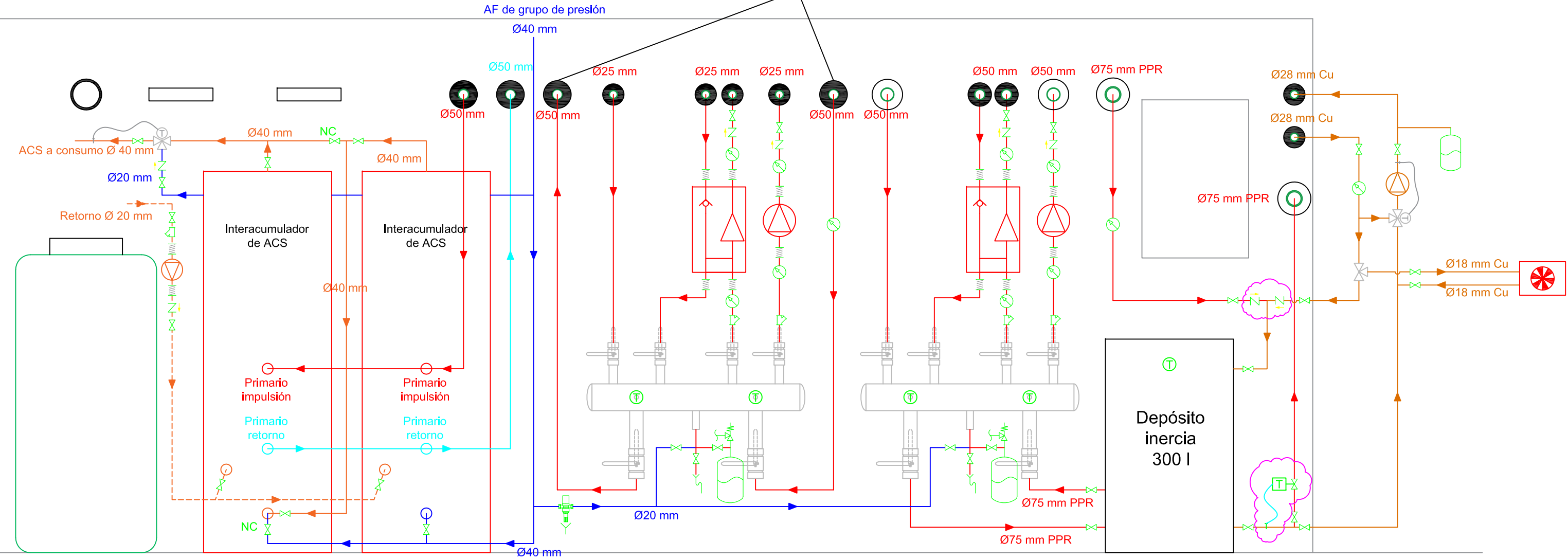
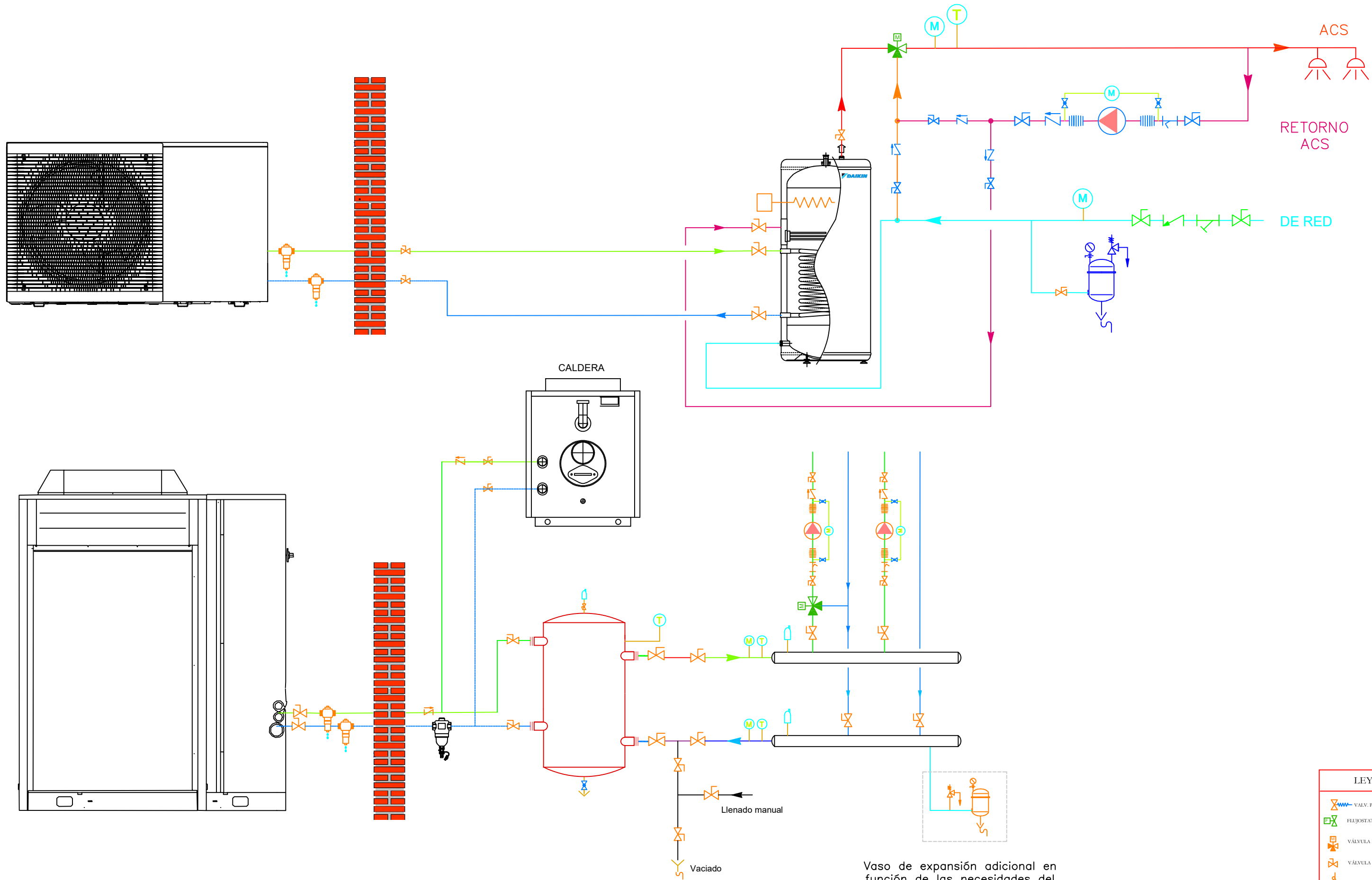
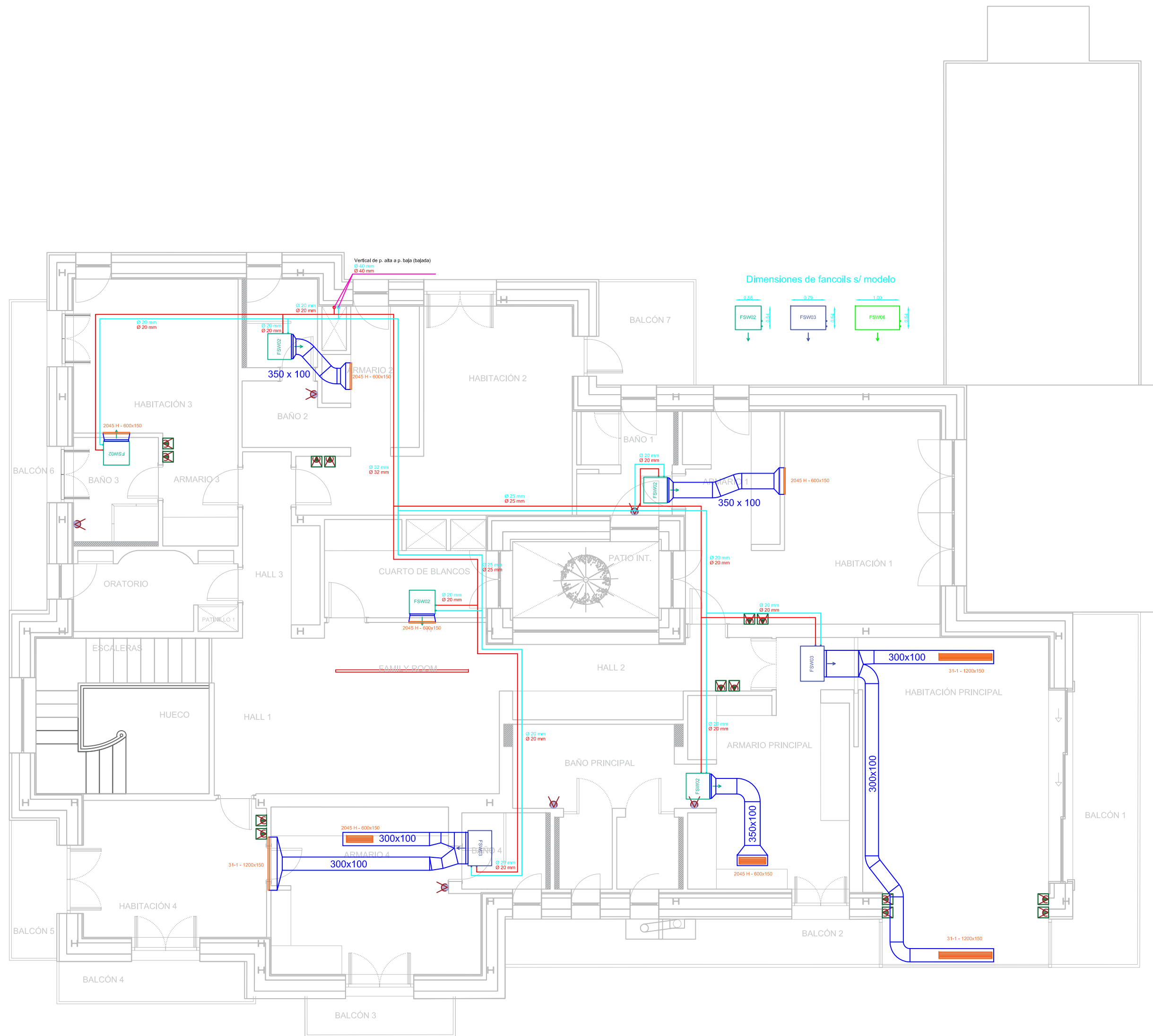


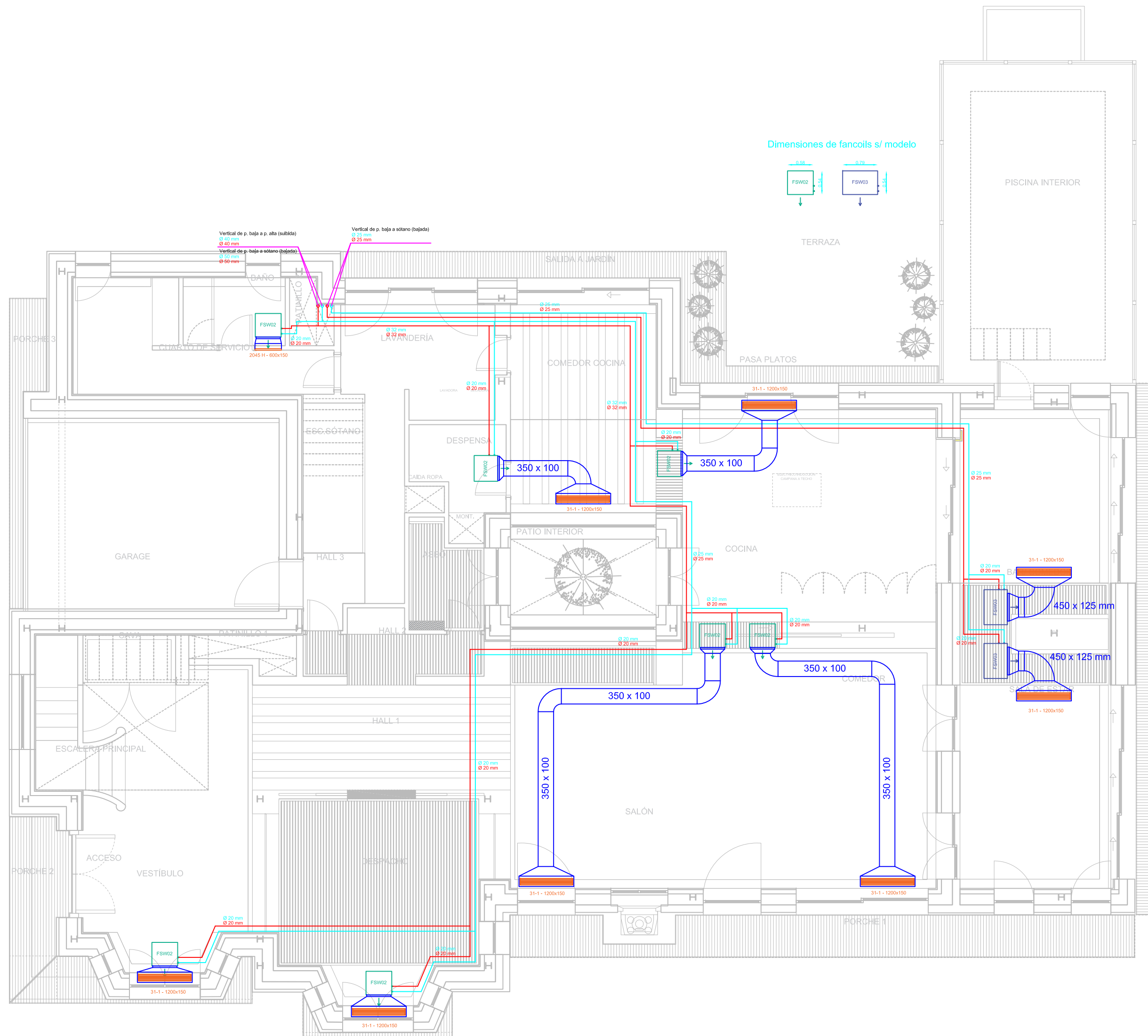
Primario climatización terraza (Altherma 3 - EBLA08E3V3)
¿Necesita depósito de inercia?





El esquema propuesto se considerará con carácter orientativo.
Debe se verificado previo a la ejecución del mismo por la
empresa instaladora o la dirección facultativa competente.
PARA CUALQUIER DUDA CONSULTE CON NUESTRO DEPARTAMENTO TÉCNICO





SISTEMAS DE VENTILACIÓN RESIDENCIAL: DucoBox Energy Comfort 325

Descripción:

DucoBox Energy Comfort es una unidad de ventilación con recuperación de calor. Suministra aire exterior a la casa de forma mecánica. El control de demanda inteligente de la unidad DucoBox Energy Comfort se traduce en un funcionamiento silencioso, inteligente y eficiente con la energía. Los componentes de control pueden emparejarse con la unidad DucoBox Energy Comfort. La unidad DucoBox Energy Comfort cuenta con un sistema de protección contra congelación (con o sin calentador), una función de bypass y flujo constante.

Datos técnicos DucoBox Energy Comfort

		Recuperador Energy Comfort 325
Consumo, modo intercambio de calor (50 Hz)	Muy Alto (W)	131,0
	Alto (W)	71,0
	Bajo (W)	15,0
Dimensiones	Unidad (AlxAxF)(mm)	705 x 700 x 525
Peso	kg	21
Caudal de aire, modo intercambio de calor (50 Hz)	Muy Alto (m3/h)	325
	Alto (m3/h)	250
	Bajo (m3/h)	100
Presión sonora (50 Hz)	Muy Alto / Alto / Bajo [dB(A)]	63 / 58,5 / 42
Presión estática (50 Hz)	Velocidad Max / Muy Alta / Alta [Pa]	150 / 100 / 50
Diámetro del conducto de conexión	mm	Diámetro interno Ø160
Drenaje de condensado	mm	Ø32 (1 ¼")
Clase Eficiencia Energética		A / A+ (con dos sensores)
Eficiencia Térmica	(%)	91
Caudal Máximo	(m3/h)	325
Potencia Sonora	(dB)	55
SFP*	(Wh/m3)	0,21
Filtros		Aire de impulsión: estándar: ISO 16890 Grueso 65% (G4)
		Aire expulsado: estándar: ISO 16890 Grueso 65% (G4)

*Medido con un caudal de referencia de 216 m3/h y una diferencia de presión de 50 Pa.



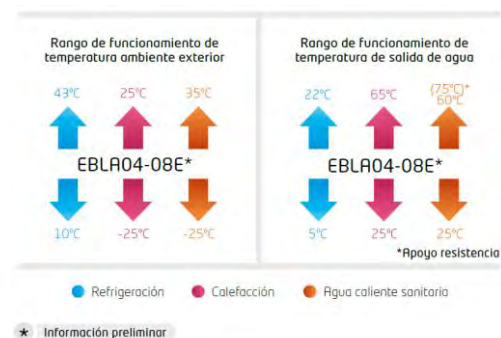
Unidades Exteriores Altherma: EBLA-DV Monobloc con R-32

Descripción

Unidad exterior marca Daikin del Sistema Daikin Altherma Monobloc de baja potencia, sistema compacto bomba de calor aerotérmica para aire acondicionado, calefacción y agua caliente sanitaria, para montaje en intemperie, modelo EBLA-DV, sistema de regulación Inverter del compresor y ventilador, con compresor Swing y expansión mediante válvula de expansión electrónica. Programa de funcionamiento nocturno con reducción de ruido. Incluye intercambiador de placas de acero inoxidable, bomba de circulación, válvula de sobrepresión (seguridad), manómetro, purgador automático y vaso de expansión. Alimentación monofásica 1x230V + T y posibilidad de trifásica 3x400V + T. Tratamiento anticorrosivo especial del intercambiador de calor. Rango de funcionamiento de temperatura exterior nominal en Frío desde 10 a 43°C de bulbo seco exterior, en Calor desde -25 a 25°C de bulbo húmedo exterior, y en modo a.c.s -25 a 35°C. Rango de funcionamiento de temperatura de salida de agua en Refrigeración desde 7 a 22°C, en Calefacción desde 25 a 60°C, y en modo ACS desde 25 a 60°C. Utiliza refrigerante ecológico R32. SmartGrid y controlbox para gestión de ACS incluido.

Datos técnicos según modelo EBLA-DV

Temperatura ambiente impulsión				EBLA04E3V3	EBLA06E3V3	EBLA08E3V3
Calefacción	7	45	Capacidad/Consumo (kW)	4,6 / 1,26	5,9 / 1,69	7,8 / 2,23
			COP	3,65	3,50	3,50
	7	35	Capacidad/Consumo (kW)	4,3 / 0,84	6 / 1,24	7 / 1,63
			COP	5,12	4,84	4,29
Refrigeración	35	7	Capacidad/Consumo (kW)	4,52 / 1,36	5,09 / 1,55	5,44 / 1,73
			EER	3,32	3,28	3,14
	35	18	Capacidad/Consumo (kW)	4,86 / 0,82	5,83 / 1,08	1,19 / 4,6
			EER	4,86 / 0,83	5,40	0,26
Eficiencia energética			55°C LOT1 (SCOP)*	A++	A++	A++
			35°C LOT1 (SCOP)*	A+++	A+++	A+++
Compresor			Tipo	SWING	SWING	SWING
Refrigerante R-32			kg/ TCO2eq / PCA	1,35 / 0,91 / 675	1,35 / 0,91 / 675	1,35 / 0,91 / 675
Alimentación eléctrica			V	I / 230 V	I / 230 V	I / 230 V
Dimensiones			Alto x Ancho x Fondo (mm)	770 x 1250 x 362	770 x 1250 x 362	770 x 1250 x 362
Peso			kg	91	91	91
Circuito agua			Conexión tubería	G 1" (macho)	G 1" (macho)	G 1" (macho)
			Tubería	ø1-1/4"	ø1-1/4"	ø1-1/4"
Potencia sonora			dB(A)	58	60	62





Unidades Interiores ALTHERMA: EKHWS-D3V3 DEPÓSITO ACS

Descripción:

Depósito de acumulación de Agua Caliente Sanitaria (ACS) marca Daikin. Tipo acumulador intercambiador fabricado en acero inoxidable, con, resistencia de apoyo (booster) de 3 kW y alimentación monofásica a través del Hidrokit marca Daikin. Incluye válvula de tres vías.

Datos técnicos según modelo

		EKHWS150D3V3	EKHWS180D3V3	EKHWS200D3V3	EKHWS250D3V3	EKHWS300D3V3
Dimensiones	Altura (mm)	1037	1203	1305	1575	1785
	Anchura (mm)	600	600	600	600	600
	Profundidad (mm)	600	600	600	600	600
Volumen depósito agua	Volumen (l)	145	174	192	242	292
Peso en vacío	Peso (kg)	45	50	53	58	63
Material	Tanque	Acero inoxidable (EN 1.4521)				
	Carcasa	Acero dulce recubierto de epoxi				
	Aislamiento	Espuma de poliuretano				
Temperatura de agua	Máxima (°C)	75,0				
Presión del agua	Máxima (bar)	10				
Resistencia de apoyo	Resistencia (kW)	3				
Conexiones hidráulicas	Diámetro (")	3/4				
Clase eficiencia energética	LOT2	B				



PROJECT DATA

Project number:
ES 000102

Street name & House number:

Postal code & Town:

DETAILS OF BUILDING OWNER

First name & Name:

Street name & House number:

Company name:

Postal code & Town:

1. INTRODUCTION

This ventilation plan was made with the greatest possible care based on the information made available to us. All resulting recommendations are illustrative, without obligation and non-binding.

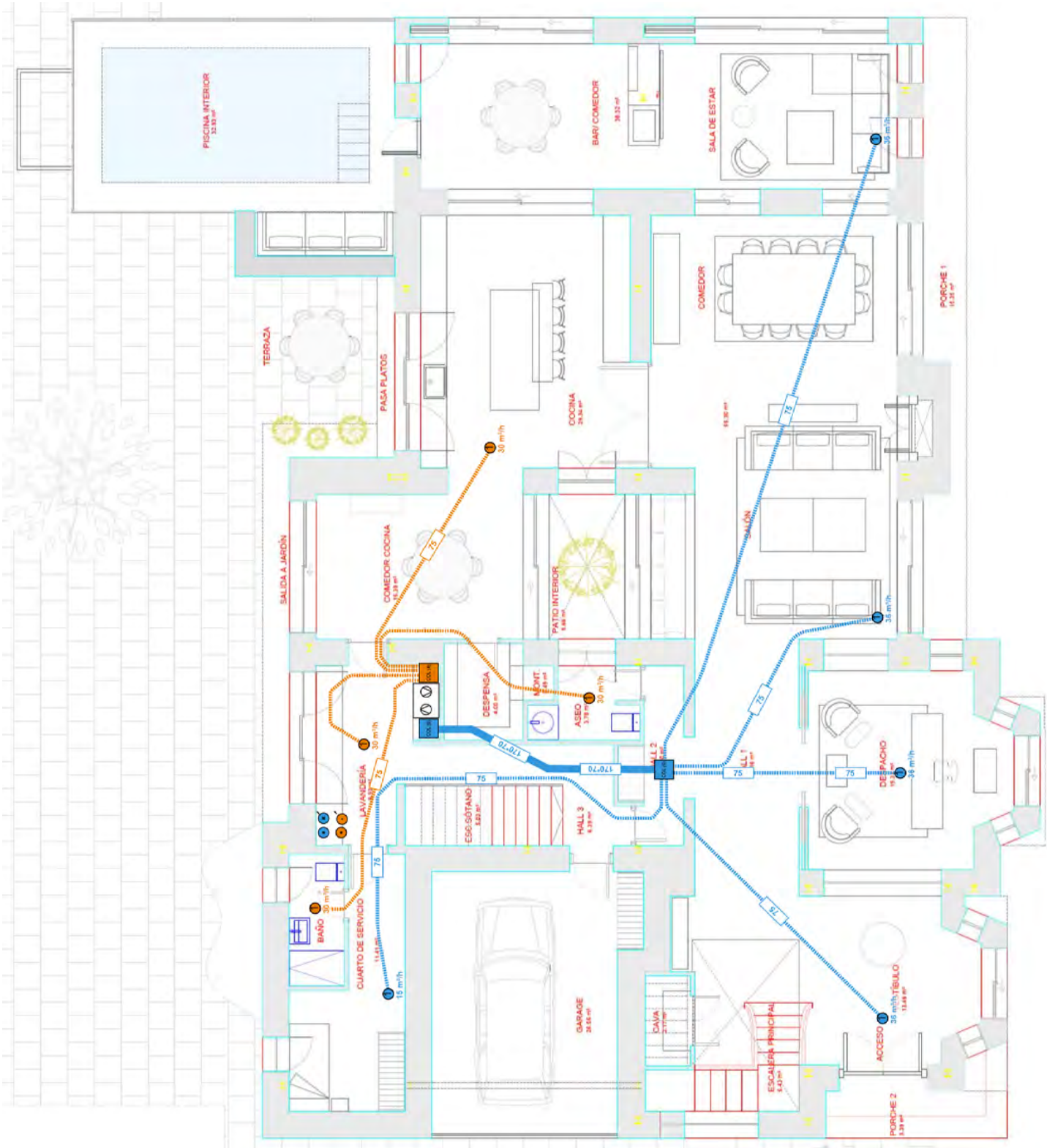
2. AIR VALVE FLOWRATES

INFLOW

name room	type room	surface area (m²)	design (m³/h)	# air valves
Cuarto de servicio	Bedroom		15	1
Vestibulo	Living space		36	1
Despacho	Living space		36	1
Salon	Living space		36	1
Sala de estar	Living space		36	1
Hab 3	Bedroom		15	1
Hab 4	Bedroom		15	1
Family room	Living space		36	1
Hab 2	Bedroom		15	1
Hab 1	Bedroom		15	1
Hab principal	Bedroom		30	1
Ortario	Bedroom		15	1
		total	300	

OUTFLOW

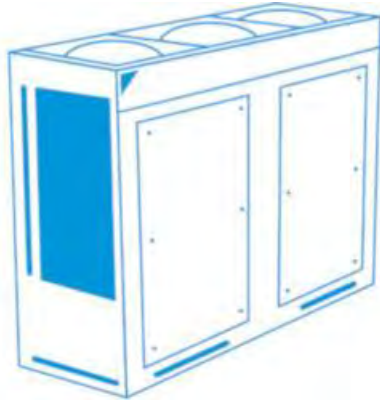
name room	type room	surface area (m²)	design (m³/h)	# air valves
Bano	Bathroom		30	1
Lavanderia	Other		30	1
Aseo	Toilet		30	1
Cociana	Kitchen		30	1
Bano 3	Bathroom		30	1
Bano 2	Bathroom		30	1
Cuarto de Blancos	Other		30	1
Bano 1	Bathroom		30	1
Bano 4	Bathroom		30	1
Bano principal	Bathroom		30	1
		total	300	





LEGEND

	Fixed pipe		Ceiling air valve		Ventilation group (system D)
	Flexible pipe		Wall air valve		Ventilation group (system C)
	Insulated pipe		roof terminal		Collector
	Damper		wall terminal		CO2 sensors
	air inflow		Window grille		RH sensors
	air outflow		Ventilation opening		RF switches
	Condensation drain				

EWYT040CZP-A2

> Air to water reversible heat pump

> Brushless fans

> High Efficiency

> R-32 refrigerant

> **Single pump low lift included**

- **Unit description:** Daikin air cooled chiller with inverter driven hermetic scroll compressors and R32 refrigerant. Unit colour: Daikin White.
- **Compressor:** Inverter driven hermetic orbiting scroll are combined on each unit. Inverter compressors continuously adjust compressor speed to actual demand. Fewer power-consuming starts and stops result in decreased energy consumption and more stable temperatures. Compressors are equipped with oil heaters that keeps the oil from being diluted by the refrigerant when the chiller is not running.
- **Evaporator:** The unit is equipped with a direct expansion plate to plate type evaporator. This heat exchanger is made of stainless steel brazed plates and covered with nitrile rubber based elastomeric foam. Unit is equipped with the necessary devices for plant integration, such as: flow switch, treated water connections, air purge and drain valves, safety valve, shut off valve.
- **Condenser:** Fins and tubes air cooled coil. Fins are designed with non-symmetric waffle louvres to enhance the heat exchange and improve the efficiency and compactness of the unit. The presence of hydrophylic and anti-corrosion treatment on the coil fins enhances the resistance to the aggressive environments.
- **Condenser coil fans:** Unit fans are axial type equipped with Brushless DC motor to maximize performances. The material of the blades is glass reinforced resin and each fan is protected by a guard. Fans offer an available external static pressure equal to allow a ducted installation.
- **Refrigerant circuit:** Each refrigerant circuit includes: Compressors, Refrigerant, Air Cooled Condenser, Electronic expansion valve, Oil separator, High pressure switch, refrigerant stop valves (liquid and gas).



Unit Overview

Model Number	Capacity kW	IPLV.IP kW / kW	Voltage	Boost
EWYT040CZP-A2	41.68	6.370	400 V / 50 Hz / 3 Ph	No

Cooling mode performances

Cooling capacity	41.68 kW	IPLV.IP	6.370 kW / kW
Power input	13.16 kW	SEER	5.76 kW / kW
EER Cooling Efficiency	3.170 kW / kW	$\eta_{s,c}$	227.4 %
Lw / Lp @ 1m	80 dB(A) / 63 dB(A)	SEPR	7.96 kW / kW
Ambient temperature	35.0 °C		
Evaporator			
Water IN/OUT	12.0 °C / 7.00 °C	Water Flow	1.990 l/s
Pressure Drops	10.1 kPa		
Fluid	Water	Fouling Factor	0.00E0 m²C/kW

Sound power level according to ISO 9614-1.

Heating mode performances

Heating capacity	40.01 kW	IPLV.IP	6.370 kW / kW
Power input	11.84 kW	SCOP	4.19 kW / kW
COP Heating Efficiency	3.380 kW / kW	$\eta_{s,h}$	159.6 %
Ambient temperature	7.00 °C	Lw / Lp @ 1m	80 dB(A) / 63 dB(A)
Condenser			
Water IN/OUT	40.0 °C / 45.0 °C	Water Flow	1.930 l/s
Pressure Drops	9.45 kPa		
Fluid	Water	Fouling Factor	0.00E0 m²C/kW

Sound power level according to ISO 9614-1.

Unit information

Compressor type	Scroll	Refrigerant charge	10.2 kg
Capacity control	InverterControlled	Refrigerant type	R32
Compressor N°	2	Circuit N°	2
Condenser fans N°	2	Evaporator type	BrazedPlate
Condenser fans control	Variable Frequency Drive	Pump	Low lift pump
Nominal air flow	5440 l/s		

Actual refrigerant charge depends on the final unit construction, refer to unit nameplate.

Electrical information

Power supply	400 V / 50 Hz / 3 Ph	Compressor starting method	Variable Frequency Drive
Running current	26.6 A	Max. inrush current	0 A
Max. Running current	44.8 A		

Voltage tolerance $\pm 10\%$. Phase Voltage unbalance $\pm 3\%$. Electrical data referred to standard unit without options, refer to unit name plate data.

Acoustic information

Sound pressure level at 1 m from the unit (rif. 2×10^{-5} Pa)

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)
74	69	62	58	57	55	52	46	63

Values referred to Evap. IN/OUT 12/7°C and Cond. IN/OUT 30/35°C, full load operation, standard unit configuration without options. Sound pressure level calculated from sound power level. Sound pressure in octave band is for information only and not considered binding.

Physical information


Connections size **50.8 mm**
 Height **1878 mm**
 Weight shipping/operating **546 kg / 551 kg**

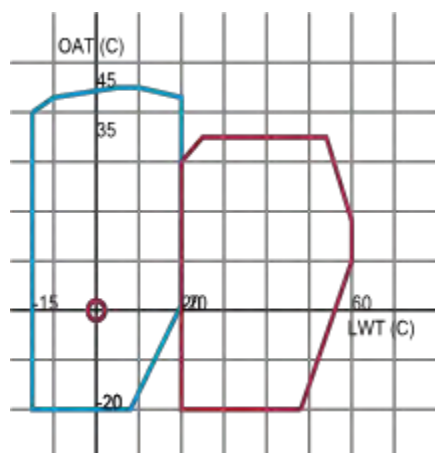
Length **814 mm**
 Width **2306 mm**

Information referred to standard unit configuration without options, refer to certified unit drawing.

General notes

For more information about the above selected product, please go to <http://www.daikineurope.com/industrial/>. Unit performances are reproducible in laboratory test environment only in accordance to recognized industry standards. This technical data sheet is generated by Daikin Applied Tool software designed and distributed by Daikin Applied Europe S.p.A. The present software does not constitute an offer binding upon Daikin Applied Europe S.p.A who compiled the content of this software to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Product images are indicative only and are intended for illustrative purposes only; pictures may be differed from the ordered product and are subject to change without prior notice. Daikin Applied Europe S.p.A. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this document. All content is copyrighted by Daikin Applied Europe S.p.A.
 This product is manufactured in Italy.

Envelope chart

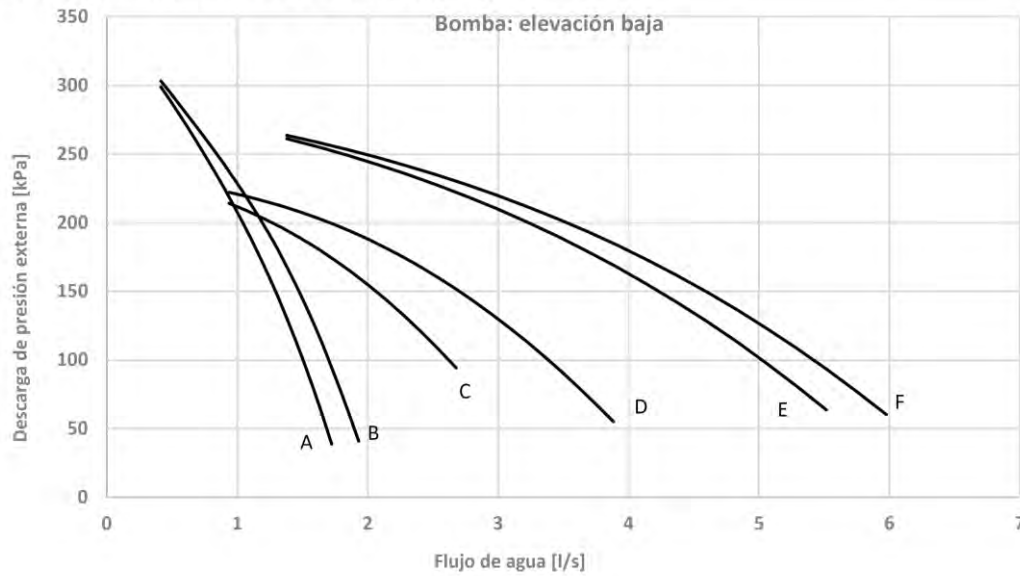


Note: this space contains the section notes...

Certification notes



EWA(Y)T~CZP: bomba de elevación baja



La presión externa hace referencia a la unidad equipada con un kit hidráulico y se define como la diferencia entre la presión estática externa de la bomba y las caídas de presión en el evaporador.

Para conocer los límites de flujo de agua de la unidad, consulte la sección de flujo de agua.

Bomba: elevación baja		Bomba: elevación alta	
Modelo	Curva de la bomba	Modelo	Curva de la bomba
EWAT/EWYT016CZP-A1	A	EWAT/EWYT016CZH-A1	A
EWAT/EWYT021CZP-A1	B	EWAT/EWYT021CZH-A1	B
EWAT/EWYT025CZP-A1	B	EWAT/EWYT025CZH-A1	B
EWAT/EWYT032CZP-A1	C	EWAT/EWYT032CZH-A1	C
EWAT/EWYT040CZP-A1	C	EWAT/EWYT040CZH-A1	C
EWAT/EWYT040CZP-A2	D	EWAT/EWYT040CZH-A2	D
EWAT/EWYT050CZP-A2	D	EWAT/EWYT050CZH-A2	D
EWAT/EWYT064CZP-A2	E	EWAT/EWYT064CZH-A2	E
EWAT/EWYT090CZP-A2	F	EWAT/EWYT090CZH-A2	F





Project FWS02ATV-50Pa

FSS Project Report Summary

Ducted Type



Input Data

Cooling 				Heating 			
Air Inlet Temperature	°C	25		Air Inlet Temperature	°C	21	
Relative Humidity	%	50					
Water Inlet Temperature	°C	7		Water Inlet Temperature	°C	45	
Water Outlet Temperature	°C	12		Water Outlet Temperature	°C	40	

							
Technology	Inverter (BLDC)			Pipes	2		
Air Flow	m ³ /h	360		Sound Distance	m	2	
External Static Pressure	Pa	50		Directivity Factor	2		
				Glycol	%	0	

Selected Units

MODEL	MODE	PT	PS	TA Out	QW	TW Out	dP W	RPM	VIn	P In	Lw	Lp
FWS02AT	Cool	1.57	1.23	14.1	276	12	8	1450	8.9	43.2	60	46
	Heat	2.11		38.5	367	40	12					

Legenda

MODE	Cooling/Heating Mode	TW Out	Water Out Temp. (°C)	QW	Water Flow (l/h)
PT	Total Capacity (kW)	dP W	Water Press Drop (kPa)	P In	Power Input (W)
PS	Sensible Capacity (kW)	RPM	RPM	Lw	Sound Power (dB(A))
TA Out	Air Out Temp. (°C)	VIn	Inverter Voltage (0-10V)	Lp	Sound Pressure (dB(A))



Model **FWS02AT**



Cooling

Total Capacity (kW)	1.57
Sensible Capacity (kW)	1.23
Air Out Temp. (°C)	14.1
Water Flow (l/h)	276
Water Out Temp. (°C)	12
Water Press Drop (kPa)	8

Heating

Total Capacity (kW)	2.11
Air Out Temp. (°C)	38.5
Water Flow (l/h)	367
Water Out Temp. (°C)	40
Water Press Drop (kPa)	12

General Data

Inverter Voltage (0-10V)	8.9
RPM	1450
Air Flow (m ³ /h)	360
Power Input (W)	43.2
Sound Power (dB(A))	60
Sound Pressure (dB(A))	46



FWS-A



Description

Low ESP ducted unit

- Bearing structure built from galvanized steel sheet (thickness up to 10/10 mm), insulated by means of Class 1 self-extinguishing panels.
- Double suction centrifugal fans, statically and dynamically balanced, directly connected to the electrical motor, made with antistatic ABS, with blades having an airfoil section and offset modules, or aluminium.
- Honey-comb polypropylene washable air filter, mounted on a galvanized sheet frame protected by a net, easily removable for maintenance operations.
- High efficiency heat exchanger/s made with copper piping and aluminium fins blocked to pipings by mechanical expansion, provided with brass manifolds and air vent valves. The heat exchanger/s usually come with water connections mounted on the left, but it can be turned by up to 180° according to the selected model.
- 2-pipe system with 3 or 4 rows heat exchanger.
- 4-pipe systems, 3 row heat exchanger (main coil) and 1 row heat exchanger (additional coil).
- BLDC permanent magnets motor, mounted on vibration damping couplings, complete with winding thermal protection. BLDC motor - 230-1-50 (V-ph-Hz).

Technical Specification

- Possibility to change the side of the water connections
- Flexi installation (horizontal or vertical)

Detail and Controllers

Operating limit:

- T° water : 5°C ÷ 95°C
- Max pressure: 10 bars

Available Controllers:

- FWEC3A
- FWEC3A

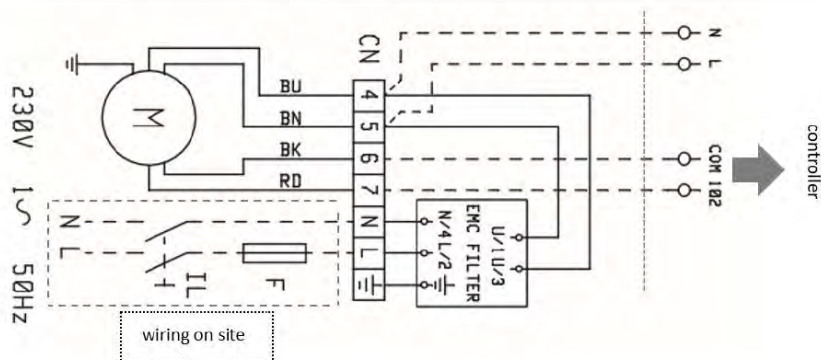




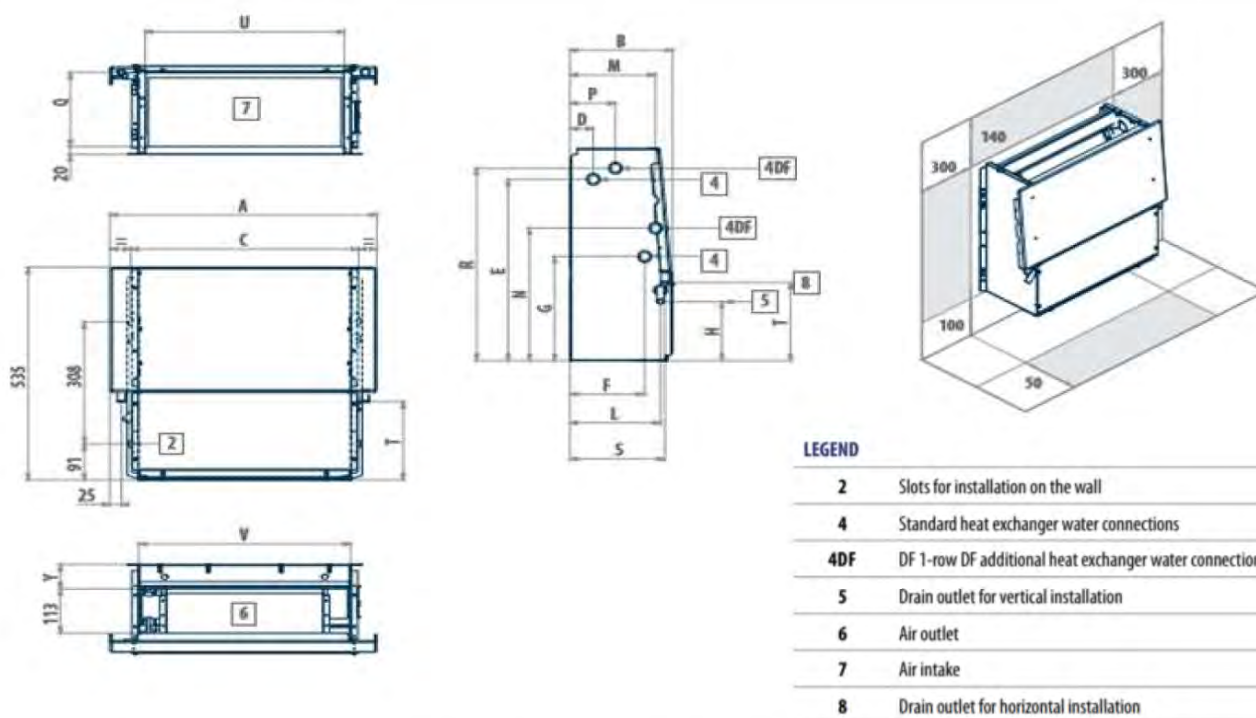
FWS-A



Unit Wiring diagram



Dimensional drawing



size	A	B	C	D	E	F	G	H	L	M	N	P	Q	R	S	T	U	V	W	Weight
02	584	224	498	51	458	163	263	149	198	187	335	99	189	486	208	198	436	464	61	15
03	794	224	708	51	458	163	263	149	198	187	335	99	189	486	208	198	646	674	61	19
06	1004	224	918	51	458	163	263	149	198	187	335	99	189	486	208	198	856	884	61	23
08	1214	249	1128	48	497	185	259	155	220	195	348	120	215	478	234	208	1066	1094	67	32



Project FWS03ATV-50Pa

FSS Project Report Summary

Ducted Type



Input Data

Cooling



Air Inlet Temperature	°C	25
Relative Humidity	%	50
Water Inlet Temperature	°C	7
Water Outlet Temperature	°C	12

Heating



Air Inlet Temperature	°C	21
Water Inlet Temperature	°C	45
Water Outlet Temperature	°C	40

Technology

Inverter (BLDC)



Air Flow	m ³ /h	580
External Static Pressure	Pa	50

Pipes



Pipes		2
Sound Distance	m	2
Directivity Factor		2
Glycol	%	0

Selected Units

MODEL	MODE	PT	PS	TA Out	QW	TW Out	dP W	RPM	VIn	P In	Lw	Lp
FWS03AT	Cool	2.9	2.22	12.9	507	12	12	1450	8.9	62	59	45
	Heat	3.77		40.4	656	40	15					

Legenda

MODE	Cooling/Heating Mode	TW Out	Water Out Temp. (°C)	QW	Water Flow (l/h)
PT	Total Capacity (kW)	dP W	Water Press Drop (kPa)	P In	Power Input (W)
PS	Sensible Capacity (kW)	RPM	RPM	Lw	Sound Power (dB(A))
TA Out	Air Out Temp. (°C)	VIn	Inverter Voltage (0-10V)	Lp	Sound Pressure (dB(A))



Model **FWS03AT**



Cooling

Total Capacity (kW)	2.9
Sensible Capacity (kW)	2.22
Air Out Temp. (°C)	12.9
Water Flow (l/h)	507
Water Out Temp. (°C)	12
Water Press Drop (kPa)	12

Heating

Total Capacity (kW)	3.77
Air Out Temp. (°C)	40.4
Water Flow (l/h)	656
Water Out Temp. (°C)	40
Water Press Drop (kPa)	15

General Data

Inverter Voltage (0-10V)	8.9
RPM	1450
Air Flow (m³/h)	580
Power Input (W)	62
Sound Power (dB(A))	59
Sound Pressure (dB(A))	45



FWS-A



Description

Low ESP ducted unit

- Bearing structure built from galvanized steel sheet (thickness up to 10/10 mm), insulated by means of Class 1 self-extinguishing panels.
- Double suction centrifugal fans, statically and dynamically balanced, directly connected to the electrical motor, made with antistatic ABS, with blades having an airfoil section and offset modules, or aluminium.
- Honey-comb polypropylene washable air filter, mounted on a galvanized sheet frame protected by a net, easily removable for maintenance operations.
- High efficiency heat exchanger/s made with copper piping and aluminium fins blocked to pipings by mechanical expansion, provided with brass manifolds and air vent valves. The heat exchanger/s usually come with water connections mounted on the left, but it can be turned by up to 180° according to the selected model.
- 2-pipe system with 3 or 4 rows heat exchanger.
- 4-pipe systems, 3 row heat exchanger (main coil) and 1 row heat exchanger (additional coil).
- BLDC permanent magnets motor, mounted on vibration damping couplings, complete with winding thermal protection. BLDC motor - 230-1-50 (V-ph-Hz).

Technical Specification

- Possibility to change the side of the water connections
- Flexi installation (horizontal or vertical)

Detail and Controllers

Operating limit:

- T° water : 5°C ÷ 95°C
- Max pressure: 10 bars

Available Controllers:

- FWEC3A
- FWEC3A

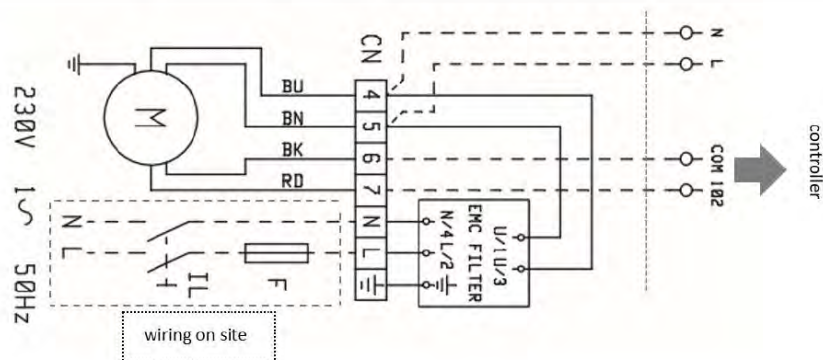




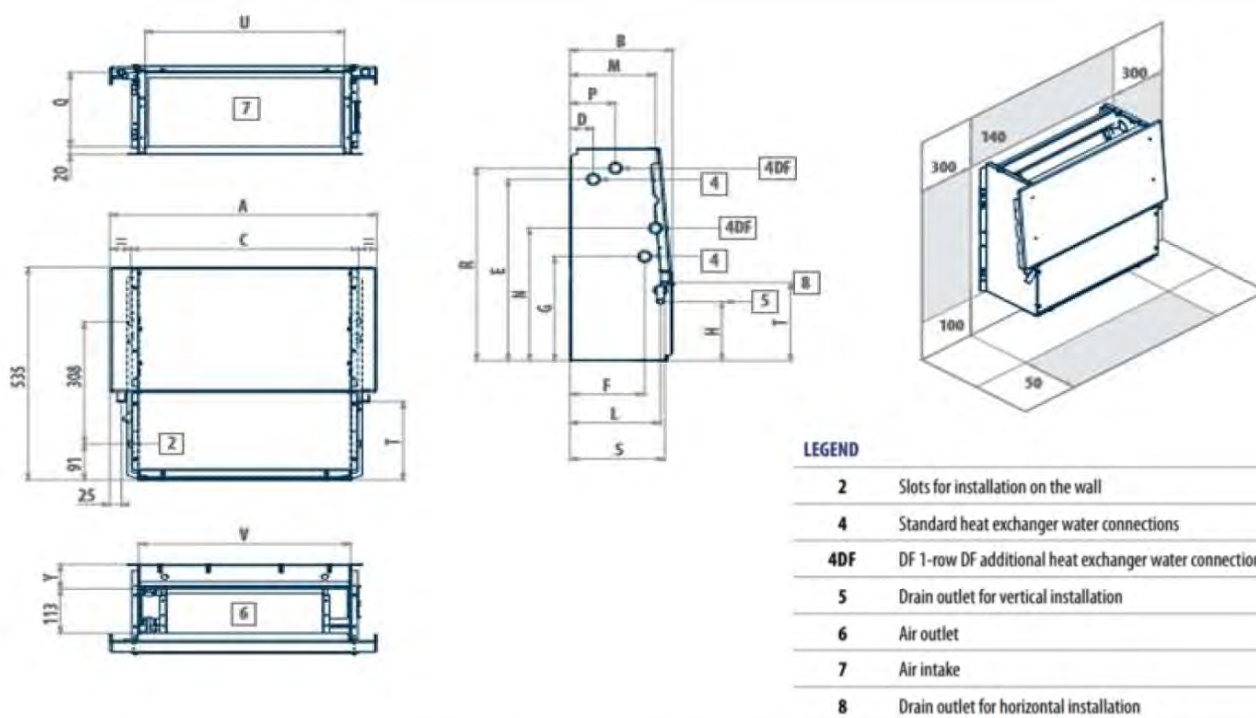
FWS-A



Unit Wiring diagram



Dimensional drawing



size	A	B	C	D	E	F	G	H	L	M	N	P	Q	R	S	T	U	V	W	Weight
02	584	224	498	51	458	163	263	149	198	187	335	99	189	486	208	198	436	464	61	15
03	794	224	708	51	458	163	263	149	198	187	335	99	189	486	208	198	646	674	61	19
06	1004	224	918	51	458	163	263	149	198	187	335	99	189	486	208	198	856	884	61	23
08	1214	249	1128	48	497	185	259	155	220	195	348	120	215	478	234	208	1066	1094	67	32