LENNOX®

APPLICATION GUIDE

PROVIDING GLOBAL SYSTEM SOLUTIONS

AIRCOOLAIR

PRODUCT RANGE

COOLING ONLY R-407 C

MODEL	OUTDOOR UNIT	INDOOR UNIT	V / Ph / 50 Hz	NOMINAL CAPACITY W	TOTAL POWER CONSUMPTION kW
				COOLING	COOLING
ANA 5EK	KNA 5EK	LNA 5EK	230-400V/3Ph	14.500	6,5
ANA 7EK	KNA 7EK	LNA 7EK	230-400V/3Ph	18.900	8,2
ANA 8EK	KNA 8EK	LNA 8EK	230-400V/3Ph	22.300	9,4
ANA 10EK	KNA 10EK	LNA 10EK	230-400V/3Ph	28.900	12,6
ANA 15EK	KNA 15EK	LNA 15EK	230-400V/3Ph	36.000	16,3

HEAT PUMP R-22

MODEL	OUTDOOR UNIT	INDOOR UNIT	V / Ph / 50 Hz	NOMINAL CAPACITY W		POWER INPUT kW	
				COOLING	HEATING	COOLING	HEATING
HAB 5	KAB 5	LHB 5	230-400V/3Ph	15.000	16.000	6,7	7,2
VAB 5	KAB 5	LVB 5	230-400V/3Ph	15.000	16.000	6,7	7,2
HAB 7	KAB 7	LHB 7	230-400V/3Ph	19.000	20.000	8,2	8,9
VAB 7	KAB 7	LVB 7	230-400V/3Ph	19.000	20.000	8,2	8,9
HAB 8	KAB 8	LHB 8	230-400V/3Ph	22.300	23.400	9,4	10,0
HAB 10	KAB 10	LHB 10	230-400V/3Ph	28.900	31.000	12,6	13,5
HAB 15	KAB 15	LHB 15	230-400V/3Ph	36.000	38.000	16,3	17,3

SPECIFICATIONS

ANA COOLING ONLY

ANA = LNA + KNA			ANA 5EK	ANA 7EK	ANA 8EK	ANA 10EK	ANA15EK
Cooling capacity*		W	14.500	18.900	22.300	28.900	36.000
Air flow: max./min. indoor		$m^3/h.$	4.200/3.400	5.000/3.800	5.700/4.200	8.400/5.600	8.400/5.600
Available pressure: max. (1)		Pa	180	180	230	230	370
Air flow: max. outdoor		$m^3/h.$	4.500	5.200	9.500	9.000	10.400
Nominal total input power		Kw.	6,5	8,2	9,4	12,6	16,3
Max current: 230/400 V		A	29/18,9	35,1/24,1	37,6/22,8	48,2/28,6	61,8/37,8
Starting current: 230/400 V		A	117/60	135/67	176/78,5	170/105	208/130
Voltage: 50 Hz + Neutral+ Earth			230/400 V-III	230/400V-III	230/400V-III	230/400V-III	230/400V-III
Weight: Indoor unit LNA		Kg.	90	100	100	180	200
Weight: Outdoor unit KNA		Kg.	135	145	210	230	260
Dimensions Unit indoor	Height	mm.	440	440	512	660	660
	Length	mm.	1.010	1.010	1.285	1.555	1.555
	Width	mm.	650	650	720	805	805
Dimensions Unit outdoor	Height	mm.	870	870	895	895	895
	Length	mm.	800	800	800	800	800
	Width	mm.	800	800	1.600	1.600	1.600
Refrigerant coupling	Liquid pipe		5/8"	5/8"	5/8"	5/8"	3/4"
	Gas pipe		3/4"	7/8"	1 1/8"	1 3/8"	1 3/8"

*Air temperature indoor interchange 27 °C DB / 19 °C WB. Air temp. outdoor 35 ºC DB.
(1)With minimum admissible flow volumes
DB.- Dry bulb
WB.- Wet bulb

ELECTRICAL CHARACTERISTICS

		ANA 5EK	ANA 7EK	ANA 8EK	ANA 10KE	ANA 15EK
NOMINAL INPUT POWER						
Compressor	Kw.	5,50	6,80	7,78	10,58	13,26
Indoor Fan	Kw.	2x0,37	2x0,5	1,1	1,5	2,2
Outdoor Fan	Kw.	0,26	0,42	2x0,26	2x0,26	2x0,42
TOTAL	Kw.	6,50	8,22	9,40	12,60	16,30
MAX. INPUT CURRENT	(A)					
Compressor	(230/400 V)	21,4/11,3	26,0/15,0	29,8/17,0	38,8/21,9	47,8/27,8
Indoor Fan	(230/400 V)	5,2	6,0	4,8/2,8	6,4/3,7	9,4/5,4
Outdoor Fan	(230 V)	2,4	3,1	2x1,48	2x1,48	2x2,31
TOTAL	(230/400V)	29/18,9	35,1/24,1	37,6/22,8	48,2/28,6	61,8/37,8

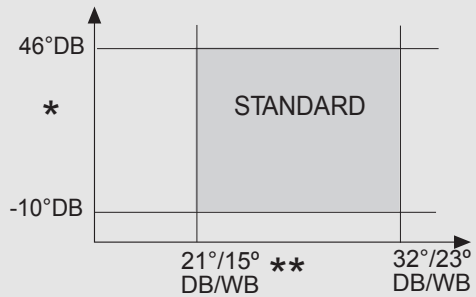
230 V 1 PHASE

OPERATING LIMITS ANA UNITS.

* Air intake temperature into the outdoor unit ºC

** Air intake temperature into the indoor unit ºC

DB.- Dry bulb
WB.- Wet bulb



SPECIFICATIONS

HAB / VAB (HEAT PUMP)

			HAB 5	HAB 7	HAB 8	HAB 10E	HAB 15E	VAB 5	VAB 7
				LHB + KAB				LVB + KAB	
Cooling capacity*		W	15.000	19.000	22.300	28.900	36.000	15.000	19.000
Cooling heating**		W	16.000	20.000	23.400	31.000	38.000	16.000	20.000
Air flow: max./min. indoor		$m^3/h.$	4300/3400	5500/3800	5700/4200	8400/5600	8400/5600	4300/3400	5500/3800
Available pressure: max. (1)		Pa	200	230	230	230	370	200	230
Air flow: max. outdoor		$m^3/h.$	4.500	5.200	9.500	9.000	10.400	4.500	5.200
Nominal total input power		Kw.	6,7	8,2	9,4	12,6	16,3	6,7	8,2
Max current: 230/400 V		A	29,4/19,3	35,1/24,1	37,6/22,8	48,2/28,6	61,8/37,8	29,4/19,3	35,1/24,1
Starting current: 230/400 V		A	117/60	135/67	176/78,5	170/105	208/130	117/60	135/67
Voltage: 50 Hz +Neutral + Earth			230/400V-III	230/400V-III	230/400V-III	230/400V-III	230/400V-III	230/400V-III	230/400V-III
Weight: Indoor unit LHB		Kg.	106	106	100	180	200	106	106
Weight: Outdoor unit KAB		Kg.	140	150	215	235	265	140	150
Dimensions Unit indoor	Height	mm.	485	485	512	660	660	996	996
	Length	mm.	1.015	1.015	1.285	1.555	1.555	1.015	1.015
	Width	mm.	966	966	720	805	805	485	485
Dimensions Unit outdoor	Height	mm.	870	870	895	895	895	870	870
	Length	mm.	800	800	800	800	800	800	800
	Width	mm.	800	800	1.600	1.600	1.600	800	800
Refrigerant coupling	Liquid pipe		5/8"	5/8"	5/8"	5/8"	3/4"	5/8"	5/8"
	Gas pipe		3/4"	7/8"	1 1/8"	1 3/8"	1 3/8"	3/4"	7/8"

*Air temperature indoor interchange 27 °C DB / 19 °C WB. Air temp. outdoor 35 ºC DB.
**Air temperature indoor interchange 21 °C DB. Air temp. outdoor 6ºC WB.
(1)With minimum admissible flow volumes
DB.- Dry bulb
WB.- Wet bulb

ELECTRICAL CHARACTERISTICS

			HAB 5	HAB 7	HAB 8	HAB 10E	HAB 15E	VAB 5	VAB 7
NOMINAL INPUT POWER									
Compressor		Kw.	5,70	6,80	7,78	10,58	13,26	5,70	6,80
Indoor Fan		Kw.	2X0,37	2X0,5	1,1	1,5	2,2	2X0,37	2X0,5
Outdoor Fan		Kw.	0,26	0,42	2X0,26	2X0,26	2X0,42	0,26	0,42
TOTAL		Kw.	6,70	8,22	9,40	12,60	16,30	6,70	8,22
MAX. INPUT CURRENT		(A)							
Compressor		(230/400 V)	21,8/11,7	26,0/15,0	29,8/17,0	38,8/21,9	47,8/27,8	21,8/11,7	26,0/15,0
Indoor Fan		(230/400 V)	5,2	6,0	4,8/2,8	6,4/3,7	9,4/5,4	5,2	6,0
Outdoor Fan		(230 V)	2,4	3,1	2X1,48	2X1,48	2X2,31	2,4	3,1
TOTAL		(230/400 V)	29,4/19,3	35,1/24,1	37,6/22,8	48,2/28,6	61,8/37,8	29,4/19,3	35,1/24,1

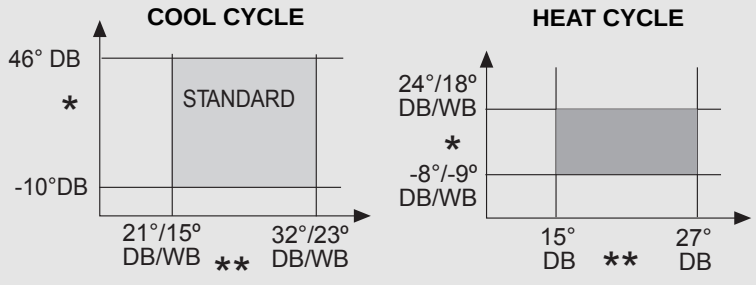
230 V 1 PHASE

OPERATING LIMITS HAB / VAB UNITS.

* Air intake temperature into the outdoor unit ºC

** Air intake temperature into the indoor unit ºC

DB.- Dry bulb
WB.- Wet bulb



CAPACITY ANA 5-7EK

COOLING CAPACITY

ANA 5EK

ANA 7EK

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB					AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB				
		25 °C	30 °C	35 °C	40 °C	45 °C	25 °C	30 °C	35 °C	40 °C	45 °C
21 °C DB	TOTAL	13,53	13,06	12,58	12,10	11,62	17,85	17,20	16,54	15,88	15,22
15 °C WB	SENSIBLE	10,53	10,31	10,09	9,88	9,66	14,01	13,71	13,41	13,12	12,82
24 °C DB	TOTAL	14,53	14,02	13,51	13,00	12,48	19,10	18,40	17,70	16,99	16,27
17 °C WB	SENSIBLE	11,37	11,15	10,93	10,72	10,50	15,11	14,81	14,51	14,02	13,91
27 °C DB	TOTAL	15,57	15,03	14,50	13,94	13,38	20,40	19,65	18,90	18,14	17,37
19 °C WB	SENSIBLE	12,15	11,93	11,71	11,49	11,28	16,13	15,83	15,53	15,23	14,93
29 °C DB	TOTAL	16,67	16,11	15,52	14,94	14,35	21,77	20,98	20,17	19,35	18,53
21 °C WB	SENSIBLE	12,09	11,87	11,65	11,43	11,21	16,01	15,71	15,41	15,11	14,80
32 °C DB	TOTAL	17,87	17,25	16,63	16,00	15,36	23,23	22,37	21,50	20,62	19,74
23 °C WB	SENSIBLE	12,85	12,63	12,41	12,19	11,97	17,00	16,70	16,40	16,09	15,79

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

FANS CHARACTERISTICS

ANA 5EK

ANA 7EK

		INDOOR UNIT				OUTDOOR UNIT	INDOOR UNIT				OUTDOOR UNIT
AIR FLOW IN M^3 /H		3400	3700	4050	4200	4500	3800	4300	4800	5000	5200
STATIC PRESSURE AVAILABLE **Pa**		180	130	50	0	--	180	140	50	0	--
CORRECTION COEFFICIENT OF COOLING CAPACITY	TOTAL	0,97	0,98	1,00	1,01	--	0,97	0,98	1,00	1,01	--
	SENSIBLE	0,89	0,93	1,00	1,04	--	0,89	0,93	1,00	1,04	--

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

HEAT WATER OPTIONAL HEATER

ANA 5-7EK

DIFFERENCE IN TEMPERATURES BETWEEN HOT WATER INTAKE AND THE AIR WHICH ENTERS THE INDOOR COIL.	60	50	40
CAPACITY IN KW FOR A FLOW OF:1.500 L/H WITH A DROP PRESSURE OF 2 KPa.	23	19	15

CAPACITY ANA 5-7EK

COOLING CAPACITY

HAB / VAB 5 — HAB / VAB 7

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB					AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB				
		25 °C	30 °C	35 °C	40 °C	45 °C	25 °C	30 °C	35 °C	40 °C	45 °C
21 °C DB	TOTAL	14,04	13,53	13,01	12,50	11,98	18,07	17,38	16,69	15,99	15,29
15 °C WB	SENSIBLE	10,80	10,57	10,33	10,10	9,87	14,18	13,86	13,55	13,24	12,93
24 °C DB	TOTAL	15,05	14,51	13,96	13,41	12,86	19,30	18,57	17,83	17,08	16,32
17 °C WB	SENSIBLE	11,65	11,41	11,17	10,94	10,71	15,28	14,97	14,65	14,33	14,02
27 °C DB	TOTAL	16,12	15,53	15,00	14,36	13,77	20,58	19,80	19,00	18,20	17,40
19 °C WB	SENSIBLE	12,43	12,19	11,96	11,72	11,49	16,30	15,98	15,67	15,35	15,04
29 °C DB	TOTAL	17,24	16,62	16,00	15,37	14,74	21,94	21,09	20,25	19,39	18,52
21 °C WB	SENSIBLE	12,36	12,12	11,88	11,65	11,41	16,16	15,85	15,53	15,21	14,90
32 °C DB	TOTAL	18,44	17,78	17,11	16,44	15,76	23,35	22,45	21,54	20,62	19,70
23 °C WB	SENSIBLE	13,11	12,87	12,64	12,40	12,17	17,15	16,83	16,51	16,19	15,88

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

HEATING CAPACITY

HAB / VAB 5 — HAB / VAB 7

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C WET BULB						AIR INLET TEMPERATURE OUTDOOR UNIT °C WET BULB					
		-8 °C	-4 °C	0 °C	6 °C	12 °C	18 °C	-8 °C	-4 °C	0 °C	6 °C	12 °C	18 °C
15 °C DB	HEATING	10,10	11,64	13,43	16,33	19,72	23,56	12,50	14,42	16,60	20,14	24,26	28,93
18 °C DB	HEATING	10,05	11,57	13,34	16,20	19,54	23,01	12,46	14,35	16,50	19,97	24,02	28,57
20 °C DB	HEATING	9,99	11,50	13,22	16,00	19,33	23,00	12,40	14,27	16,38	20,00	23,76	28,21
24 °C DB	HEATING	9,90	11,39	13,11	15,88	19,10	22,70	12,33	14,17	16,26	19,61	23,49	27,83

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

FANS CHARACTERISTICS

HAB / VAB 5 — HAB / VAB 7

		INDOOR UNIT				OUTDOOR UNIT	INDOOR UNIT				OUTDOOR UNIT
AIR FLOW IN M^3 /H		3400	3800	4150	4300	4500	3800	4500	5200	5500	5200
STATIC PRESSURE AVAILABLE **Pa**		200	130	50	0	--	230	170	50	0	--
CORRECTION COEFFICIENT OF COOLING CAPACITY	TOTAL	0,97	0,98	0,99	1	--	0,96	0,97	0,98	1	--
	SENSIBLE	0,96	0,97	0,98	1	--	0,95	0,97	0,98	1	--
CORRECTION COEFFICIENT OF HEATING CAPACITY		0,97	0,98	0,99	1	--	0,97	0,98	0,99	1	--

DATA EUROVENT

CAPACITY

COOLING CAPACITY

ANA 8EK / HAB 8E — ANA 10EK / HAB 10E

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB					AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB				
		25 °C	30 °C	35 °C	40 °C	45 °C	25 °C	30 °C	35 °C	40 °C	45 °C
21 °C DB	TOTAL	21,18	20,29	19,42	18,57	17,76	27,54	26,43	25,31	24,19	23,08
15 °C WB	SENSIBLE	15,45	15,02	14,61	14,22	13,84	20,15	19,62	19,09	18,57	18,06
24 °C DB	TOTAL	22,70	21,76	20,84	19,94	19,07	29,45	28,29	27,11	25,92	24,74
17 °C WB	SENSIBLE	16,56	16,14	15,73	15,33	14,95	21,59	21,07	20,54	20,01	19,50
27 °C DB	TOTAL	24,31	23,31	22,30	21,39	20,45	31,50	30,26	28,90	27,75	26,50
19 °C WB	SENSIBLE	17,59	17,17	16,76	16,37	15,99	22,92	22,39	21,87	21,35	20,84
29 °C DB	TOTAL	26,02	24,98	23,95	22,94	21,95	33,66	32,34	31,01	29,69	28,36
21 °C WB	SENSIBLE	17,50	17,09	16,69	16,29	15,92	22,77	22,25	21,73	21,22	20,72
32 °C DB	TOTAL	27,85	26,75	25,66	24,59	23,54	35,95	34,56	33,15	31,74	30,34
23 °C WB	SENSIBLE	18,50	18,09	17,69	17,31	16,93	24,06	23,54	23,02	22,51	22,01

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

HEATING CAPACITY

HAB 8E — HAB 10E

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C WET BULB						AIR INLET TEMPERATURE OUTDOOR UNIT °C WET BULB					
		-8 °C	-4 °C	0 °C	6 °C	12 °C	18 °C	-8 °C	-4 °C	0 °C	6 °C	12 °C	18 °C
15 °C DB	HEATING	15,91	18,00	20,39	24,31	28,92	34,18	20,30	23,23	26,52	31,82	37,95	44,87
18 °C DB	HEATING	15,51	17,59	19,98	23,87	28,46	33,68	20,06	22,94	26,19	31,40	37,45	44,25
20 °C DB	HEATING	15,13	17,20	19,58	23,40	28,02	33,20	19,80	22,64	25,83	31,00	36.93	43,63
24 °C DB	HEATING	14,76	16,83	19,20	23,06	27,60	32,74	19,54	22,32	25,47	30,52	36,39	42,98

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

FANS CHARACTERISTICS

Indoor fan. Static pressure available Pa.

			ANA 8EK / HAB 8E				ANA 10EK / HAB 10 E		
AIR FLOW IN M^3 /H			4200	5000	5700		5600	7000	8400
PULLEY POSITION	pulley closed	R.P.M. 1.125	230	200	150	R.P.M. 930	230	190	--
	-- 1 Turn	R.P.M. 1.055	195	155	100	R.P.M. 870	190	150	100
	--2 Turns	R.P.M. 985	160	115	60	R.P.M. 810	150	100	50
	-- 3 Turns	R.P.M. 915	120	80	20	R.P.M. 750	110	60	0

DATA EUROVENT M^3/H INDOOR FAN KNA / KAB 8E : 5.700 M^3/H ; KNA / KAB 10E : 8.400 M^3/H

Outdoor fan flow in M^3/H KNA / KAB 8E : 9.500 M^3/H ; KNA / KAB 10E : 9.000 M^3/H

HEAT WATER OPTIONAL HEATER

ANA8EK / HAB 8E

DIFFERENCE IN TEMPERATURES BETWEEN HOT WATER INTAKE AND THE AIR WHICH ENTERS THE INDOOR COIL.	60	50	40
CAPACITY IN KW FOR A FLOW OF:2.000 L/H WITH A DROP PRESSURE OF 2,5 KPa.	32	26	20

ANA10EK / HAB 10E

DIFFERENCE IN TEMPERATURES BETWEEN HOT WATER INTAKE AND THE AIR WHICH ENTERS THE INDOOR COIL.	60	50	40
CAPACITY IN KW FOR A FLOW OF:2.000 L/H WITH A DROP PRESSURE OF 2,5 KPa.	48	40	32

CAPACITY

COOLING CAPACITY ANA15EK / HAB 15E

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C DRY BULB				
		25 °C	30 °C	35 °C	40 °C	45 °C
21 °C DB	TOTAL	33,89	32,55	31,17	29,74	28,27
15 °C WB	SENSIBLE	24,35	23,70	23,04	22,37	21,68
24 °C DB	TOTAL	36,34	34,90	33,41	31,87	30,29
17 °C WB	SENSIBLE	26,07	25,41	24,74	24,05	23,36
27 °C DB	TOTAL	38,91	37,36	36,00	34,11	32,42
19 °C WB	SENSIBLE	27,65	26,98	26,31	25,62	24,92
29 °C DB	TOTAL	41,64	39,97	38,26	36,49	34,68
21 °C WB	SENSIBLE	27,51	26,84	26,16	25,47	24,76
32 °C DB	TOTAL	44,54	42,74	40,90	39,00	37,05
23 °C WB	SENSIBLE	29,03	28,36	27,67	26,97	26,27

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

HEATING CAPACITY HAB 15E

AIR INLET TEMPERATURE INDOOR UNIT	COOLING CAPACITY IN KW	AIR INLET TEMPERATURE OUTDOOR UNIT °C WET BULB					
		-8 °C	-4 °C	0 °C	6 °C	12 °C	18 °C
15 °C DB	HEATING	25,22	28,63	32,56	39,11	46,74	55,30
18 °C DB	HEATING	24.92	28,29	32,20	39,60	46,09	54,47
20 °C DB	HEATING	24,62	27,93	31,78	38,00	45,42	53,61
24 °C DB	HEATING	24,28	27,55	31,34	37,51	44,73	52,73

DATA EUROVENT

DB: Dry bulb - WB: Wet bulb

FANS CHARACTERISTICS

Indoor fan. Static pressure available Pa.

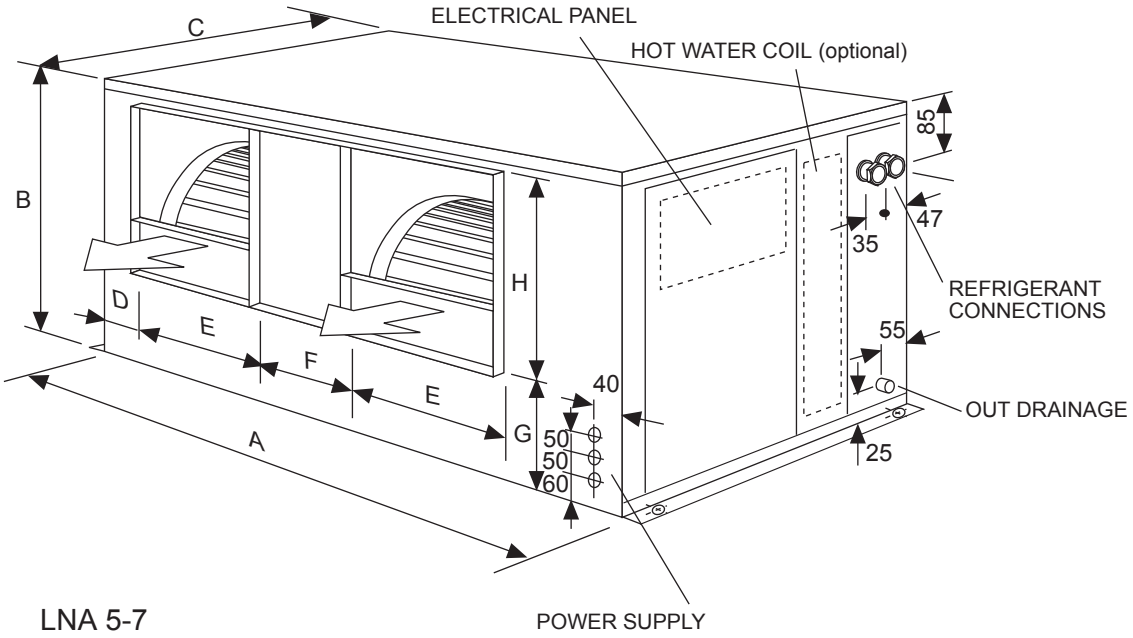
AIR FLOW IN M^3 /H			5600	7000	8400
PULLEY POSITION	pulley closed	R.P.M. 1.125	370	310	--
	-- 1 Turn	R.P.M. 1.055	310	250	180
	-- 2 Turns	R.P.M. 985	250	190	120
	-- 3 Turns	R.P.M. 915	200	140	60

Nominal air flow M^3/H indoor fan KNA 15EK / KAB 15E : 8.400 M^3/H
Outdoor fan air flow in M^3/H KNA / KAB 15E :10.400 M^3/H

HEAT WATER OPTIONAL HEATER
ANA15EK / HAB 15E

DIFFERENCE IN TEMPERATURES BETWEEN HOT WATER INTAKE AND THE AIR WHICH ENTERS THE INDOOR COIL.	60	50	40
CAPACITY IN KW FOR A FLOW OF:2.500 L/H WITH A DROP PRESSURE OF 2,5 KPa.	48	40	32

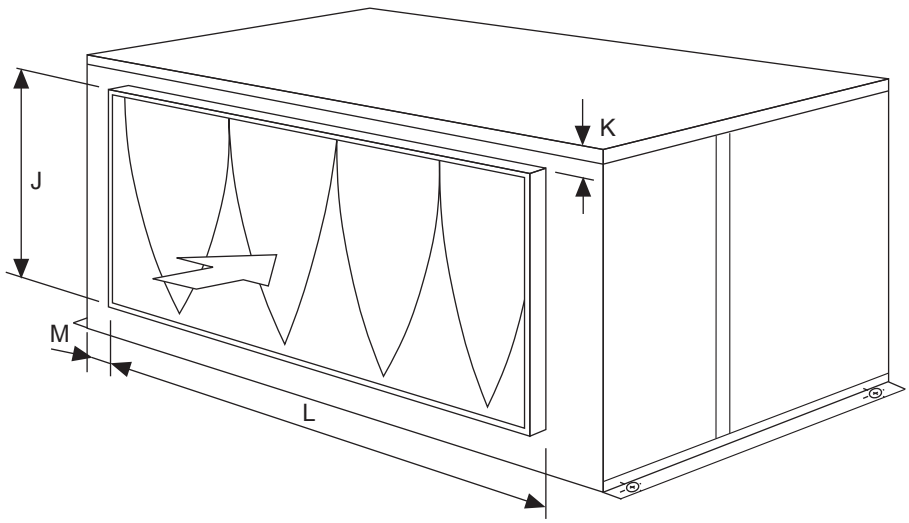
DIMENSIONS LNA 5-7



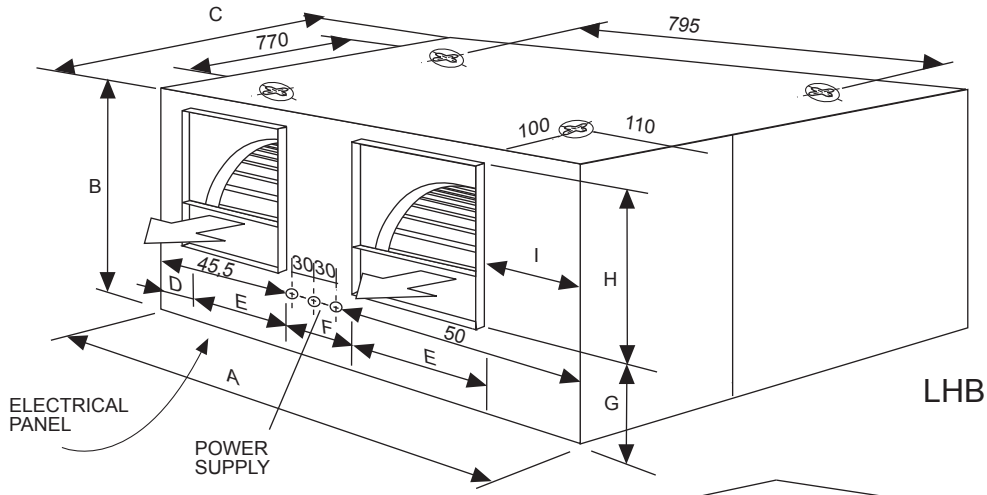
LNA 5-7

A	1010	G	140
B	440	H	260
C	650	I	380
D	101	J	380
E	300	K	900
F	200	L	90

COUPLINGS CONNECTIONS			Drainage Ø mm.
MODEL	LIQUID LINE	GAS LINE	
LNA-5	5/8"	3/4"	16
LNA-7	5/8"	7/8"	16



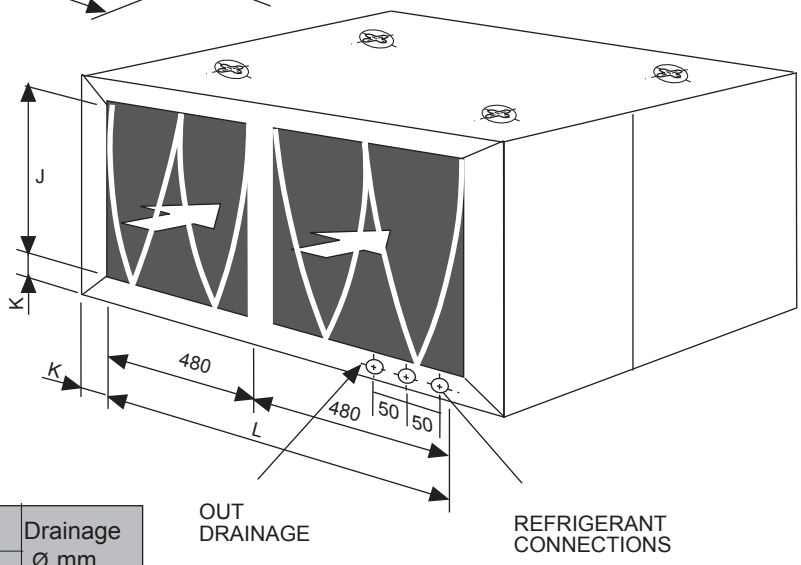
DIMENSIONS LHB / LVB 5-7



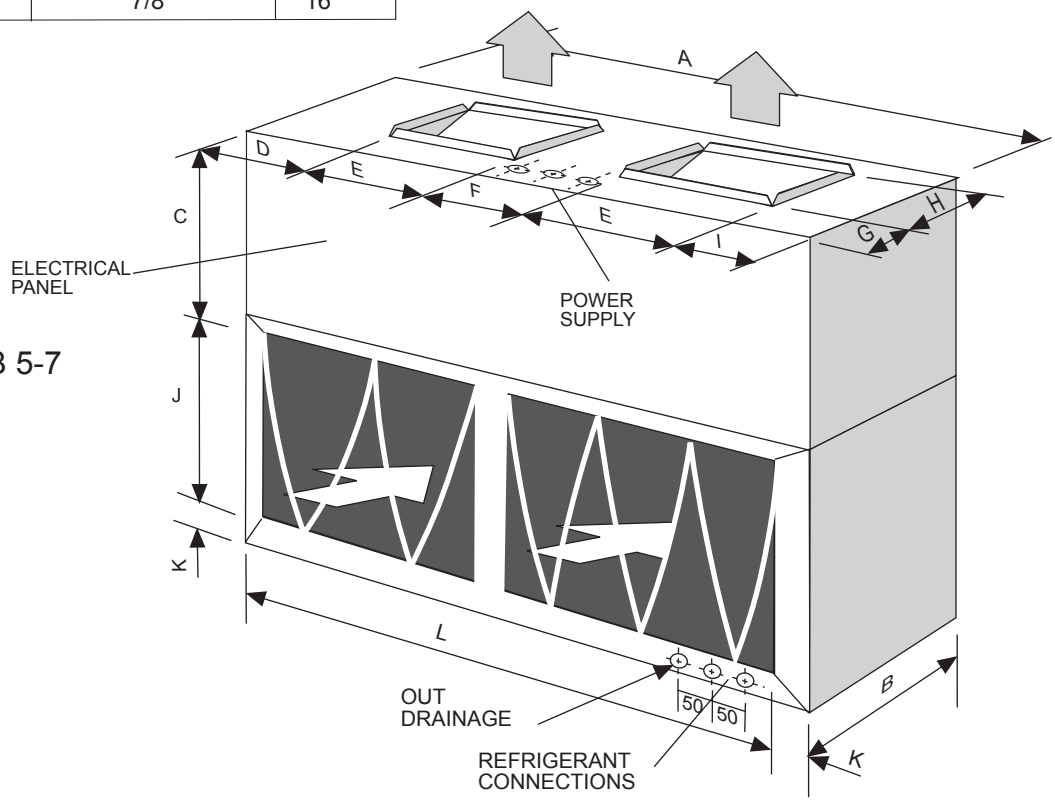
LHB 5-7

LHB / LVB 5-7

A	1015	G	198
B	485	H	265
C	966	I	92
D	92	J	380
E	300	K	60
F	200	L	90

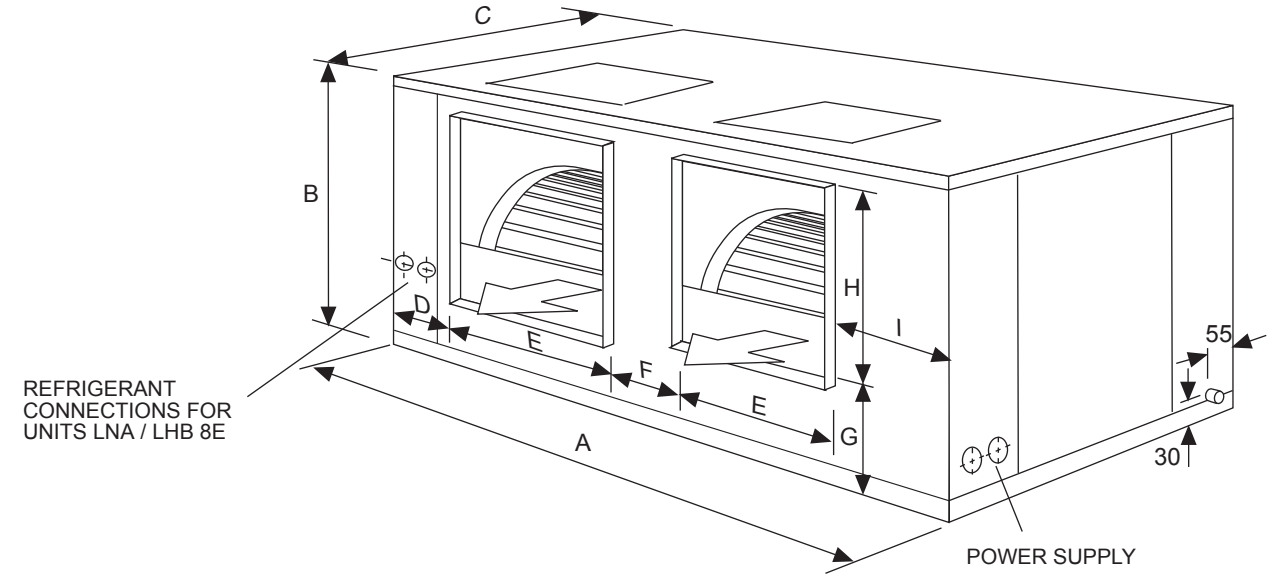


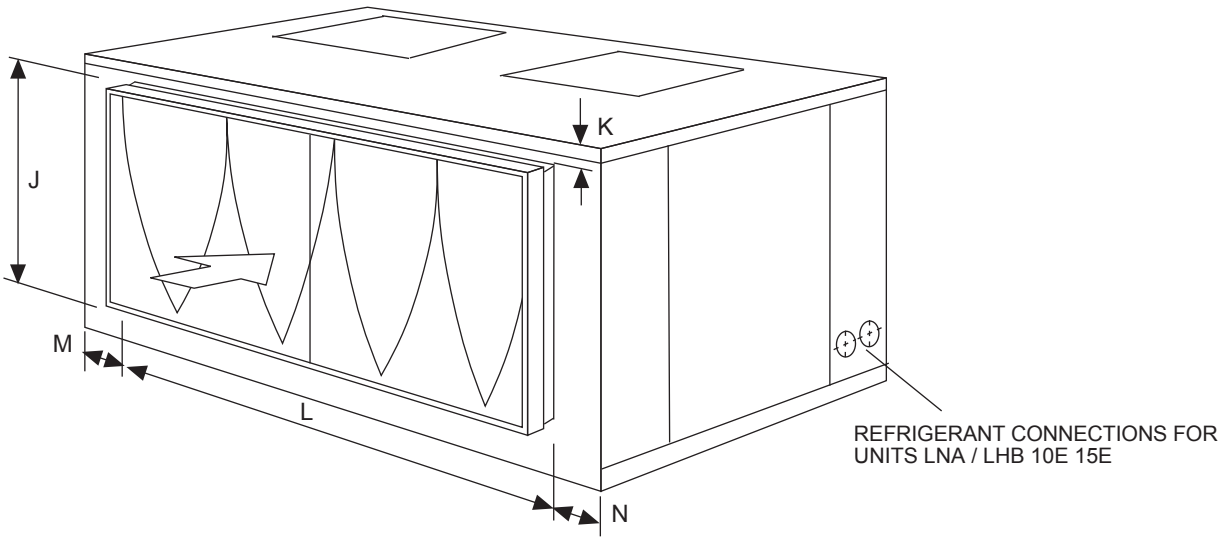
COUPLING CONNECTION			Drainage Ø mm.
MODEL	LIQUID LINE	GAS LINE	
LHB/LVB-5	5/8"	3/4"	16
LHB/LVB-7	5/8"	7/8"	16



LVB 5-7

DIMENSIONS LNA / LHB 8E-10E-15E





LNA - LHB 8E

A	1285	H	330
B	512	I	383
C	720	J	480
D	101	K	15
E	310	L	1082
F	170	M	70
G	128	N	134

LNA - LHB 10E-15E

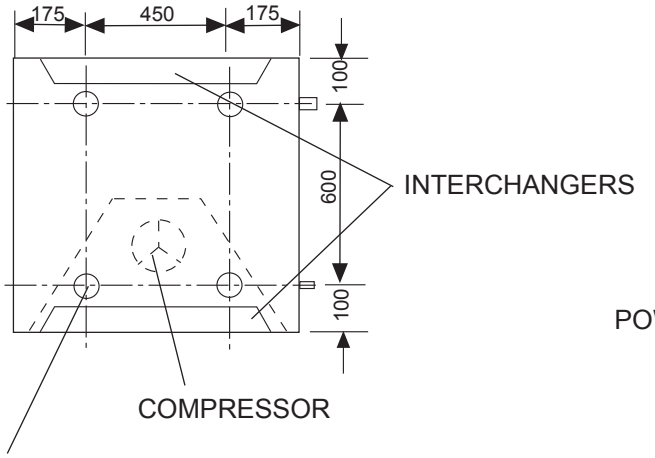
A	1555	H	382
B	660	I	462
C	805	J	625
D	185	K	112
E	350	L	1340
F	200	M	78
G	432	N	132

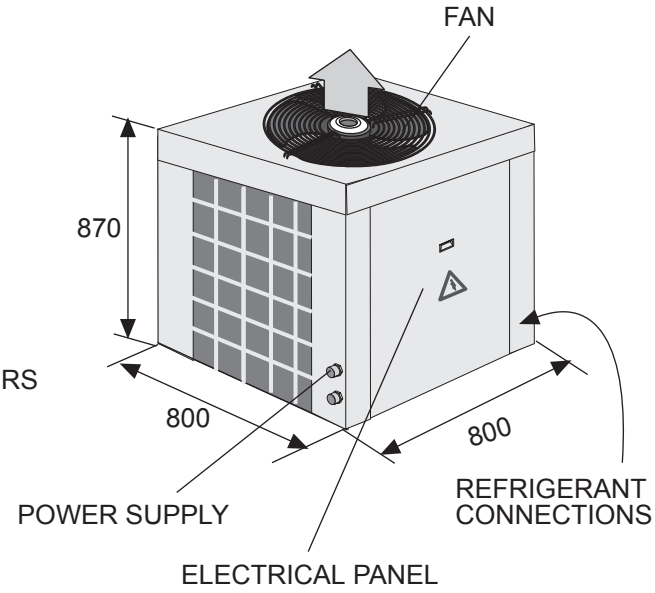
COUPLING CONNECTION			Drainage Ø mm.
MODEL	LIQUID LINE	GAS LINE	
LNA/ LHB 8E	5/8"	1 1/8"	16
LNA/LHB10E	5/8"	1 3/8"	16
LNA/LHB15E	3/4"	1 3/8"	16

DIMENSIONS

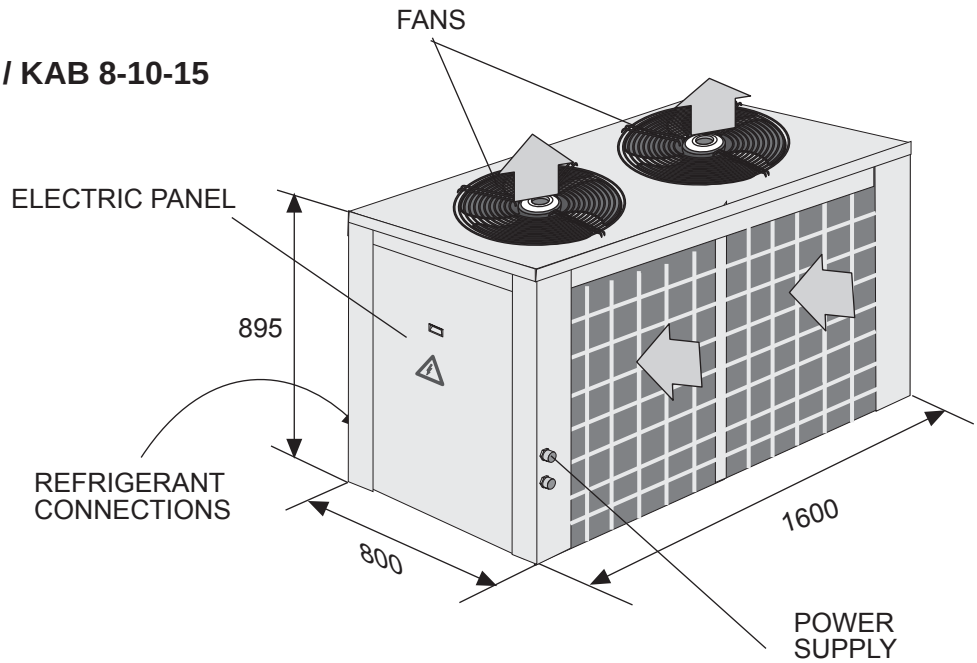
KNA 5EK-7EK / KAB 5-7

FLOOR MOUNTED

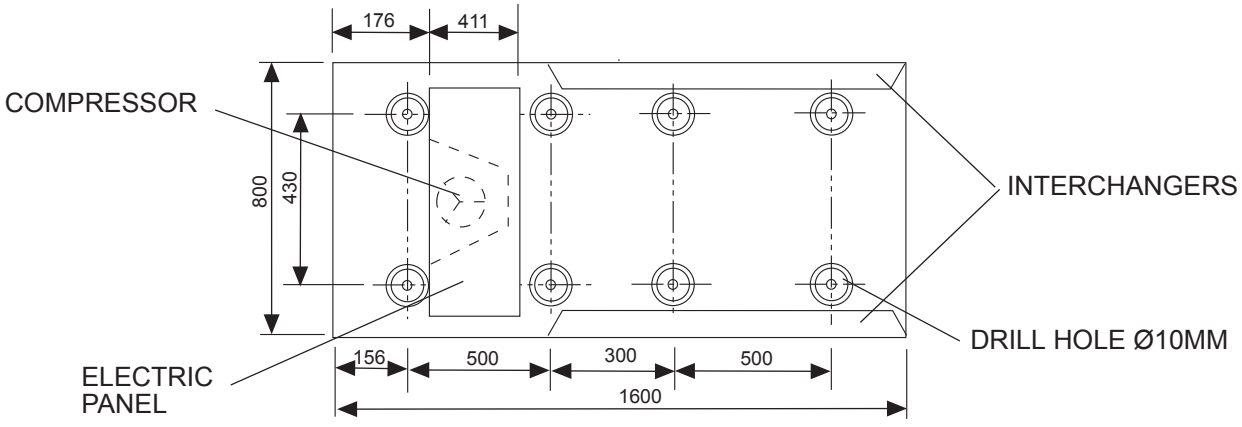




KNA 8EK-10EK-15EK / KAB 8-10-15

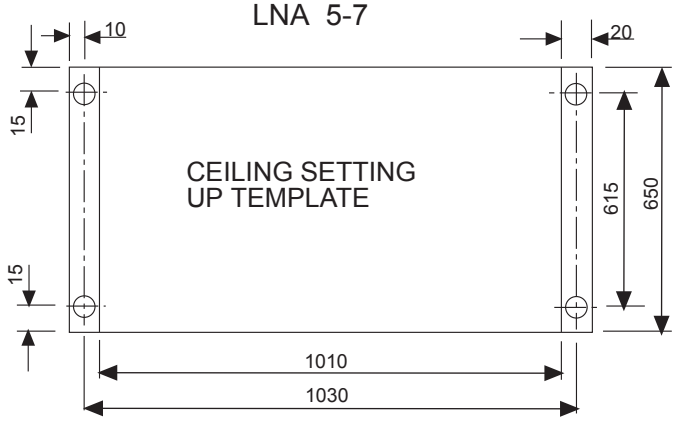


FLOOR MOUNTED

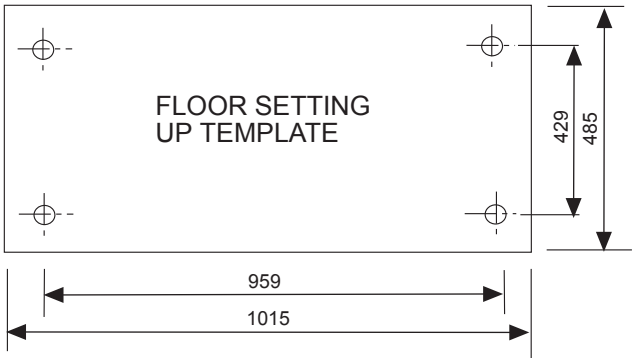


TEMPLATE

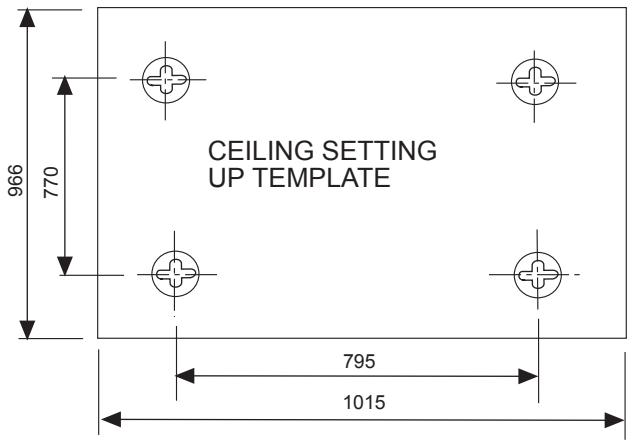
LNA 5-7



LVB 5-7



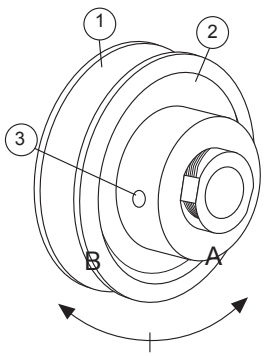
LHB 5-7



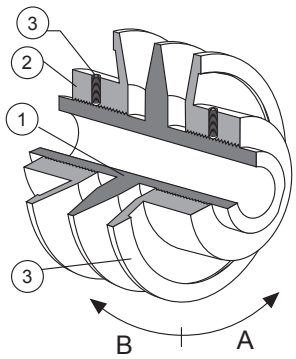
FLOW REGULATION IN THE FANS

The fan in the units LNA / LHB 8-10E-15E have a variable pulley incorporated into the activating motor, by which it is possible to vary the air flow of the unit.

SIMPLE pulley



DOUBLE pulley



1.Fixed part
2. Mobil part
3. Fixing screw

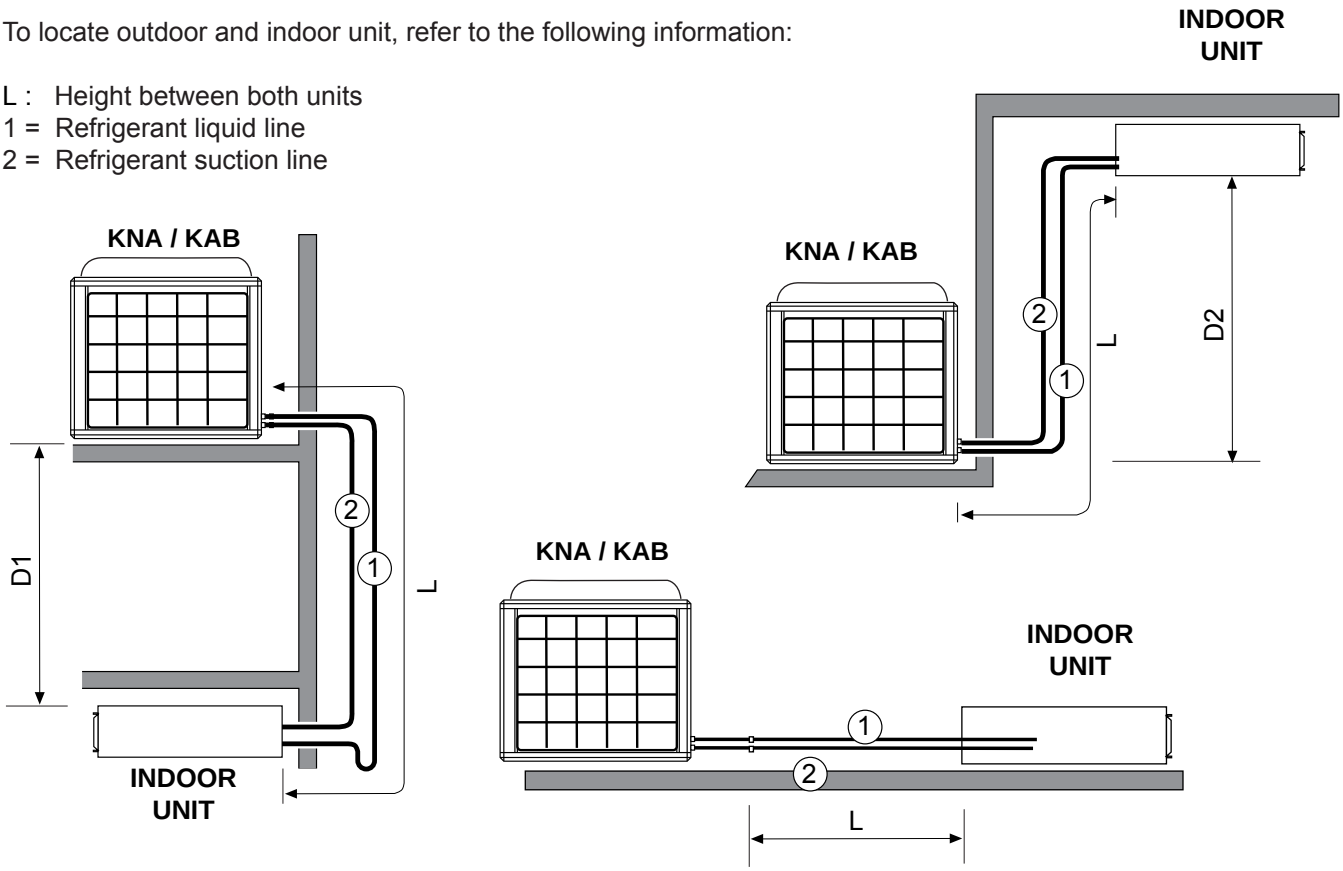
To increase the fan flow, turn the mobil part in direction "B".
To reduce the FLOW, turn in direction "A".

REFRIGERANT CONNECTIONS

DISTANCES BETWEEN UNITS

To locate outdoor and indoor unit, refer to the following information:

L : Height between both units
1 = Refrigerant liquid line
2 = Refrigerant suction line



		MODEL				
		5	**7**	**8**	**10**	**15**
Pipe size (*)	Liquid pipe	5/8"	5/8"	5/8"	5/8"	3/4"
	Suction pipe	3/4"	7/8"	1 1/8"	1 3/8"	1 3/8"
Refrigerant line sizes Max vertical	D2	6	6	10	10	10
	D1	9	9	15	15	15
Refrigerant line sizes L	Total vertical + Horizontal	15	20	25	25	25
Number of bends	maximum	12	12	12	12	12
Capacity drop	%	6	6	4	2	3

If the height length is greater than 5 meters, a siphon suction must be installed on the suction line every 5 meters to ensure that oil return to the compressor.

The data shows are for maximum, distances they may vary depends on number of bends.
(*)Model 5 incorporated coupling connections.

(*) For other positions and longer lengths, consult the Lennox Technical Support Deparment for application assistance.
The following data will be obtained from that estimation:
- Pipe dimensions
- siphon suction
- Insulation
- Refrigerant charge


Abrasive surfaces


Low temperatures


High temperatures

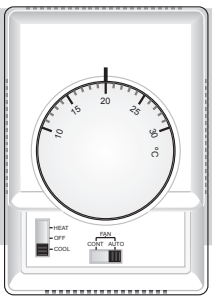

Risk of injury with moving objects


Electrical voltage

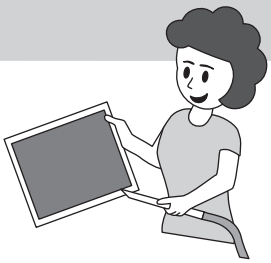

Risk of injury with rotating objects

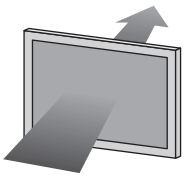
WARNING
Electric shock hazard can cause injury or death. Before attempting to perform any service or maintenance on the unit, turn OFF the electrical power, and check that the fan has stopped.

The air filter cleaning operations do not require technical service; however when an electrical or mechanical operation is required call an Engineer.



FILTER CLEANING
Check the air filter and make sure it is not blocked with dust or dirt.





If the filter is dirty, wash it in a bowl with neutral soap and water, drying it in the shade before inserting it in the unit.

Standard Guidelines to Lennox equipment

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The data published in the operating instructions is based on the latest information available. We reserve the right to make modifications without notice.

We reserve the right to modify our products without notice without obligation to modify previously supplied goods.

These operating instructions contain useful and important information for the smooth operation and maintenance of your equipment.

The instructions also include guidelines on how to avoid accidents and serious damage before commissioning the equipment and during its operation and how to ensure smooth and fault-free operation. Read the operating instructions carefully before starting the equipment, familiarize yourself with the equipment and handling of the installation and carefully follow the instructions. It is very important to be properly trained in handling the equipment. These operating instructions must be kept in a safe place near the equipment.

Like most equipment, the unit requires regular maintenance. This section concerns the maintenance personnel and management.
If you have any queries or would like to receive further information on any aspect relating to your equipment, do not hesitate to contact us.

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