

# AIR-COOLED CONDENSING UNIT



- Cooling only
- Cooling Capacities of 14 a 70 kW

**AIRCUBE**

## Cooling Capacities of 14 - 70 kW



The Aircube KNA condensing unit is designed and manufactured for outdoor installation.

Only precision engineered **quality components** are used in the compressor, axial direct-drive fans, air-cooled condensers and the regulating controls, and together they form the basis of a what is a quality guaranteed product.

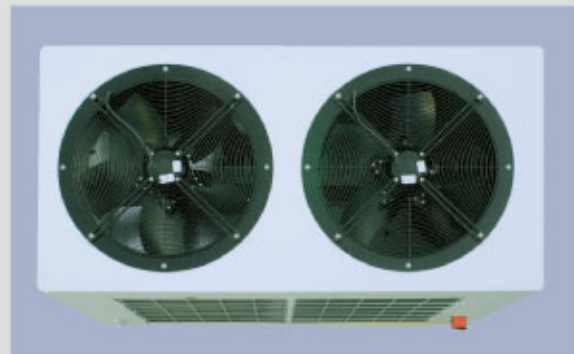
The use of air-cooled condensers with relatively high surface areas on the 5 - 15E models means that the units are able to operate with **relatively low condensing temperatures**. An additional advantage of this design is longer service life due to reduced load and lower running costs by using efficient scroll compressors.

The Aircube is designed primarily for use in air conditioning systems and will operate safely in conjunction with air handling units with evaporating temperatures ranging between 0 °C to + 10 °C.

The **standard unit is** supplied with **electronic winter control**, which means under extreme winter conditions it will operate effectively down to -10 °C. The axial fan is controlled **proportionally** as the outdoor temperature falls.

The **cabinet** is made of galvanized sheet steel finished with high resistant epoxy powder coating and internally lined with acoustic insulation.

The **axial fan** is directly driven by an IP54 low noise motor, with insulating category F, which means that it is suitably protected for outdoor installation.



# AIR-COOLED CONDENSATION UNIT

R407C

The **compressors** used are cooled by aspirated gas and are hermetically sealed with built-in thermal protection.

They are mounted on anti-vibration mounts, with an acoustically lined cabinet contributing to low noise operation. To extend the life of the compressors they are protected with an antiroll system.

The **electrical panel** contains:

- Circuit breakers
- High and low pressure switches
- Thermal protections
- Voltage input switches or master switch (model E)
- Crank case heater
- Electronic control panel



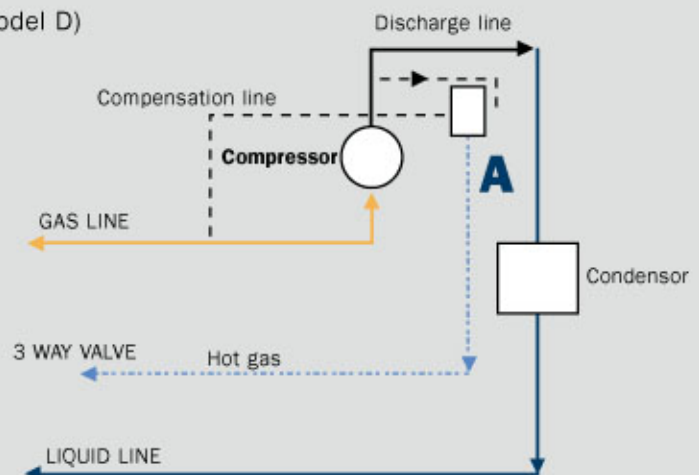
## ACOUSTIC PRESSURE LEVEL

Aircube KNA	5EK	7EK	8EK	10EK	15EK	15DK	17DK	20DK	30DK
External ambient temperature +30°C	40	42	43	43	45	45	46	46	46
External ambient temperature +25°C	38	39	41	41	43	43	44	44	44
External ambient temperature +20°C	36	38	39	39	41	41	42	42	42

In dB(A) for ref.  $2 \times 10^{-5}$  N/m at a distance of 10 metres in free field conditions, in accordance with standard DIN 45635 paragraph 14

## OPTIONAL

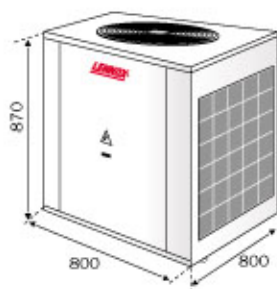
- Hot gas bypass
- Master switch (model D)
- Fault signalling



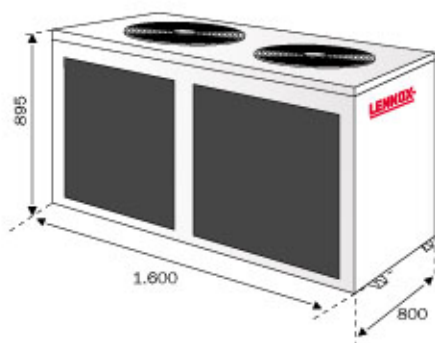
**A:** Kit hot gas bypass

# DIMENSIONS

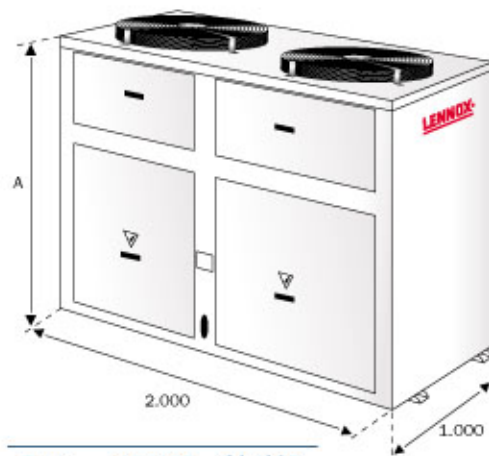
**TYPE 5/7E**



**TYPE 8/10/15E**



**TYPE 15/17/20/30D**



Type	15/17D	20/30D
A	1.330	1.830

## TECHNICAL DATA

TYPE		KNA 5EK	KNA 7EK	KNA 8EK	KNA 10EK	KNA 15EK	KNA 15DK	KNA 17DK	KNA 20 DK	KNA 30 DK
Cooling capacity	kW	14,1	17,8	21,95	28,30	35,95	36,30	43,00	55,40	68,20
Compressor power input	kW	5,29	7,00	8,00	10,26	13,70	14,23	16,26	21,30	27,85
Fan power consumption	kW	0,26	0,42	2x0,26	2x0,26	2x0,42	2x0,44	2x0,44	2x0,44	2x0,51
Compressor starting current	A	63	69	79	105	130	84	98	129	160
Compressor running current	A	15	23	22	27	36	34	38	48	60
Fan current rating	A	2,4	3,1	2X2,4	2X2,4	2X3,1	2X2,2	2X2,2	2X2,2	2X2,6
Operating voltage	V	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz	3X400V 50 Hz
Air flow rate	m <sup>3</sup> /h	4500	5200	9500	9000	10.400	14.400	14.200	20.000	19.200
Operating weight	kg	135	145	220	270	320	305	350	405	455
Coolant connections:										
Liquid line	Inches	5/8	5/8	5/8	5/8	3/4	2x5/8	2x5/8	2x5/8	2x3/4
Gas line	Inches	3/4	7/8	1 1/8	1 3/8	1 3/8	2x 7/8	2x 1 1/8	2x 1 1/8	2x 1 3/8
Coolant filling	kg	4	5,6	Filling with nitrogen	Filling with nitrogen	Filling with nitrogen	Filling with nitrogen	Filling with nitrogen	Filling with nitrogen	Filling with nitrogen
Sound pressure level	dB(A)	46	48	49	49	51	52	53	55	55

The above-stated data is valid for an evaporation temperature of + 5°C and an air external ambient air temperature of 30°C. Acoustic pressure level in dB(A) for ref. 2 x 10<sup>-5</sup> N/m at a distance of 2 - 10 metres in free field conditions.