

EHW

HORIZONTAL AIR CONDITIONING UNITS, LOW SILHOUETTE



Models: 518 | 725 | 830 | 1036 | 1042 | 1657 | 2069 | 2476 | 3097 | 35110

Cooling capacities: 18 a 110 KW

Heating capacities: 27 a 342 KW



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INTRODUCTION

GENERAL DESCRIPTION

EHW series water-to-air units are supplied fully finished and ready for installation, having passed our strict quality control process. The design and layout of the components offer great installation versatility and easy access to the interior of the unit for maintenance.

CABINET

Made of high quality sheet steel covered with an aluminum, zinc and silicon alloy and finished with an electrostatic polyester powder coating polymerized in a furnace at 190°C, thus providing excellent coverage on corners and edges and ensuring optimum corrosion resistance. Inside, the unit is fitted with thermo-acoustic insulation.

HEAT EXCHANGERS

Manufactured with comprising mechanically expanded copper tubes with specially corrugated fins to provide superior performance levels.

FANS

Double aspiration fan that allows its application in ducts. Three phase motors with power transmission system of pulleys and belts of easy adjustment, reduced noise level, incorporating pre-lubricated bearings and are already statically and dynamically balanced.

AIR FILTER

High efficiency, removable and washable, 20 mm thick, S-20 reticulated, polyurethane foam.

POWER SUPPLY

The units operate with the following power supply: 230V three phase or 400V three phase and 50Hz.

OTHER CHARACTERISTICS

- Vertical or horizontal impulsion. Easily to change during the installation.
- Semiautomatic trap included in the exchanger.
- Unit's general switch.
- Chassis for floor or ceiling installation, included.

- Removable filters, horizontal (both sides) or vertical (bottom)
- Vertical removable filters horizontally (on both sides) or (bottom).

OPTIONALS

- Centrifugal Plug Fan with 7 curved and high efficient blades manufactured three-dimensionally with composites. Equipped with built-in pressure tap nozzles. High air flow, high efficiency, high pressure and low noise level due to the geometry of the fan blades.
- EUROCLAS A1. The A1 class products don't contribute to fire in any phase. Not even when it's a completely



developed fire.

- Hot water coils
- Heating coils by electric resistances.
- Optional impulsion

REGULATIONS AND CERTIFICATIONS

ISO 9001 CERTIFICATION. HILPUS AIRE ACONDICIONADO S.L., trying always to find the customer satisfaction, has obtained the ISO 9001 Quality System referred to its production activity. This will results in a continuous determination to improve quality and reliability of all our products; commercial activities, design, raw materials, production and after-sales service, are the means to reach our goal.

CE MARKING: Our machines have got the CE mark, in conformity with the essential requirements of the applicable EC directives and their last modifications as well as with the national legislation of each country.

TECHNICAL CHARACTERISTICS

	EHW	518	725	830	1036	1042	1250
CAPACITIES							
Cooling capacity (1)	KW	18	25	30	36	42	50
Heating capacity (2)	KW	27	36	33	50	58	70
Heating capacity (3)	KW	59	79	94	110	127	145
EXCHANGER COIL							
Type	Aluminum fin coil and copper tubing						
Water flow	m ³ /h	2,978	4,637	5,381	6,028	6,841	7,753
Hydraulic connections	"	1 1/4	1 1/2	1 1/2	2	2	2
FAN							
Type	Centrifugal with double aspiration						
Number	1						
Voltage	V/f/Hz	230.III	400.III	230.III	400.III	230.III	400.III
Absorbed power (4)	KW	0,6	0,8	1,1	0,8	1,1	1,5
Absorbed current	A	3,5	2,2	4,2	2,6	5,0	3,1
Air flow	m ³ /h	3500	4200	5200	5500	6500	8200
Available static pressure	Pa	80	105	74	108	80	70
Motor power	KW	0,55	0,75	1,1	0,75	1,1	1,5
DIMENSIONS AND WEIGHT							
Lenght	mm	1085	1130	1130	1700	1700	1700
Widht	mm	750	800	800	870	870	870
Height	mm	580	650	650	650	650	650
Weight	Kg	108	150	150	214	214	217

	EHW	1657	2069	2476	3097	3511
CAPACITIES						
Cooling capacity (1)	KW	57	69	76	97	110
Heating capacity (2)	KW	83	100	110	132	155
Heating capacity (3)	KW	183	220	241	290	342
EXCHANGER COIL						
Type	Aluminum fin coil and copper tubing					
Water flow	m ³ /h	9,676	11,776	12,829	15,534	17,575
Hydraulic connections	"	2	2	2	2 1/2	2 1/2
FAN						
Type	Centrifugal with double aspiration					
Number	1					
Voltage	V/f/Hz	230.III	400.III	230.III	400.III	230.III
Absorbed power (4)	KW	2,2	3	3	4	4
Absorbed current	A	8,5	4,9	11,4	6,7	16,9
Air flow	m ³ /h	9500	11200	12500	14800	18000
Available static pressure	Pa	113	145	150	180	205
Motor power	KW	2,3	3	3	4	4
DIMENSIONS AND WEIGHT						
Lenght	mm	2000	2600	2600	2800	2800
Widht	mm	939	980	980	1050	1050
Height	mm	747	752	752	915	915
Weight	Kg	291	356	356	452	472

- (1) Cooling Capacity for water temperatures between 7/12°C and 27°C with 50%HR
- (2) Heating Capacity for water temperatures between 50°C and 20°C
- (3) Heating Capacity for water temperatures between 85°C and 20°C
- (4) Fan's Power Consumption in nominal conditions.

OPTIONALS

PLUG FAN AND EC MOTOR VERSION

	EHW	518	725	830	1036	1042	1250
CAPACITIES							
Cooling capacity (1)	KW	18	25	30	36	42	50
Heating capacity (2)	KW	27	36	33	50	58	70
Heating capacity (3)	KW	59	79	94	110	127	145
EXCHANGER COIL							
Type	Aluminum fin coil and copper tubing						
Water flow	m ³ /h	2,978	4,637	5,381	6,028	6,841	7,753
Hydraulic connections	"	1 1/4	1 1/2	1 1/2	2	2	2
FAN							
Type	Plug-Fan motor EC						
Number		1			2		
Diameter	mm	355	450	450	450	450	450
Voltage	V/f/Hz	400 / III / 50					
Absorbed current (4)	KW	0,43	0,51	0,67	0,242	0,284	0,497
Air flow	m ³ /h	3500	4200	5200	5500	6500	8200
Available static pressure	Pa	80	105	74	108	80	70
Max. available static pressure	Pa	1273	776	666	898	865	740
Motor power	KW	2,5	2	2	2	2	2
DIMENSIONS AND WEIGHT							
Lenght	mm	1085	1130	1130	1700	1700	1700
Widht	mm	750	800	800	870	870	870
Height	mm	580	650	650	650	650	650
Weight	Kg	108	150	150	214	214	217

	EHW	1657	2069	2476	3097	35110
CAPACITIES						
Cooling capacity (1)	KW	57	69	76	97	110
Heating capacity (2)	KW	83	100	110	132	155
Heating capacity (3)	KW	183	220	241	290	342
EXCHANGER COIL						
Type	Aluminum fin coil and copper tubing					
Water flow	m ³ /h	9,676	11,776	12,829	15,534	17,575
Hydraulic connections	"	2	2	2	2 1/2	2 1/2
FAN						
Type	Plug-Fan motor EC					
Number		2				
Diameter	mm	500	500	500	560	560
Voltage	V/f/Hz	400 / III / 50				
Absorbed current (4)	KW	0,67	0,748	0,817	0,817	1,54
Air flow	m ³ /h	9500	11200	12500	14800	18000
Available static pressure	Pa	113	145	150	180	205
Max. available static pressure	Pa	947	960	953	845	670
Motor power	KW	3,5	3,5	3,5	3,4	3,4
DIMENSIONS AND WEIGHT						
Lenght	mm	2000	2600	2600	2800	2800
Widht	mm	939	980	980	1050	1050
Height	mm	747	752	752	915	915
Weight	Kg	291	356	356	452	472

- (1) Cooling Capacity for water temperatures between 7/12°C and 27°C with 50%HR
- (2) Heating Capacity for water temperatures between 50°C and 20°C
- (3) Heating Capacity for water temperatures between 85°C and 20°C
- (4) Fan's Power Consumption in nominal conditions and standard available pressure.

SOUND DATA

CENTRIFUGAL FAN VERSION

➤ **SOUND PRESSURE**

EHW	518	725	830	1036	1042	1250
1m	74,9	72,3	75,4	68,9	70,8	74,9
2m	68,9	66,3	69,4	62,9	64,8	68,9
5m	60,9	58,3	61,4	54,9	56,8	60,9
10m	54,9	52,3	55,4	48,9	50,8	54,9

EHW	1657	2069	2476	3097	35110
1m	77,5	75,0	76,6	76,1	77,1
2m	71,5	69,0	70,6	70,1	71,1
5m	63,5	61,0	62,6	62,1	63,1
10m	57,5	55,0	56,6	56,1	57,1

➤ **SOUND PRESSURE**

EHW	518	725	830	1036	1042	1250
63 Hz	51,4	49,8	52,9	46,4	48,3	52,4
125 Hz	61,4	58,8	61,9	55,4	57,3	61,4
250 Hz	68,4	64,8	67,9	61,4	63,3	67,4
500 Hz	73,4	71,8	74,9	68,4	70,3	74,4
1000 Hz	78,8	76,0	79,1	72,6	74,5	78,6
2000 Hz	76,2	74,1	77,2	70,7	72,6	76,7
4000 Hz	73,4	69,8	72,9	66,4	68,3	72,4
8000 Hz	65,4	60,8	63,9	57,4	59,3	63,4
Total dB	82,4	79,8	82,9	76,4	78,3	82,4

EHW	1657	2069	2476	3097	35110
63 Hz	55,0	56,5	58,1	59,0	60,6
125 Hz	64,0	64,5	66,1	68,5	57,6
250 Hz	70,0	67,5	69,1	69,4	71,6
500 Hz	77,0	74,5	76,1	75,4	79,6
1000 Hz	81,2	77,8	79,4	78,8	79,7
2000 Hz	79,3	76,8	78,4	77,8	77,6
4000 Hz	75,0	74,5	76,1	74,0	74,6
8000 Hz	66,0	66,5	68,1	68,1	64,6
Total dB	85,0	82,5	84,1	83,6	84,6

PLUG FAN AND EC MOTOR VERSION

➤ SOUND PRESSURE

EHW	518	725	830	1036	1042	1250
1m	68,4	63,9	68,4	59,4	61,4	66,7
2m	62,3	57,9	62,4	53,4	55,4	60,7
5m	54,4	49,9	54,4	45,4	47,5	52,7
10m	48,4	43,9	48,4	39,4	41,4	46,7

EHW	1657	2069	2476	3097	35110
1m	67,4	69,2	71,2	69	74
2m	61,3	63,2	65,2	63	68
5m	53,4	55,2	57,2	55,1	60
10m	47,4	49,2	51,2	49	54

➤ SOUND PRESSURE

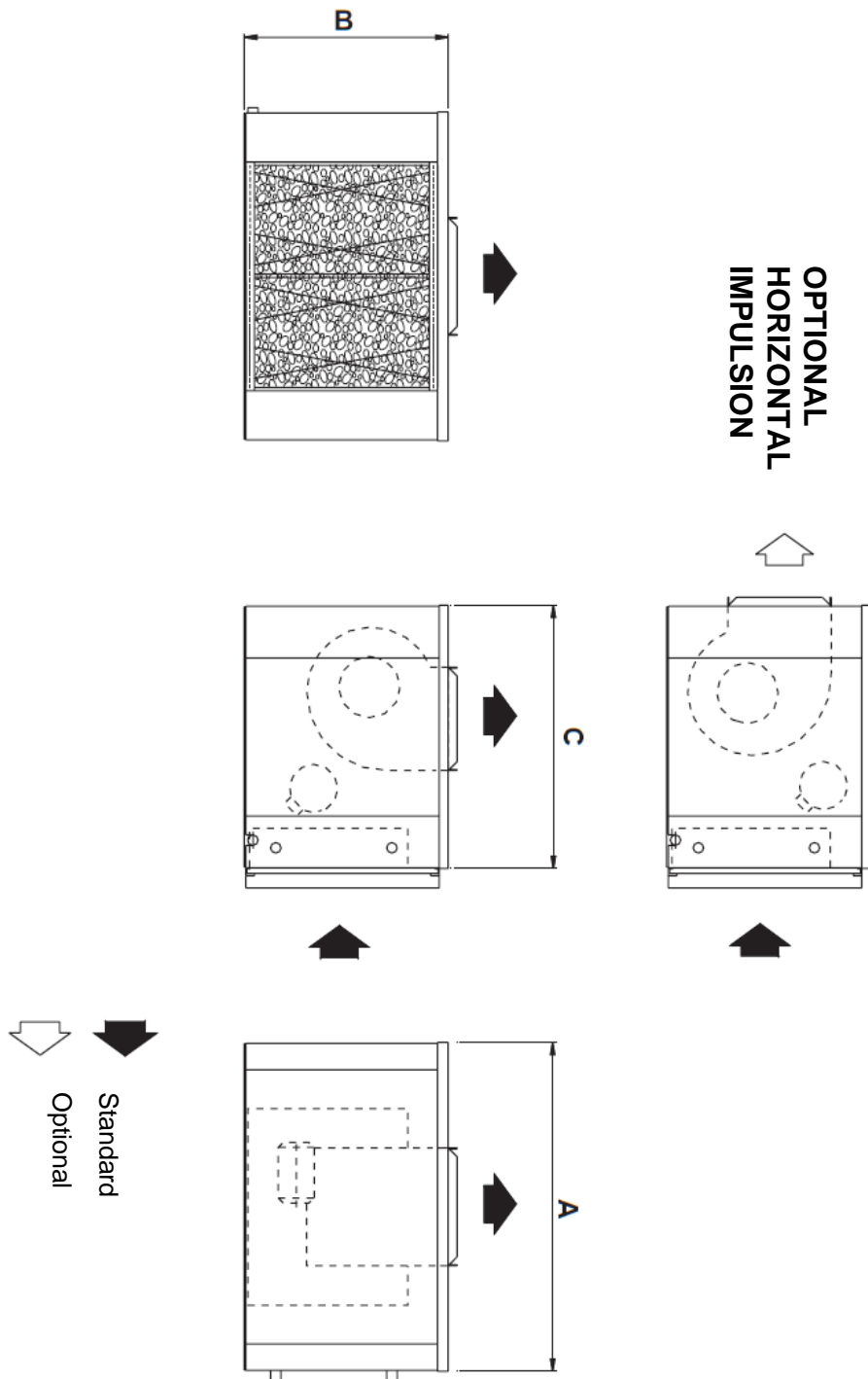
EHW	518	725	830	1036	1042	1250
63 Hz	39	42	45	41	42	44
125 Hz	55	56	61	50	52	59
250 Hz	63	60	65	57	58	63
500 Hz	68	65	69	60	62	67
1000 Hz	72	67	71	63	65	70
2000 Hz	69	64	68	60	62	67
4000 Hz	66	62	68	54	58	65
8000 Hz	63	51	61	43	45	54
Total dB	75,8	71,4	75,9	66,9	68,9	74,2

EHW	1657	2069	2476	3097	35110
63 Hz	43	42	43	42	44
125 Hz	61	64	67	64	69
250 Hz	64	66	68	67	72
500 Hz	69	71	73	71	76
1000 Hz	70	72	74	71	76
2000 Hz	68	69	70	69	73
4000 Hz	63	65	68	65	71
8000 Hz	55	57	60	60	66
Total dB	74,8	76,7	78,7	76,5	81,5

Note : the audio data are referred to the noise levels of the fans under free download and available static pressure.

DIMENSIONS

EHW 518 – 725 – 830 (STD)

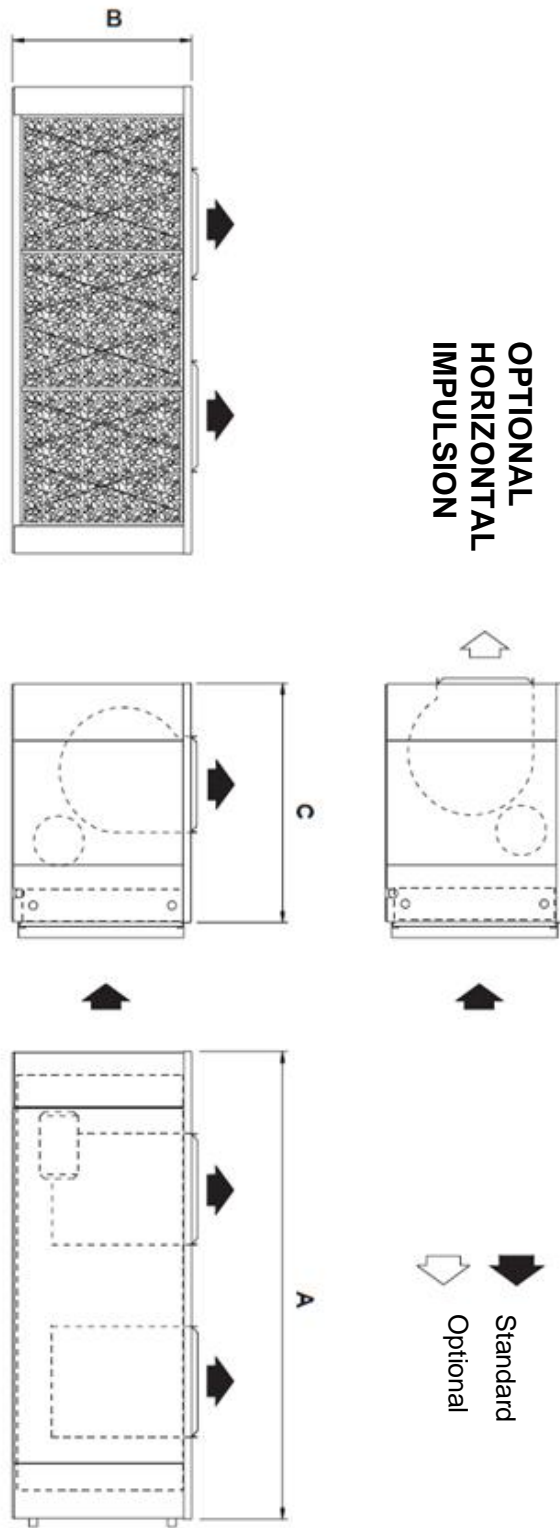


MODEL		A	B	C
518	mm	1085	580	750
725	mm	1130	650	800
830	mm	1130	650	800

EHW

HORIZONTAL AIR CONDITIONING
UNITS, LOW SILHOUETTE

| EHW 1036 – 1042 – 1250 – 1657 – 2069 – 2476 (STD)

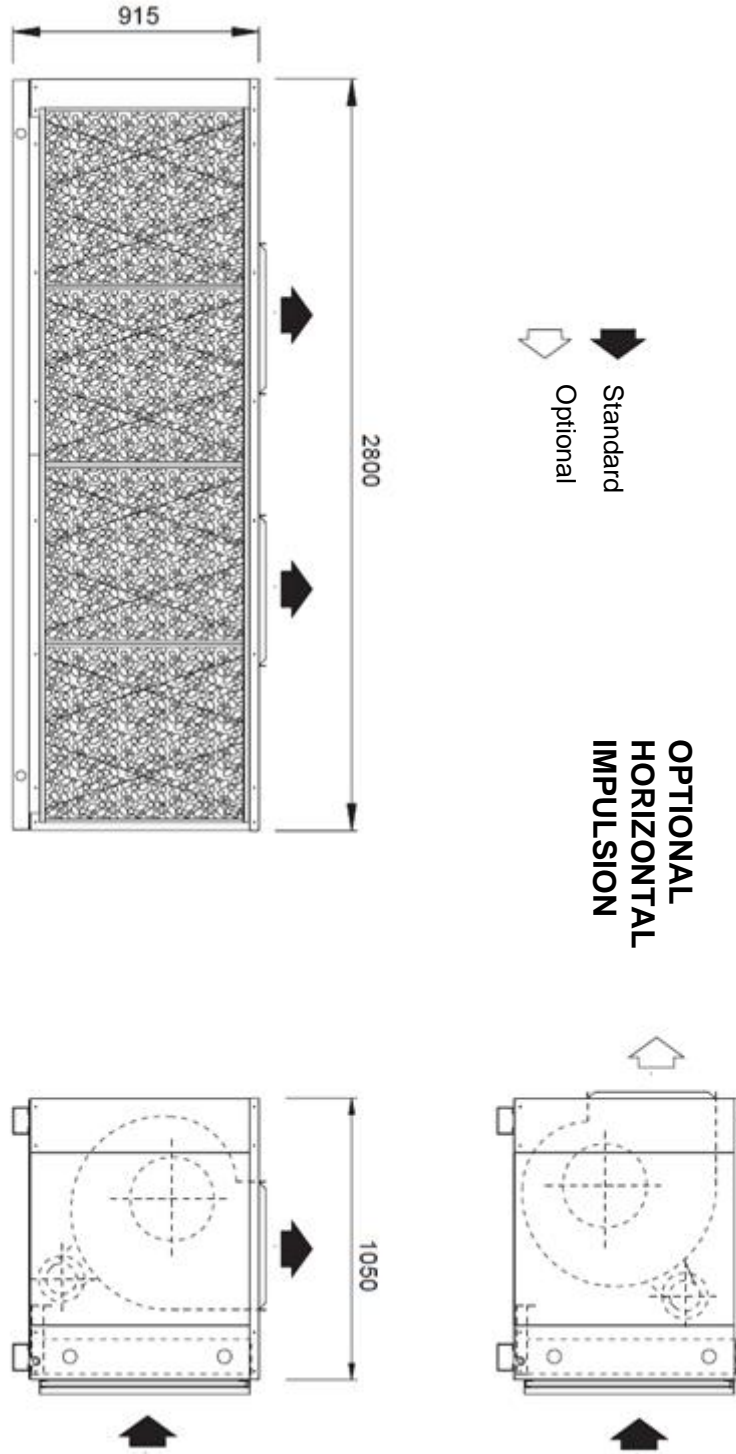


MODEL		A	B	C
1036 – 1250	mm	1700	650	870
1657	mm	2000	747	939
2069 – 2476	mm	2600	752	980

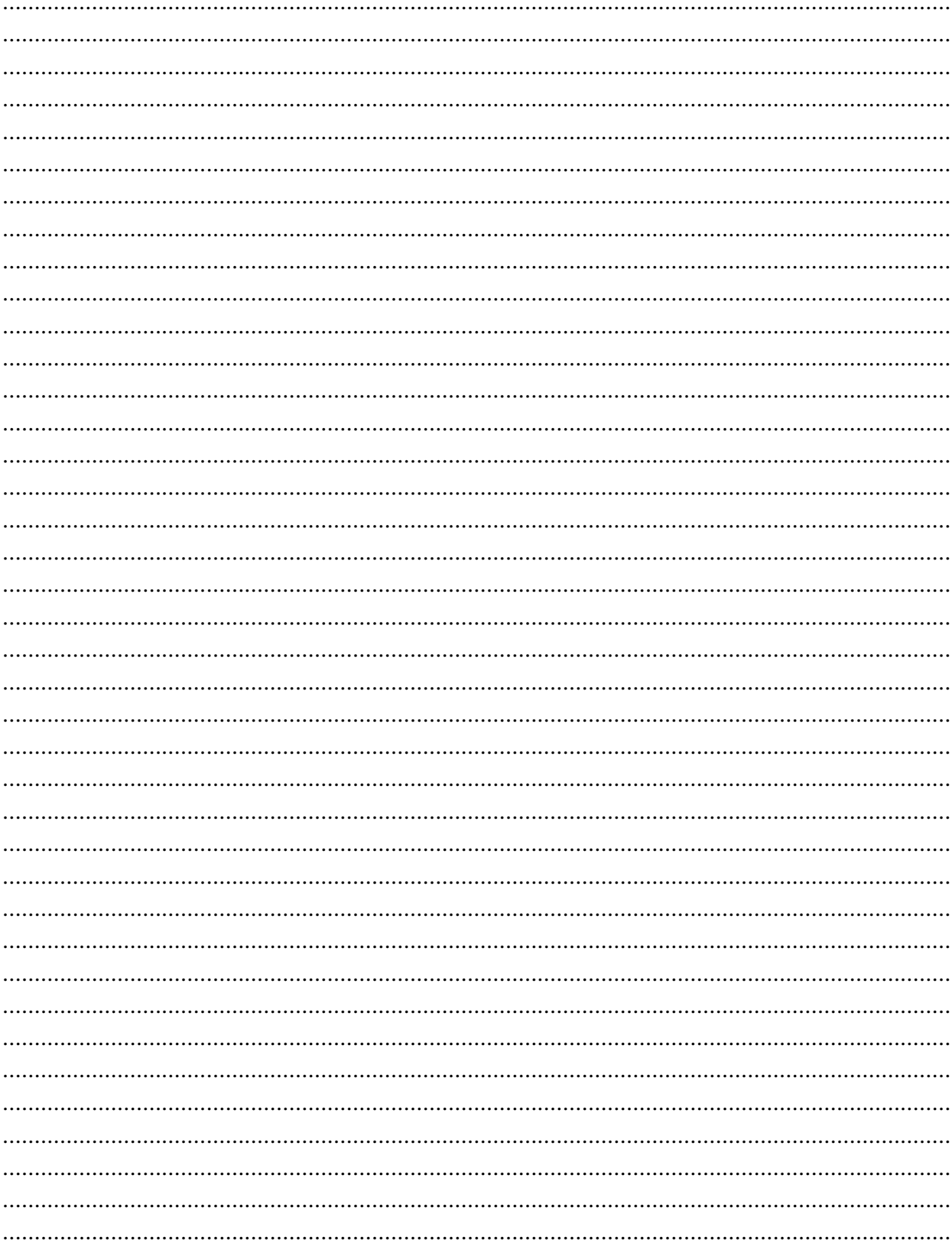
EHW

HORIZONTAL AIR CONDITIONING
UNITS, LOW SILHOUETTE

EHW 3097 – 35110 (STD)



****All drawings are from the standard version**





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