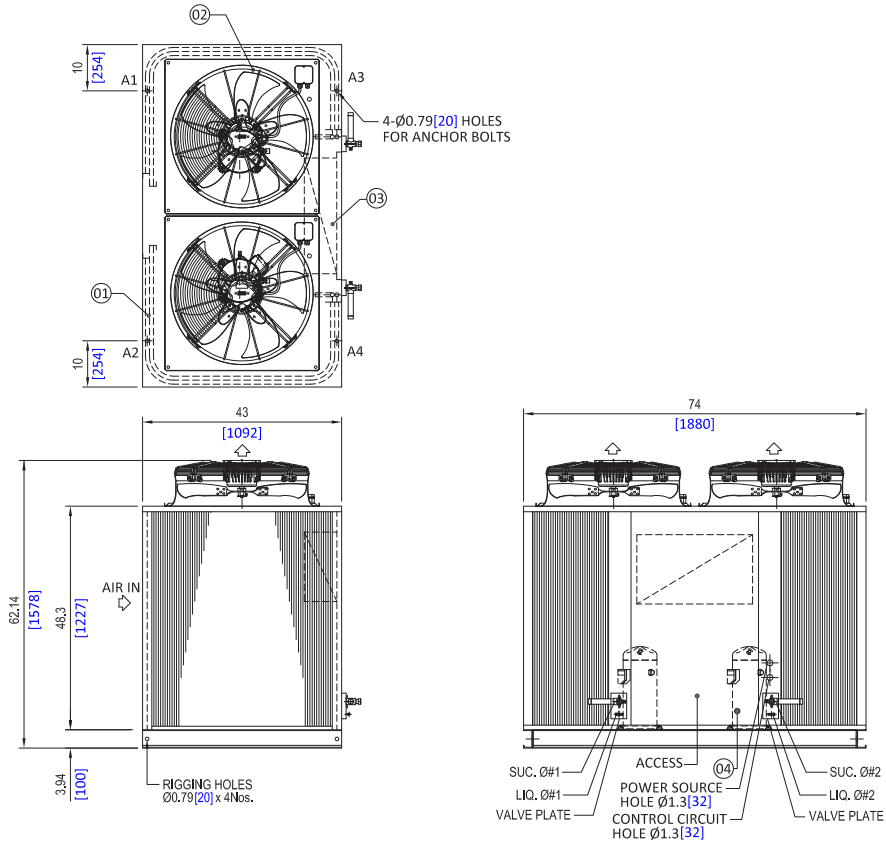


Condensing Unit Dimensional Data (HIGH EFFICIENCY)

Models: ACUM- 110L G & 120L G



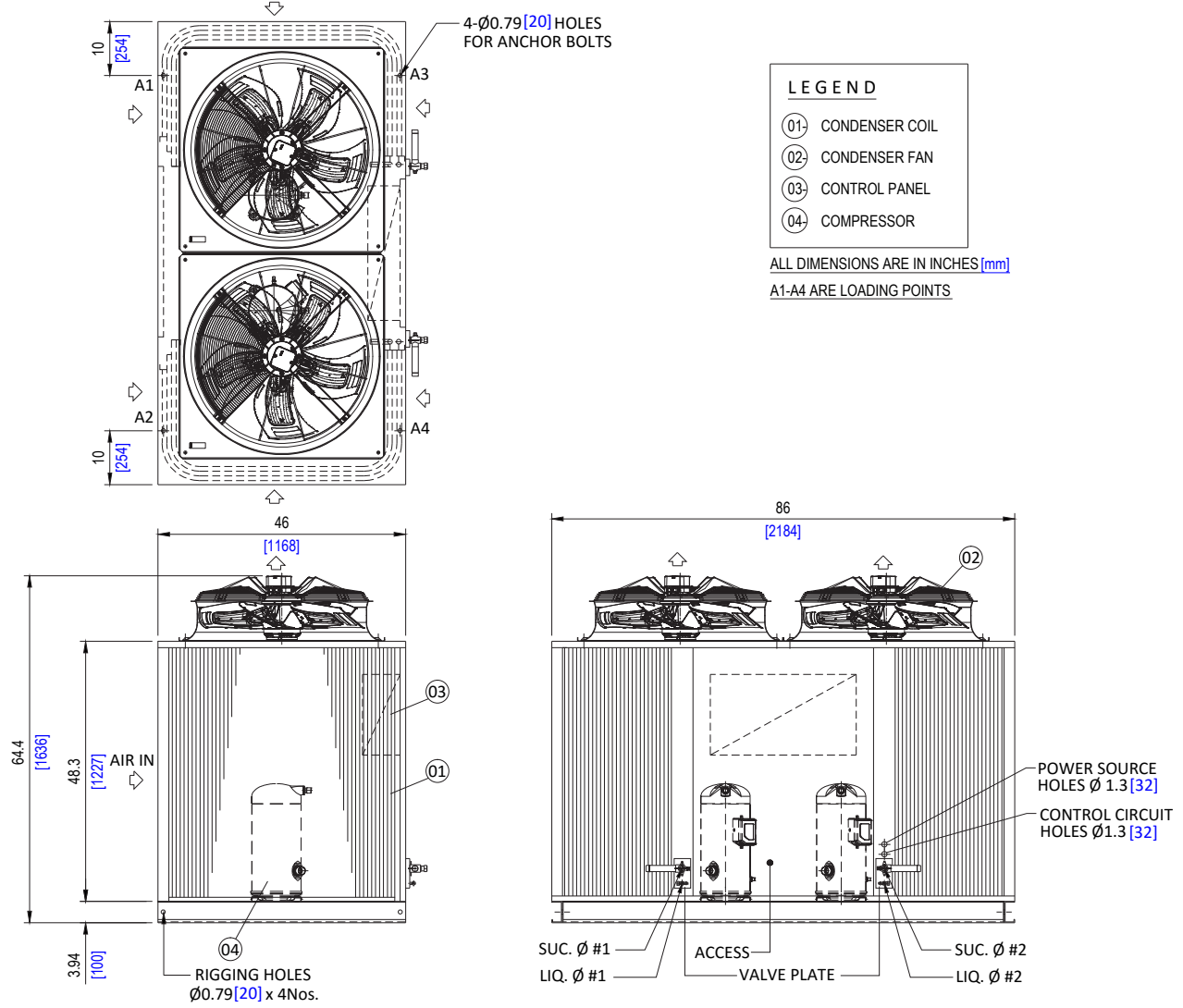
Models: ACUM- 130L G, 160L G, 180L G & 205L G





Condensing Unit Dimensional Data (HIGH EFFICIENCY)

Models: ACUM- 240L G & 260L G



Air Handling Unit Dimensional Data (HIGH EFFICIENCY)

Models: CADX-060L G to 180L G

Model CADX-LG	DIMENSIONS										
	L	W	H	A	B	C	D	E	J	G	F
060LG	45 [1143]	48 [1219]	25.2 [640]	24 [610]	39.2 [996]	21.4 [544]	17.48 [444]	17.48 [444]	11.38 [289]	13.03 [331]	1.7 [43]
070LG	45 [1143]	48 [1219]	25.2 [640]	24 [610]	39.2 [996]	21.4 [544]	17.48 [444]	17.48 [444]	11.38 [289]	13.03 [331]	1.7 [43]
100LG	50 [1270]	56 [1422]	27.2 [690]	26 [660]	47 [1194]	23.3 [592]	20.2 [514]	20.2 [514]	13.43 [341]	15.55 [395]	3.5 [89]
*120LG	50 [1270]	56 [1422]	28.2 [716]	27 [686]	47 [1194]	23.3 [592]	20.2 [514]	20.2 [514]	13.43 [341]	15.55 [395]	3.5 [89]
*150LG	58 [1474]	70 [1778]	30.2 [767]	29 [737]	62.6 [1589]	25.4 [646]	25.7 [653]	25.7 [653]	15.91 [404]	18.54 [471]	2.5 [63]
*180LG	60 [1524]	70 [1778]	33.2 [843]	32 [813]	62.6 [1589]	28.8 [732]	13.2 [334]	13.2 [334]	13.43 [341]	43.7 [1109]	9 [228]

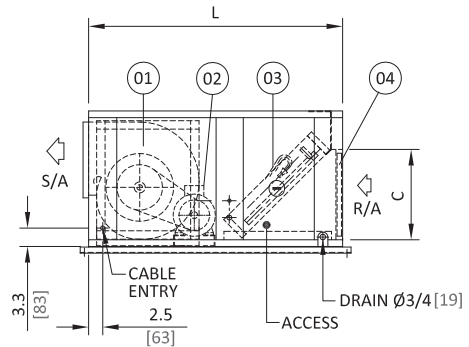
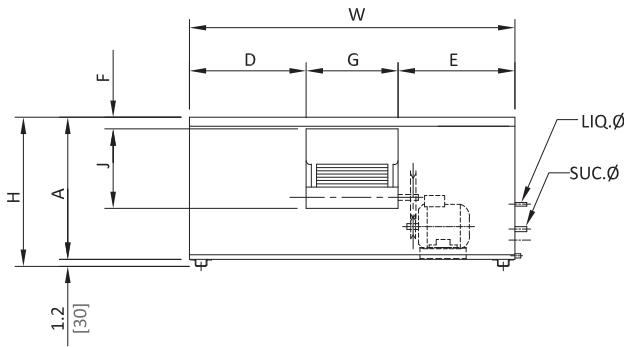
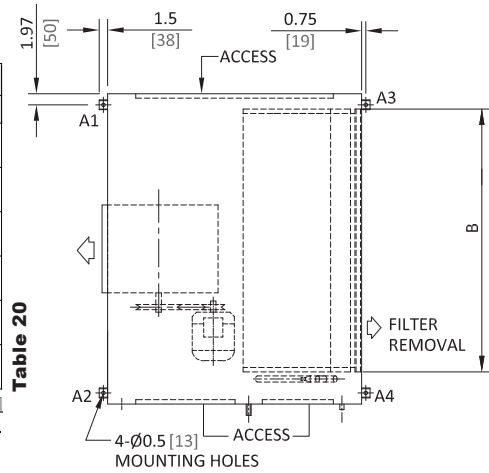
MODEL CADX-180LG WITH DOUBLE BLOWER FAN

*MODELS WITH DOUBLE CIRCUITS

USE DRAIN SIZE 1/2" FOR MODELS 150LG & 180LG

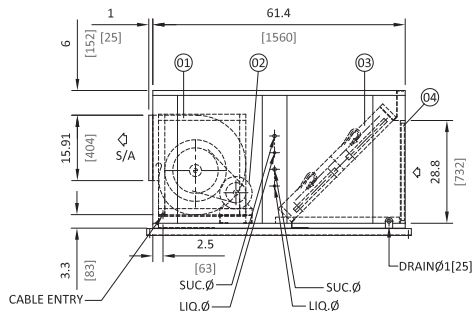
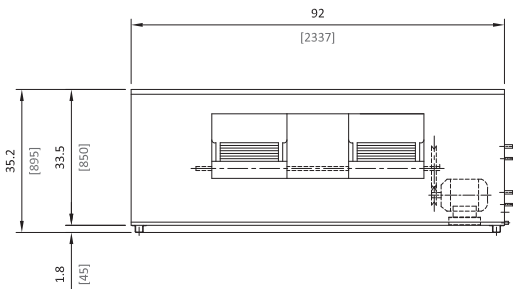
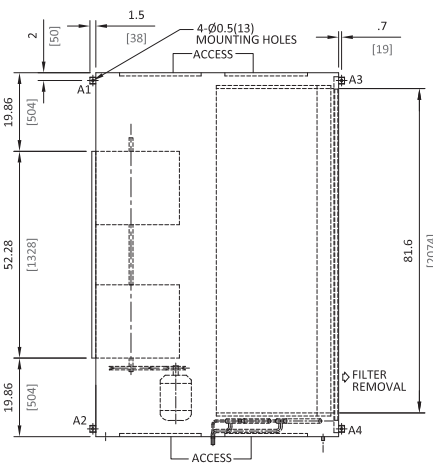
ALL DIMENSIONS ARE IN INCHES (MM)

A1-A4 ARE LOADING POINTS



Models: CADX-240L G

- LEGEND**
- ① - EVAPORATOR FAN
 - ② - EVAPORATOR FAN MOTOR
 - ③ - EVAPORATOR COIL
 - ④ - 1" THK. FLAT FILTER





WEIGHTS & LOADING POINTS (HIGH EFFICIENCY)

MODEL ACUM-LG	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT
	A1	A2	A3	A4	
050LG	102 [46]	104 [47]	107 [49]	106 [48]	419 [190]
060LG	132 [60]	124 [56]	133 [60]	119 [54]	509 [230]
070LG	132 [60]	124 [56]	133 [60]	119 [54]	509 [230]
085LG	143 [64]	136 [62]	145 [66]	130 [59]	554 [252]
100LG	145 [66]	138 [62]	147 [67]	132 [60]	562 [255]
110LG	218 [99]	217 [98]	219 [99]	218 [99]	872 [395]
120LG	220 [100]	219 [99]	222 [101]	221 [100]	882 [400]

MODEL ACUM-LG	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT
	A1	A2	A3	A4	
130LG	239 [109]	239 [108]	242 [110]	241 [109]	962 [436]
160LG	240 [109]	239 [108]	242 [110]	242 [110]	963 [437]
180LG	263 [119]	262 [119]	265 [120]	264 [120]	1054 [478]
205LG	264 [120]	263 [119]	265 [120]	264 [120]	1056 [479]
240LG	324 [147]	323 [147]	342 [155]	342 [155]	1331 [604]
260LG	324 [147]	323 [147]	342 [155]	342 [155]	1331 [604]

Table 21

MODEL CADX-LG	LOAD AT EACH POINT Lbs (Kgs)				TOTAL WEIGHT
	A1	A2	A3	A4	
060LG	66 [30]	62 [28]	57 [26]	51 [23]	236 [107]
070LG	66 [30]	62 [28]	57 [26]	51 [23]	236 [107]
100LG	83 [38]	86 [39]	78 [35]	77 [35]	324 [147]
120LG	89 [40]	92 [42]	84 [38]	83 [38]	348 [158]
150LG	120 [55]	125 [57]	110 [50]	109 [49]	464 [211]
180LG	122 [55]	136 [62]	115 [52]	122 [56]	495 [225]
240LG	169 [77]	192 [87]	166 [75]	176 [80]	703 [319]

Table 22

Recommended Suction and Liquid Line Sizes:

Models		PIPE LENGTH - FEET (m)															
		25 (7.6)				50 (15.2)				75 (22.9)				100 (30.5)			
		Circuit A		Circuit B		Circuit A		Circuit B		Circuit A		Circuit B		Circuit A		Circuit B	
ACUML G	CADXL G	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction
050LG	060LG	1/2	7/8	-	-	1/2	7/8	-	-	1/2	7/8	-	-	1/2	1 1/8	-	-
060LG	060L G	1/2	7/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-
070LG	070L G	1/2	7/8	-	-	1/2	1 1/8	-	-	1/2	1 1/8	-	-	5/8	1 1/8	-	-
085LG	100L G	1/2	1 1/8	-	-	1/2	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 3/8	-	-
100LG	100L G	1/2	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 1/8	-	-	5/8	1 3/8	-	-
110LG	120L G	1/2	7/8	1/2	7/8	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
120LG	120L G	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8
130LG	150L G	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8
160LG	150L G	1/2	7/8	1/2	7/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8
180LG	180L G	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8
205LG	180L G	1/2	1 1/8	1/2	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8
240LG	240L G	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8	5/8	1 3/8	5/8	1 3/8
260LG	240L G	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 1/8	5/8	1 3/8	5/8	1 3/8	3/4	1 3/8	3/4	1 3/8

Table 23

Notes :

1. Pipe diameters are based on equivalent length of copper tubing sizes.
2. Pipe sizes are based on 2°F (1.1°C) or less temperature losses for liquid and suction line in equivalent pipe length.
3. If the condensing unit is below the evaporating unit, the maximum lift should not exceed to 66 feet.
4. Do not exceed 100 feet piping length without checking with SKM.
5. These sizes are for guidance only. For detailed proper piping, refer to recognized piping references like ASHRAE Guide and Data Book.

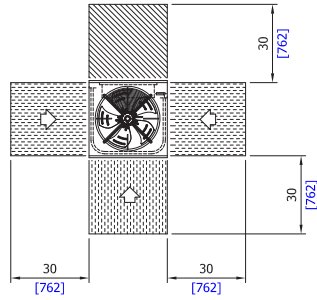
The recommended or required suction and liquid line sizes do not necessarily correspond with the refrigerant connections available on the outdoor or indoor unit. Necessary transformation may be required and it's field performed.

Recommended Clearances

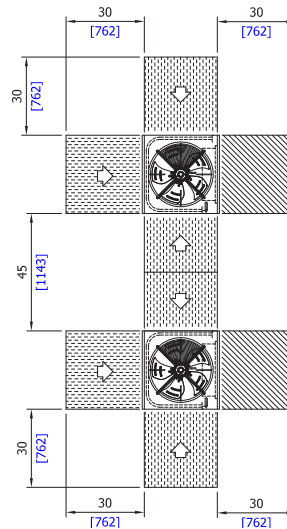
 SPACING FOR SERVICE

 SPACING FOR AIR FLOW

ALL DIMENSIONS ARE IN INCHES[mm]
* FOR ESM APPROVED MODEL

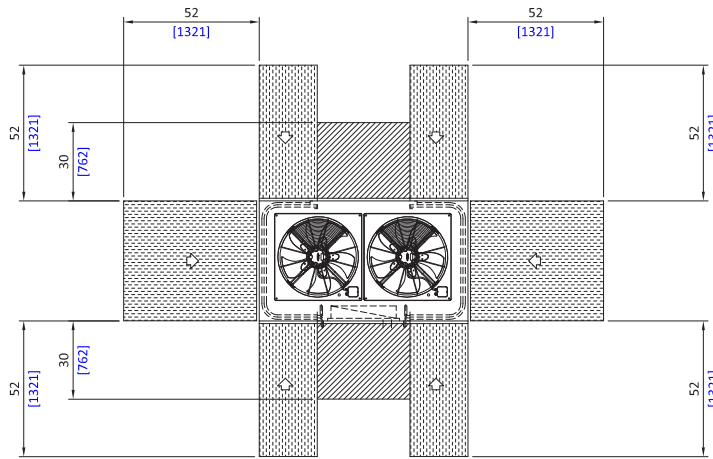


SINGLE UNIT

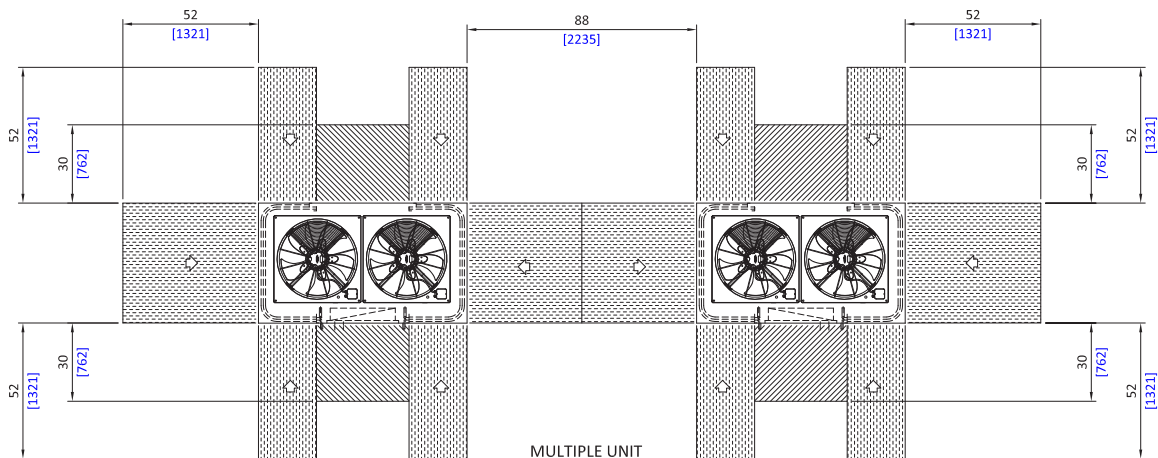


MULTIPLE UNIT

**ACUM-050L - 100L
ACUM-050LG - 100LG**



SINGLE UNIT



MULTIPLE UNIT

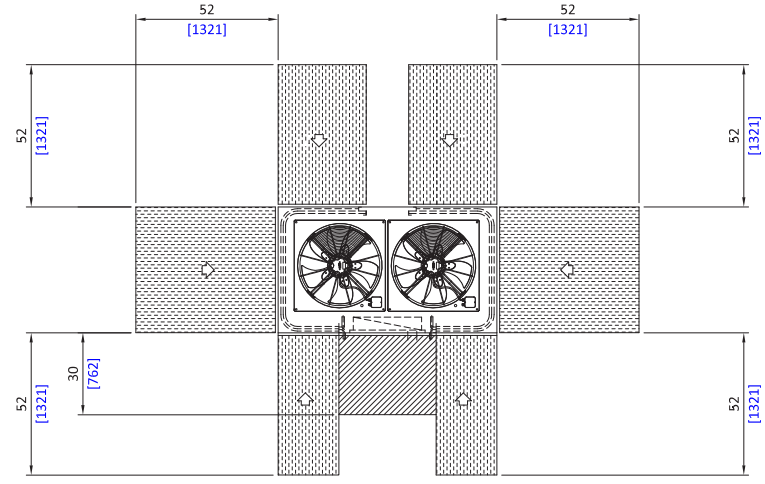
**ACUM-110L - 260L
ACUM-240L G & 260L G**



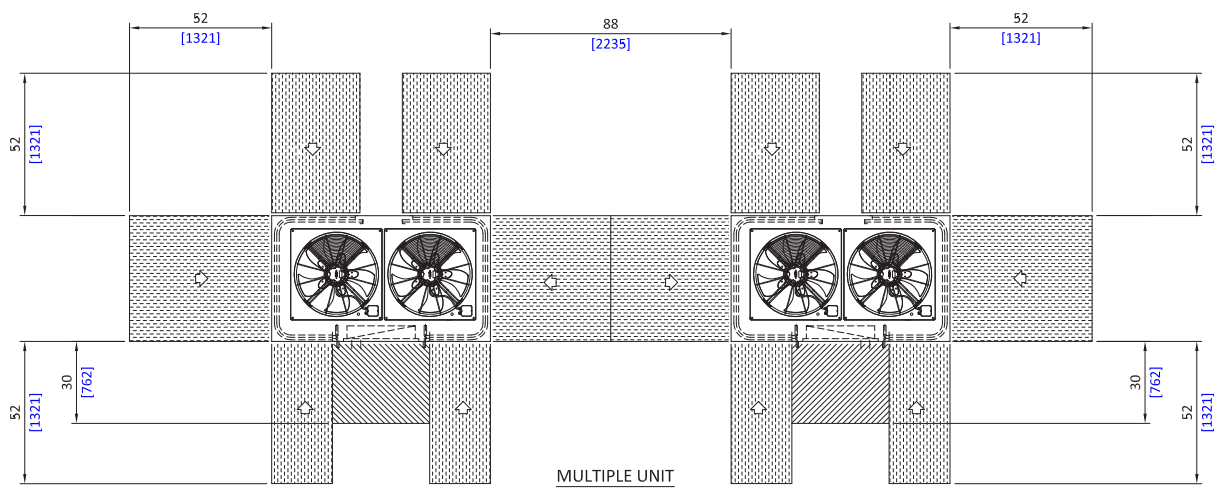
Recommended Clearances (HIGH EFFICIENCY)

Models: ACUM - 110L G to 205L G

SPACING FOR SERVICE
 SPACING FOR AIR FLOW



SINGLE UNIT



MULTIPLE UNIT

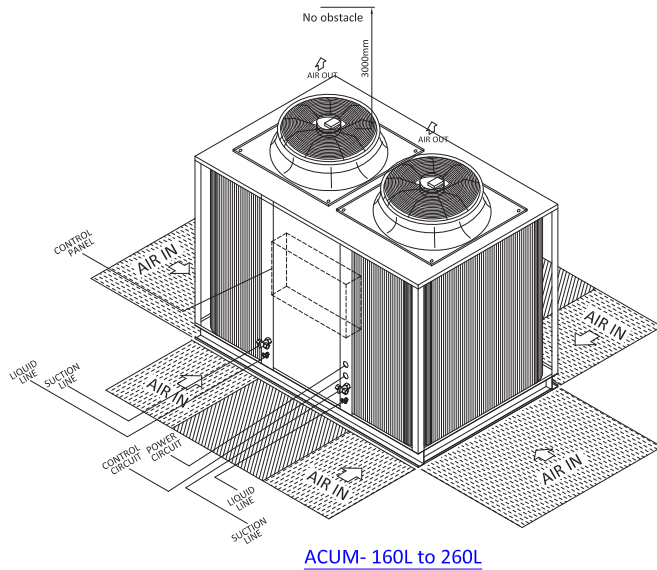
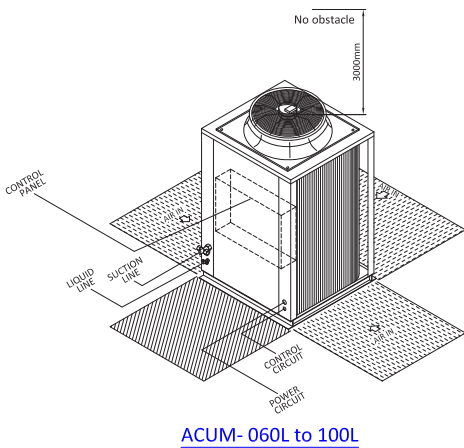
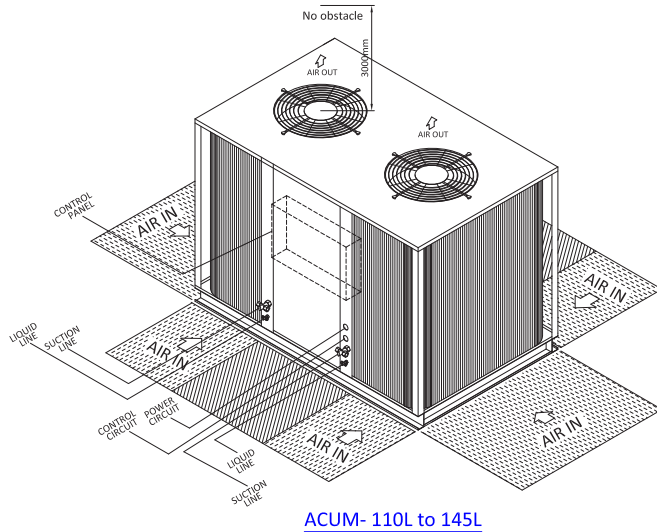
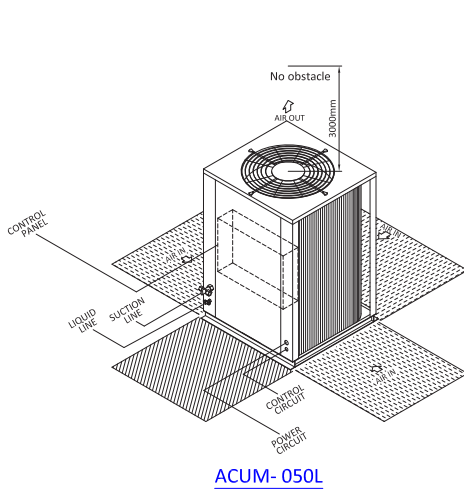
Installation and Commissioning

- Install the unit in such a location which is flat and strong enough to support its weight.
- All field wiring must comply with applicable local and national codes.
- Service spacing should be provided as shown in the figure. If any obstacles are around the unit, distributed air is short-circuited so that the unit stops frequently and access to the unit is difficult for inspection and aftersales services.

INSTALLATION & COMMISSIONING

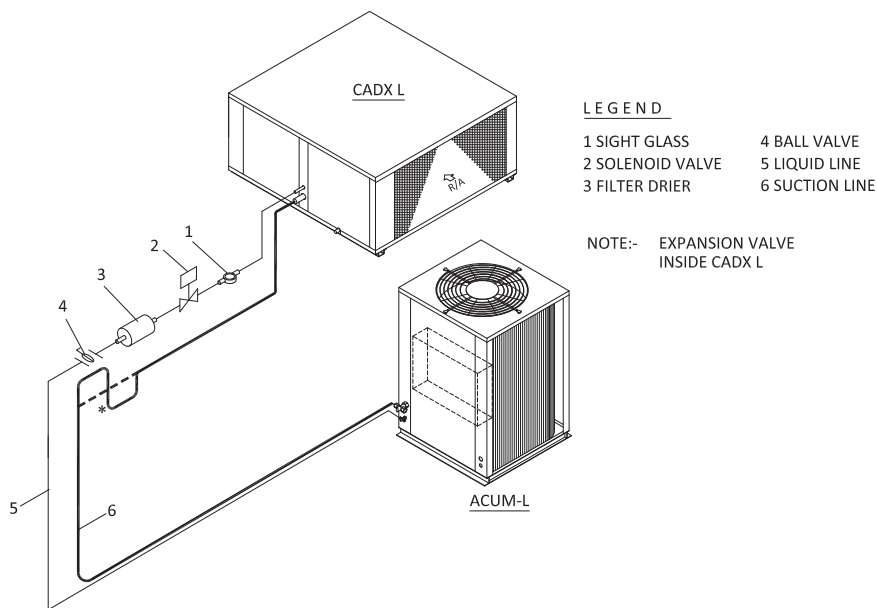
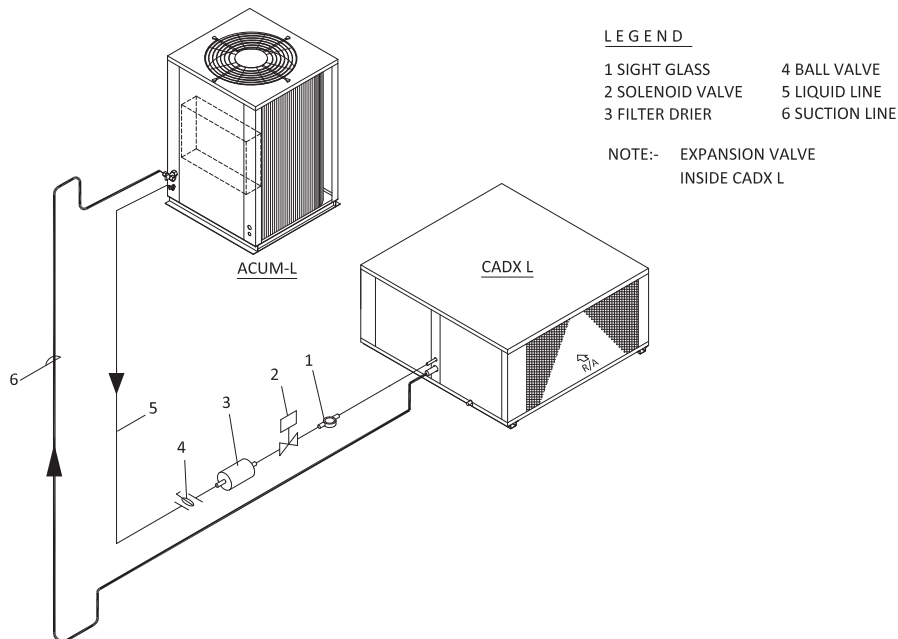
 SPACING FOR SERVICE

 SPACING FOR AIRFLOW





Typical Refrigeration Piping



* INVERTED TRAP WITHOUT PUMP DOWN CONTROL.
DOTTED WITH PUMP DOWN CONTROL.

Refrigerant Piping:

Correct design and size of refrigerant piping is necessary to proper operation. The refrigerant piping generally should be designed to accomplish the following:

- To ensure proper refrigerant feed to the evaporator.
- To provide practical refrigerant line sizes without excessive pressure drop.
- To maintain uniform return of lubricating oil to the compressor.
- To prevent refrigerant from entering the compressor and causing compressor damage due to "slugging".

GUIDE SPECIFICATIONS

GENERAL

Split air conditioner shall be composed of a ceiling suspended air handling unit & floor mounted air cooled condensing unit, rated in accordance with AHRI standards 210 / 240 and 340 / 360.

CONDENSING UNIT

The condensing unit shall be composed of compressor(s), coil(s) and condenser fan(s) and motor(s).

COMPRESSOR

Compressor shall be hermetically sealed, compact high efficiency and low noise scroll type. These compressors are refrigerant gas cooled, furnished with advanced scroll temperature protection or internal motor protection.

CONDENSER COIL(S)

Condenser coils shall be air cooled with integral sub cooler, constructed of special inner grooved seamless copper tubes 3/8" OD mechanically expanded into Corrugated aluminum fins. These coils shall be tested against leakage by air pressure of 525psig (3620kPa) under water, cleaned & dehydrated at the factory.

CONDENSER FAN(S) & MOTOR(S)

Condenser Fans shall be direct driven propeller type discharging air vertically upward, equipped with statically & dynamically balanced aluminum alloy blades, inherent corrosion resistant shaft & PVC coated steel wire fan guard. Condenser fan motor(s) shall be Totally Enclosed Air Over (TEAO), 4 pole or 6 pole, class-F insulation, minimum IP-54 protection and factory wired to unit control panel

CONTROL PANEL

The panel shall be factory wired and confirm to IP-54 requirements. Control panel shall contain compressor and motor starting contactors, electronic control board for unit operation, compressor anti-recycle time delay, control on/off switch, control circuit breaker, power & control terminal blocks and high/low pressure protection.

CONDENSING UNIT CASING

Units casing shall be made of hot dip galvanized steel sheets (zinc coated) conforming to JIS-G3302 and ASTM A653 that shall be phosphatized and then electrostatically dry powder coated of approx 60 microns to provide an extremely tough, scratch resistance, excellent anti corrosive protection that can pass 1000 hours in 5% salt spray testing at 95°F relative humidity as per ASTM B117.

AIR HANDLING UNIT CASING

The unit casing for CADX-L is made of zinc coated galvanized steel sheets conforming to JIS-G3302 and ASTM A653 which is phosphatized and baked after an electrostatic powder coat of approximately 60 microns. This finish and coating can pass a 1000 hour in 5% salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117. Panels and casing are insulated with 1" (25mm) thick fiberglass (with BGT coating) thermal and acoustic insulation having density of 2 lb/ft³. (32 kg/m³) and thermal conductivity of 0.23 BTU.in/ft²°Fh (0.033 W/m²K). Insulation meets the requirements of NFPA 90A and 90B for fire resistance.

EVAPORATOR COIL

Evaporator coil shall be constructed of inner grooved copper tubes 3/8" OD mechanically bonded to aluminum Corrugated fins. Coil consists of headers of seamless copper tubing, thermostatic expansion valve(s) & multi-circuited distributor(s). These coils shall be tested against leakage by air pressure of 300 psig (2068 Kpa) under water, cleaned & dehydrated at the factory. Coil shall conform to AHRI-410.

EVAPORATOR FAN AND MOTOR

Fans of evaporators shall be forward curved, double inlet double width (DIDW), centrifugal type, Statically & dynamically balanced, mounted on a single heavy duty statically & shaft with permanently lubricated bearings & driven by V belt with an adjustable variable pitch motor pulley. Motor shall be Totally Enclosed Fan Cooled (TEFC), 4 poles, class-F insulated, minimum IP55 protection & wired to unit control panel.

FILTERS

Air handling units shall be provided with air filter. Filter should be 1" (25mm) standard or 2" (50mm) thick optional washable aluminum media with average dust arrestance 54% based on ASHRAE standards 52.1.

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