40MULA

Evaporator Coil
Sizes 24K-60K

Carrier

Product Data

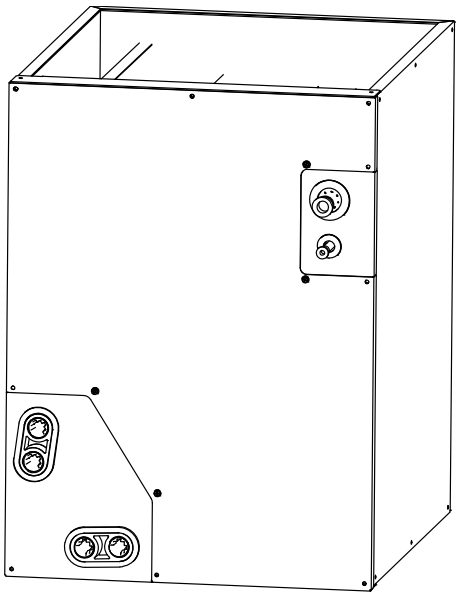


Fig. 1 — Evaporator A Coil (40MULAQ24XAX and 40MULAQ36XBX)

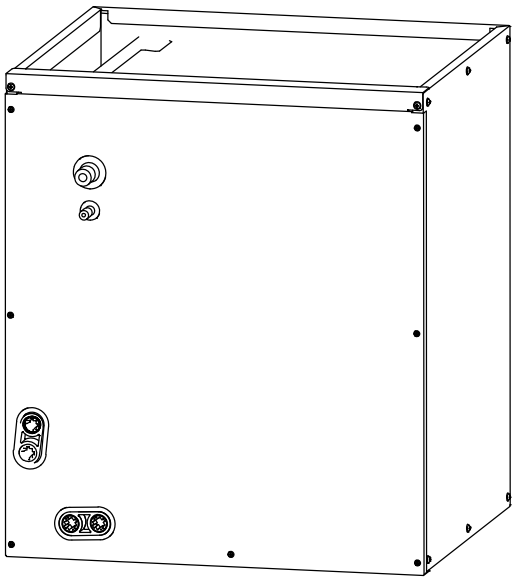


Fig. 2 — Evaporator A Coil (40MULAQ24XBX, 40MULAQ36XCX, 40MULAQ48XCX, 40MULAQ60XDX

NOTE: Images are for illustration purposes **only**. Actual models may differ slightly.

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NOTE: The Coil Interface and the Wired Controller (KSACN1101AAA) are required for this unit to perform per AHRI ratings.

INDUSTRY LEADING FEATURES / BENEFITS

FAST INSTALLATION

This evaporator coil is simple to install. This makes the system the equipment of choice, especially in retrofit situations.

On all indoor units, service and maintenance expense is reduced due to easy accessible service panels. In addition, these systems have extensive self-diagnostics to assist in troubleshooting.

BUILT-IN RELIABILITY

The units are designed to provide years of trouble-free operation.

The units include protection against freeze-up and high evaporator temperatures on heat pumps.

The condensing units on the heat pumps are protected by a three minute delay that provides over-current protection and high temperature protection prior to the start of the compressor.

ECONOMICAL OPERATION

The system design allows individual or multi-room heating or cooling when required. There is no need to run large supply-air fans or chilled water pumps to handle a few spaces with unique load patterns.

EASY-TO-USE CONTROLS

The units have microprocessor-based controls to provide the ultimate in comfort and efficiency. The user-friendly control provides the interface between the user and the unit.

MULTI-POISE INSTALLATION

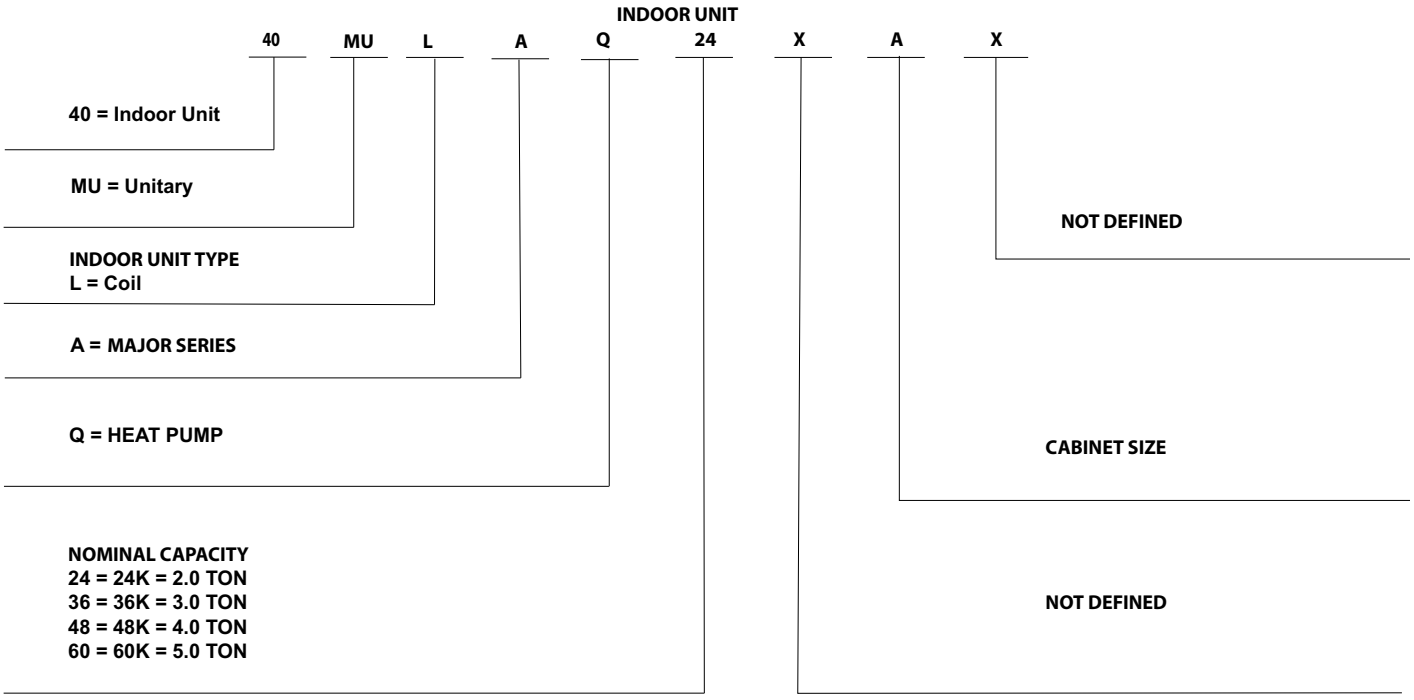
Designed for maximum installation flexibility. The secondary drain built-in allows the unit to be mounted in an upflow, downflow, left or right installation depending on existing conditions.

AGENCY LISTINGS

All systems are listed with AHRI (Air Conditioning, Heating & Refrigeration Institute), UL/ETL and CSA.

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

MODEL NUMBER NOMENCLATURE



AHRI CERTIFIED www.ahridirectory.org

Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to www.ahridirectory.org.

MODEL NUMBERS

	kBTUh	Carrier	Number of Indoor Units
Description	24	40MULAQ24XAX	1
	24	40MULAQ24XBX	1
	36	40MULAQ36XBX	1
	36	40MULAQ36XCX	1
	48	40MULAQ48XCX	1
	60	40MULAQ60XDX	1

DIMENSIONS

Model Number		40MULAQ24XAX	40MULAQ24XBX	40MULAQ36XBX	40MULAQ36XCX	40MULAQ48XCX	40MULAQ60XDX
Dimensions							
Height (A)	In/ (mm)	17.99(457)	17.99(457)	23.58(599)	23.98(609)	23.98(609)	27.99(711)
Width (B)	In/ (mm)	14.49(368)	17.52(445)	17.52(445)	20.98(533)	20.98(533)	24.49(622)
Depth (E)	In/ (mm)	21.02(534)	20.98(533)	20.98(533)	20.98(533)	20.98(533)	20.98(533)
Packaging							
Height	In/ (mm)	20.55(522)	20.28(515)	25.39(645)	26.38(670)	26.38(670)	30.31(770)
Width	In/ (mm)	17.6(447)	20.47(520)	20.47(520)	24.02(610)	24.02(610)	27.76(705)
Depth	In/ (mm)	26.06(662)	26.18(665)	26.18(665)	26.18(665)	26.18(665)	26.18(665)
Thickness	In/ (mm)	0.276(7)	0.276(7)	0.276(7)	0.276(7)	0.276(7)	0.276(7)
Drawing No.		ZXW-645*430*505S-NS	ZXW-505*650*490S-NS	ZXW-505*650*630S-NS	ZXW-595*650*645S-NS	ZXW-595*650*645S-NS	ZXW-690*650*745S-NS
Material	-	Double Corrugated					
Weight-Gross	lbs. (kg)	46.52(21.1)	52.03(23.6)	69.00(31.3)	77.16(35)	77.16(35)	98.33(44.6)
Weight - Net	lbs. (kg)	41.67(18.9)	42.77(19.4)	60.19(27.3)	66.58(30.2)	66.58(30.2)	86.64(39.3)

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DIMENSIONS (CONT)

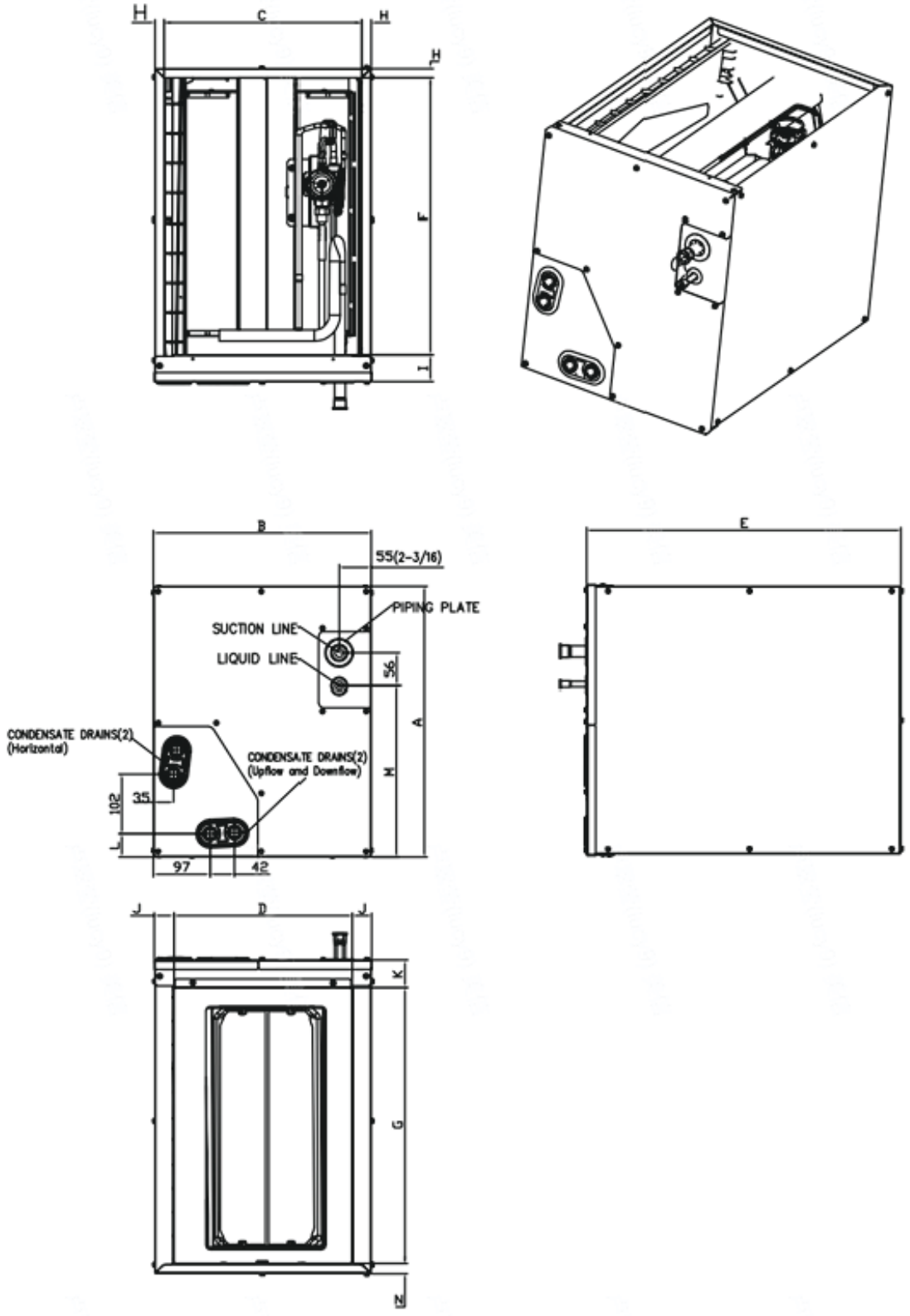


Fig. 3 — 40MULAQ24XAX, 40MULAQ36XBX

DIMENSIONS (CONT)

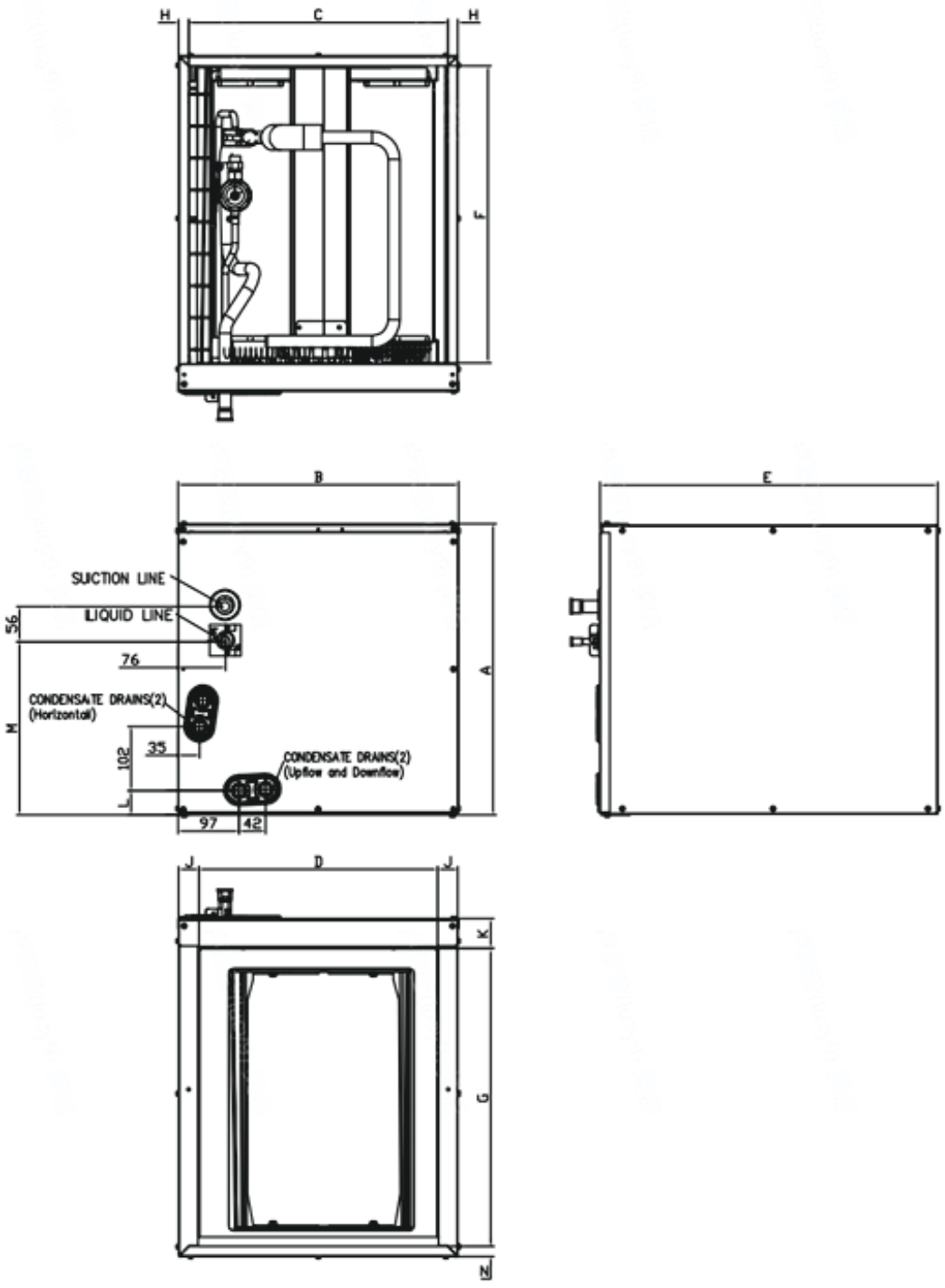


Fig. 4 — 40MULAQ24XBX, 40MULAQ36XCX, 40MULAQ48XCX, 40MULAQ60XDX

REFRIGERANT COIL SPECIFICATIONS

MODEL NUMBER		40MULAQ24XAX	40MULAQ24XBX	40MULAQ36XBX	40MULAQ36XCX	40MULAQ48XCX	40MULAQ60XDX
Number of rows	Rows	3	3	4	4	4	5
Tube outside diameter	inch	0.276	0.276	0.276	0.276	0.276	0.276
	mm	7	7	7	7	7	7
Nominal Tube Wall	inch	0.039	0.039	0.039	0.039	0.039	0.039
	mm	1	1	1	1	1	1
Tube Enhancement	(Yes/ No)	Yes	Yes	Yes	Yes	Yes	Yes
Tube Material		Aluminum					
Tube pitch (a) x row pitch (b)	inch	0.83x0.53	0.83x0.53	0.83x0.53	0.83x0.53	0.83x0.53	0.83x0.53
	mm	21x13.37	21x13.37	21x13.37	21x13.37	21x13.37	21x13.37
Fin Spacing	FPI	20	20	20	16	16	20
	mm	1.3	1.3	1.3	1.6	1.6	1.3
Fin type		Louvered					
Fin Material		Hydrophilic aluminum					
Coil length x width x height	inch	16.34*13.23*1.58*2	16.34*13.23*1.58	16.34*18.19*2.11*2	16.34*18.19*2.11*2	16.34*18.19*2.11*2	16.34*21.50*2.64*2
	mm	415*336*40.11*2	415*336*40.11*2	415*462*53.48*2	415*426*53.48*2	415*426*53.48*2	415*546*66.85*2
Face area	ft2	3.01	3.01	4.14	3.82	3.82	4.89
Number of circuits	#	6	6	10	10	10	14
Metering Device		TXV					
High Burst Pressure	Psi (MPa)	550(3.79)	550(3.79)	550(3.79)	550(3.79)	550(3.79)	550(3.79)
Low Burst Pressure	Psi (MPa)	340(2.34)	340(2.34)	340(2.34)	340(2.34)	340(2.34)	340(2.34)
Design (high/low) Burst Pressure	Psi	550/340	550/340	550/340	550/340	550/340	550/340
Gas Pipe (size – connection type)	In (mm)	3/4”(19)	3/4”(19)	3/4”(19)	3/4”(19)	3/4”(19)	7/8”(22)
Liquid Pipe (size – connection type)	In (mm)	3/8”(9.52)	3/8”(9.52)	3/8”(9.52)	3/8”(9.52)	3/8”(9.52)	3/8”(9.52)

APPLICATION DATA

Unit Selections

Select equipment that either matches or supports slightly more than the anticipated peak load. This provides better humidity control, fewer unit cycles, and less part-load operation.

For units used in spaces with high sensible loads, base equipment selection on unit sensible load, not on total anticipated load. Adjust for anticipated room wet bulb temperature to avoid undersizing the equipment.

System Operating Conditions

OPERATING RANGE MIN/MAX °F / °C

All sizes 24-60: (due to outdoor unit use)

- **Cooling: 5°F/122°F (-15°C/50°C)**
- **Heating: -22°F/75°F (-30°C/24°C)**

NOTE: Without intervention, the unit may continue to run at temperatures outside of the specified operating temperatures. However, operation outside of the specified temperature range may result in decreased performance which may cause damage to the unit.

METERING DEVICES

The outdoor unit has an electronic device to meter the refrigerant in heating. The evaporator coil has a TXV to meter the refrigerant in cooling. The indoor unit has TXV and the outdoor has EEV.

DRAIN CONNECTIONS

Install drains to meet the local sanitation codes.

REFRIGERANT LINES

General refrigerant line sizing:

1. The outdoor units are shipped with a full charge of R410A refrigerant. All charges, line sizing, and capacities are based on runs of 25 ft. (7.6 m).
2. Refrigerant lines should not be buried in the ground. If it is necessary to bury the lines, do not bury more than 36-in (914 mm). Provide a minimum 6-in (152 mm) vertical rise to the service valves to prevent refrigerant migration.
3. Paired match-ups with this coil 38MURA ODU's have a true liquid line and do not require both to be insulated.
4. Special consideration should be given to isolating the interconnecting tubing from the building structure. Isolate the tubing so vibration or noise is not transmitted into the structure.

⚠ CAUTION

It is **REQUIRED** to flow Nitrogen in the system while brazing the line set.

NOMINAL AIRFLOW SPECIFICATIONS

Model Number	40MULAQ24XAX	40MULAQ24XBX	40MULAQ36XBX	40MULAQ36XCX	40MULAQ48XCX	40MULAQ60XDX
Indoor CFM	705.9	705.9	882.4	882.4	1029.4	1117.7

PERFORMANCE

Pressure Drop Across Coil Vs. Air Flow

Capacity	Pressure (Pa)	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70	-75
18K/24K	Airflow (M^3/h)	276	484	636	786	913	1024	1135	1238	1330	1426	1539	1622	1703	1783	1858
	Pressure (Pa)	-6.8	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70	-75
30K/36K	Airflow (M^3/h)	374.5	505	676	823.8	958.4	1081.8	1194.9	1305.5	1409.9	1505.4	1603.8	1693.5	1778.2	1865.1	1950
	Pressure (Pa)	-7.7	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65	-70	-75
48K/60K	Airflow (M^3/h)	437	529	692	844	980	1104	1227	1335	1441	1543	1642	1733	1832	1916	2010

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