

# WiSAN-YMD1 NA 40.2

Air cooled full inverter modular heat pump

Outdoor installation



SIZE - EXCELLENCE	40.2
Cooling capacity [tons]	28.6
Heating capacity [MBH]	379



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# Features and benefits

WiSAN-YMD1 NA is the new air-cooled Modular heat pump, equipped with Full DC Inverter technology and R-32 refrigerant with low environmental impact, designed for outdoor installation.

## WiSAN-YMD1 NA

Air-cooled Modular heat pump with Full DC Inverter technology and R-32 refrigerant

- Nominal cooling capacity: 28,6 Tons
- Nominal heating capacity: 379 MBH
- Seasonal efficiency IPLV: 18,5
- Operating with 118 °F of outdoor air temperature in cooling
- Operating down to -13 °F of outdoor air temperature in heating
- Hot water production up to 140 °F
- Copper/aluminium hydrophilic condensing coils
- Plate heat exchanger
- 2 refrigeration circuits



# Features and benefits

The WiSAN-YMD1 NA unit is available in a single energy version with very high efficiency levels when cooling and heating, is able to provide a high outlet water temperature, is suitable for colder climates due to its wide operating range and also operates very quietly.

Capacity modulation from 35%

## Wide operating range

### EXCELLENCE

Outdoor temperature	Max	Min
Heating	108 °F	-13 °F
Cooling	118 °F	14 °F

Produced water temperature	Max	Min
Heating	140 °F	86 °F
Cooling	68 °F	32 °F

## Functionality

- Hot water production up to 140 °F
- Management of external hydronic unit driven by inverter
- Management of external hydronic unit on/off

## Application Versatility

System components that may be fitted on board the unit:

- 2 Pipes Kit for Reversible Heating/Cooling cascade management
- 4 Pipes Kit for Simultaneous Heating & Cooling cascade management

## Cascade management

WiSAN-YMD1 NA is designed to connect up to eight units on a single group through dedicated 2 or 4 pipes hydraulic kit, and up to two different groups can be managed by a dedicated centralized controller, reaching up to 458 Tons of capacity.

# Standard unit technical specifications

## Compressor

Inverter controlled scroll-type hermetic compressor equipped with a motor protection device for overheating, overcurrents and excessive temperatures of the supply gas. It is installed on rubber anti-vibration mounts and comes with a full oil charge. The compressor is wrapped in a sound-absorbing hood, that reduces its sound emissions. A guard heater with automatic insertion prevents the refrigerant from diluting the oil when the compressor stops.

## Structure

Supporting structure and base made entirely of sturdy sheet steel, with hot-dip galvanised surface treatment and parts in full view painted with polyester powder RAL9001, which guarantees excellent mechanical characteristics and high corrosion resistance over time.

## Panelling

External panelling made of sheet steel, with hot-dip galvanised surface treatment and painted with polyester powder RAL9001 that guarantees greater corrosion resistance in outdoor installations and eliminates the need for periodic painting. The panels can be easily removed to fully access internal components.

## Internal exchanger

AISI 304/316 stainless steel direct expansion brazed plate heat exchanger, packaged without seals using copper as brazing material, with low refrigerant content and high exchange surface area, complete with:

- 13 mm thick external anti-condensation thermal insulation;
- antifreeze heater to protect the water side exchanger to prevent ice from forming if the water temperature drops below the pre-set value

## External exchanger

Direct expansion finned coil exchanger made with copper pipes placed on staggered rows mechanically expanded to better adhere to the fin collar. The fins are made of hydrophilic aluminium and properly spaced for maximum heat exchange efficiency.

## Fan

Helical fans with four profiled blades made of reinforced plastic material, directly coupled to an electronically controlled brushless DC motor in IP44 execution.

The brushless technology and the special power supply increase both the life cycle and the efficiency. Consumption is thus reduced by as much as 50%. The fans are housed in aerodynamically shaped nozzles to increase efficiency and minimise noise levels and are fitted with accident prevention grilles.

Both fans and grilles are designed with CFD technology. Supplied with variable speed control

## Refrigeration circuit

Two refrigeration circuits made of copper, brazed and factory-assembled, complete with:

- electronic expansion valve;
- 4-way cycle inversion valve;
- high-pressure safety switch;
- liquid receiver;
- suction separator;
- high and low pressure transducers;
- temperature sensors;
- refrigerant safety valve;
- economiser exchanger;

## Electrical panel

The power section includes:

- door locking main circuit breaker;
- protection fuses, SCCR = 65 kA;
- AC filter on the power supply;
- protection for compressor overload;

The control section includes:

- serial port with Modbus (RS485) for remote communication;
- compressor overload protection and timer;
- relay for remote cumulative fault signal;
- defrosting cycle optimisation;
- condenser control;
- dry contact for remote on/off control;
- dry contact for SUMMER/WINTER remote control;
- dry contact for auxiliary generator management;

The control keypad includes:

- remote interface terminal with graphic display for indoor installation;
- multifunction keys for ON/OFF control;
- hot, cold or auto operation modes;
- alarms display and reset;
- daily or weekly schedule;
- separate power adapter for remote use;

## Water circuit

- pressure relief valve (300 Psi);
- temperature sensors;
- de-aerator;
- differential pressure switch;

## Drain pan

Condensate collection basins made of AISI 316 stainless steel allow condensate to be collected and drained.

The various basins, located underneath the batteries, are equipped with antifreeze heating elements applied to the bottom. The basins are fitted with stainless steel pipes for channelling the outlets to a common outlet, which the installer is responsible for arranging.

The electric heaters are thermostatically controlled and are activated depending on the outside air temperature.

## Test

Unit subjected to factory-tested in specific steps and test pressure of the piping of the refrigerant circuit (with nitrogen and hydrogen), before shipping them.

# Standard unit technical specifications

## Unit equipment with outdoor air low temperatures

MINIMUM OUTDOOR AIR TEMPERATURE	OPERATING UNIT		UNIT IN STAND-BY (FED UNIT)	UNIT IN STORAGE (UNIT NOT FED)
	COOL*	HOT**		
From 107°F to 14°F	✓ STANDARD UNIT			
From 14°F to 4°F				✓ STANDARD UNIT
From 4°F to -4°F	✗ NOT POSSIBLE	✓ STANDARD UNIT	✓ STANDARD UNIT	
From -4°F to -13°F				✓ WATER EMPTY UNIT OR WITH AN APPROPRIATE PERCENTAGE <sup>(1)</sup>

(1) Water empty unit or with an appropriate glycol percentage

At the unit start-up the water temperature or water with glycol must be inside the operating range indicated in the "Operating range" graph. To know the water freezing temperature on varying the glycol percentage refer to the specific 'Correction factors for glycol use' table.

- ⚠ Strong winds can induce air to flow through the exchanger and air-levels which can provoke a reduction in the operating limit. In the presence of predominant winds it is necessary to use suitable windbreak barriers.
- ⚠ The unit, with an outdoor air temperature on average lower than 14 °F can remain stored for a maximum of 1 month.

# Unit configuration

WiSAN-YMD1 NA   40   .2   4606H   EXC   SC   CCHY   VENDC   -   MOB   TCDC

(1)   (2)   (3)   (4)   (5)   (6)   (7)   (8)   (9)   (10)   (11)

## (1) Range

WiSAN-YMD1 NA = Air cooled full inverter modular heat pump with R-32 refrigerant

## (2) Size

40 = Nominal compressor capacity (HP)

## (3) Compressors

.2 = Compressor quantity

## (4) Supply voltage

4606H = 460/3/60 supply voltage (Standard)

## (5) Energy version

EXC = Excellence version (Standard)

## (6) Acoustic configuration

SC = Acoustic configuration with compressor soundproofing (Standard)

LN = Silenced acoustic configuration

EN = Super-silenced acoustic configuration

## (7) Condensing coils

CCHY = Copper / aluminium condenser coil with hydrophilic treatment (Standard)

CCCA = Copper / aluminium condenser coil with acrylic lining

CCCA1 = Copper / aluminium condensing coils with Aluminium Energy Guard DCC treatment

## (8) Fans

VENDC = Dc high efficiency fan (Standard)

## (9) Water fittings

(-) Not required (Standard)

AMOD2MA = Water fittings for modular unit 2 pipes with manual valves

AMOD2MO = Water fittings for modular unit 2 pipes with motorized valves

AMOD4MO = Water fittings for modular unit 4 pipes with motorized valves

## (10) Electrical panel

MOB = Serial port rs485 with modbus protocol (Standard)

## (11) Drain pan

TCDC = Drain pan with electrical heater (Standard)

# Built-in options

## PGFC

### Finned coil protection grilles

Grilles made in drawn of electro-welded steel and coated to protect the external coil from accidental contact with people and things.

The protection grill has a height equal to the whole unit. Therefore, all areas under the coils are protected.

This accessory also protects the rear area of the unit opposite to the electric panel.

Ideal for installation in places where persons can pass from, such as car parks, terraces, etc.

The accessory is provided and installed built-in the unit. Grille slot 0.98 in.

⚠ This option is not suitable for application in sulphuric environments.

## CCCA

### Copper / aluminium condenser coil with acrylic lining

Condensing coils with copper pipes and aluminum fins with acrylic lacquering. Can be used in settings with moderately aggressive low saline concentrations and other chemical agents. The acrylic coating is used as the most economical and effective method particularly in protecting aluminum surfaces exposed to the corrosive influence of the humid and salty air in regions with marine climates.

Attention!

- Cooling capacity variation -2.7%
- Variation in compressor power input +4.2%
- Operating range reduction -2.1°C

## CCCA1

### Copper / aluminium condensing coils with Aluminium Energy Guard DCC treatment

Condensing coils with copper pipes and aluminum fins with Aluminium Energy Guard DCC treatment. Complete treatment which offers an optimal thermal exchange and guarantees and protects the finned coil exchangers from corrosion over time and UV rays. Can be used in settings with very aggressive saline concentrations and other chemical agents in the air thus maintaining the performance of the coils over time and with negligible pressure drop.

## AMOD2MA

### Water fitting for modular unit 2 pipes with manual valves

To configure a 2-pipe modular system, each unit must be selected with the water connections for each modular unit.

The kit consists of two 4" horizontally manifolds and two manual butterfly valves that allow the unit to be excluded from the modular system in the event of a fault.

The water outlets remain in the same position as the single unit, but the pipe diameters are 4".

## AMOD2MO

### Water fitting for modular unit 2 pipes with motorized valves

To configure a 2-pipe modular system, each unit must be selected with the water connections for the modular unit.

The kit consists of two 4" horizontal manifolds and two motorized butterfly valves that allow the unit to be excluded from the modular system in the event of a fault or to improve the efficiency of the water system.

The water outlets remain in the same position as the single unit, but the pipe diameters are 4".

To control the motorized valves, the INTELLIPLANT option is required.

## AMOD4MO

### Water fitting for modular unit 4 pipes with motorized valves

To configure a 4-pipe modular system, each unit must be selected with the water connections for the modular unit.

The kit consists of four 4" horizontal manifolds and four motorized butterfly valves that allow the unit to be excluded from the modular system in the event of a fault or to improve the efficiency of the plumbing system.

The water outlets remain in the same position as the individual unit, but the pipe diameters are 4".

To control the motorized valves, the INTELLIPLANT option is required.

## EHWP

### User side water piping antifreeze electric heaters

Thermostat-controlled antifreeze heaters are provided and installed on the water piping of the 2-pipe or 4-pipe modular kit and wired directly to the unit's electrical panel, where a dedicated power supply is provided. Each heater has a power output of 120 W. The heaters are activated if the temperature detected on the modular kit falls below +2°C. The customer is responsible for connecting the secondary power supply (UPS) to the heaters.

# Accessories separately supplied

## AMMSX Anti-seismic spring antivibration mounts

The anti-seismic spring antivibration mounts must be fastened in special housings on the supporting metal struts.

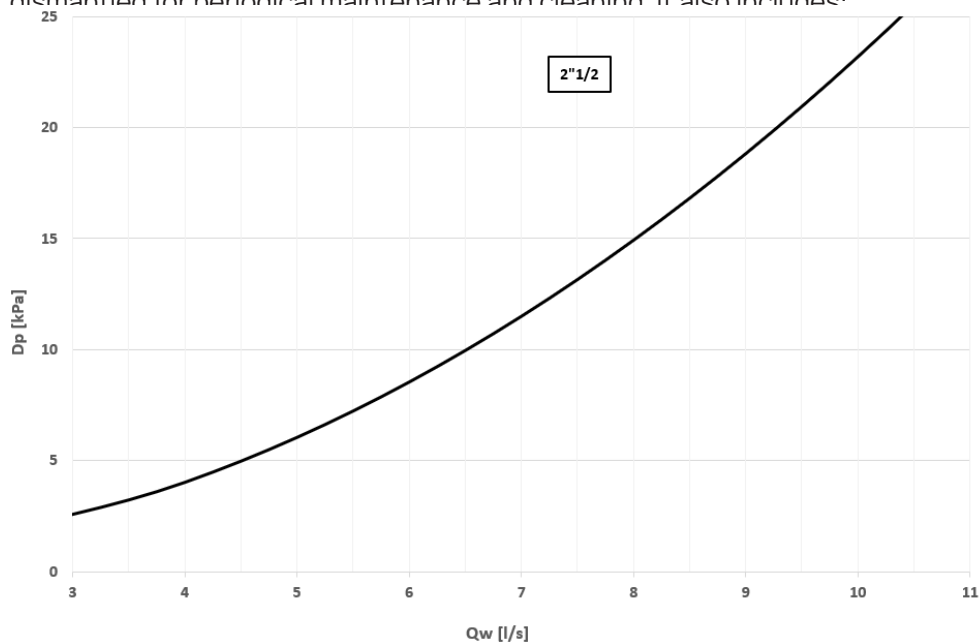
The containment structure is designed to ensure high resistance multidirectional forces acting on the surface of the unit in the presence of wind and / or telluric movements.

The antivibration mounts have been tested according to ANSI/ASHRAE 171-2008 standard (Method of Testing Seismic Restraint devices for HVAC&R Equipment). The performance levels and the test methodology have been validated and certified by Lloyd's Register.

⚠ Installation is a responsibility of the Customer.

## IFWX Steel mesh strainer on the water side

The device stops the exchanger from being clogged by any impurities which are in the hydraulic circuit. The mechanical steel mesh strainer must be placed on the water input line. It can be easily dismantled for periodical maintenance and cleaning. It also includes:



⚠ Pressure drop referred to a clean filter.

⚠ Installation is the responsibility of the Client, externally to the unit.

⚠ Check for the presence of the required hydraulic shut-off valves in the system, in order to undertake periodical maintenance.

## CMSC13X Serial communication module ModBus TCP/IP, BACnet/IP, BACnet MS/TP

This enables the serial connection of the supervision system, using ModBus TCP/IP, BACnet/IP, BACnet MS/TP as the communication protocol. It enables access to the complete list of operational variables, commands and alarms. Using this accessory every unit can dialogue with the main supervision systems.

⚠ The configuration and management activities for the BACnet networks are the responsibility of the client.

⚠ The total length of each individual serial line must not exceed 3280 ft and the line must be connected in bus type (input/output).

# General technical data

## Performance - Excellence

### Acoustic configuration with compressor soundproofing (SC)

Size		40.2
<b>Cooling Mode</b>		
Cooling capacity		TR 28.6
Power input		kW 37.2
EER	1	Btu/W*h 9.22
IPLV		Btu/W*h 18.5
Water flowrate		gpm 68.1
<b>Heating Mode Low water / High Air</b>		
Thermal capacity		kBtu/h 379.0
Power input	2	kW 30.8
COP		kW/kW 3.61
<b>Heating Mode Low water / Low Air</b>		
Thermal capacity		kBtu/h 234.0
Power input	3	kW 29.6
COP		kW/kW 2.32
<b>Heating Mode Medium water / High Air</b>		
Thermal capacity		kBtu/h 382.0
Power input	4	kW 36.6
COP		kW/kW 3.06
<b>Heating Mode Medium water / Low Air</b>		
Thermal capacity		kBtu/h 229.0
Power input	5	kW 35.1
COP		kW/kW 1.91

1. AHRI 550-590 Cooling Capacity Conditions: 95°F Ambient Air, 54°F EWT and 44°F LWT.
2. Low water / High Air = 47°F ambient / 105°F leaving water temperature (Full Load Heating Performance Tested to AHRI Standard 550/590)
3. Low water / Low Air = 17°F ambient / 105°F leaving water temperature (Full Load Heating Performance Tested to AHRI Standard 550/590)
4. Medium water / High Air = 47°F ambient / 120°F leaving water temperature (Full Load Heating Performance Tested to AHRI Standard 550/590)
5. Medium water / Low Air = 17°F ambient / 120°F leaving water temperature (Full Load Heating Performance Tested to AHRI Standard 550/590)

## Construction - Excellence

### Acoustic configuration with compressor soundproofing (SC)

SIZE	40.2	
	C1	C2
<b>Compressor</b>		
Compressor Type	Scroll inverter	Scroll Inverter
Compressor number	Nr 1	1
Refrigerant type	R32	R32
Refrigerant charge per circuit	lbs 14,33	14,33
Refrigerant circuit number	Nr 2	
Oil charge	gal 0,607	0,607
<b>User side heat exchanger</b>		
Type of exchanger	BPHE	
Number of heat exchangers	Nr 1	
Water content	gal 2,78	
<b>Source side Heat Exchanger</b>		
Type of exchanger	Fin coil	
Number of heat exchangers	Nr 1	1
<b>Fans</b>		
Type of fans	Axial	
Number of fans	Nr 1	1
Motore type	Brushless	
Standard Air flow	cfm 25872	
Rated motor input	a HP 2	2
MOC	a A 4	4
<b>Water circuit</b>		
Connections diameter in/out	inch 2" / 2"	
Maximum operating pressure	psi 300	300
Minimum water content in heating	gal 264	
<b>Power supply</b>		
Standard power supply	V 460/3~ /60	
<b>Electrical data</b>		
<b>Power Current</b>		
MCA	A 76,1	
MOP	A 80,0	
SCCR	kA 65,0	
Power Input	Hp 15	15

MCA: Min. Circuit Amps. (For wire diameter selection)

MOP: Maximum overcurrent protector

MOC: Maximum operating current of the motor

SCCR: Short Circuit Current rating.

a - data is related to the single component

# General technical data

## Sound levels - Excellence

### Acoustic configuration with compressor soundproofing (SC)

SIZE	Sound power level (dB) - Octave band (Hz)								Sound pressure level	Sound power level
	63	125	250	500	1000	2000	4000	8000	dB(A)	dB(A)
40.2	76	77	77	79	82	78	72	71	74	87

### Silenced acoustic version (LN)

SIZE	Sound power level (dB) - Octave band (Hz)								Sound pressure level	Sound power level
	63	125	250	500	1000	2000	4000	8000	dB(A)	dB(A)
40.2	74	72	74	77	79	75	70	70	71	84

### Super-Silenced acoustic version (EN)

SIZE	Sound power level (dB) - Octave band (Hz)								Sound pressure level	Sound power level
	63	125	250	500	1000	2000	4000	8000	dB(A)	dB(A)
40.2	66	64	67	71	71	66	63	63	65	77

Sound levels refer to full load units, in test nominal conditions. The sound pressure level refers to 3.28 ft from the standard unit outer surface operating in open field. Measures according to UNI EN ISO 9614-2 regulations.

Data referred to the following conditions:

Cooling

- internal exchanger water temperature = 53.6 / 44.6 °F

- ambient temperature = 95 °F

Heating

- internal exchanger water temperature = 104 / 113 °F

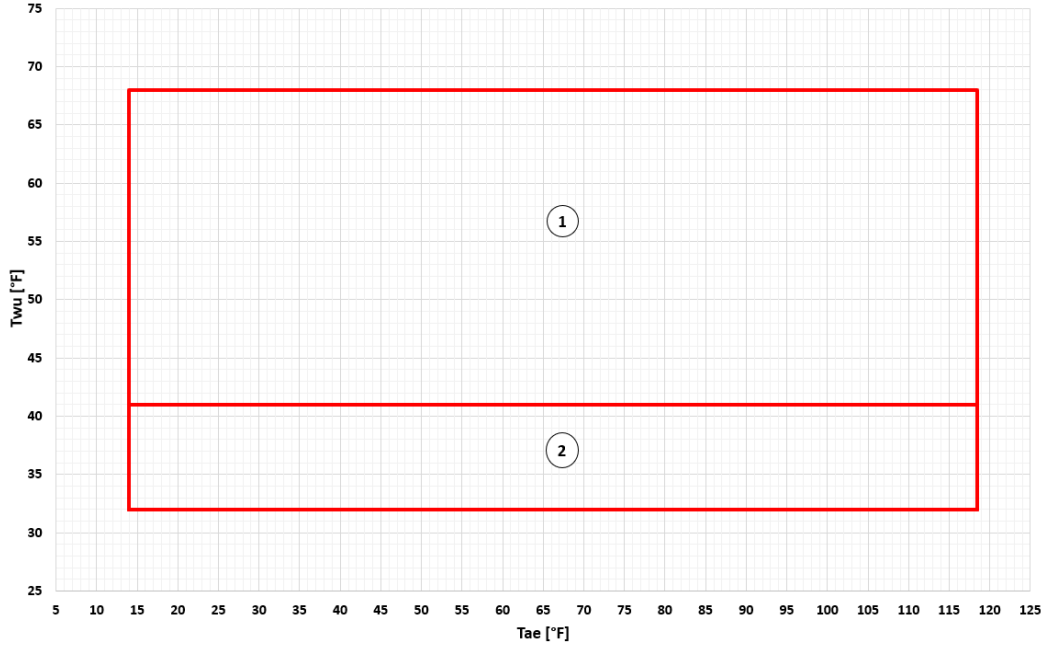
- ambient temperature = 44.6 °F d.b. / 42.8 °F w.b.

For the silenced and super silenced versions, the correction factors for capacity and efficiency at rated operating conditions are as follows:

HEATING	Silenced version (LN)	Super-silenced version (EN)	COOLING	Silenced version (LN)	Super-silenced version (EN)
Capacity	0.97	0.82	Capacity	0.92	0.80
COP	1.015	1.050	EER	1.015	1.025

## Operating range - Excellence

### Cooling

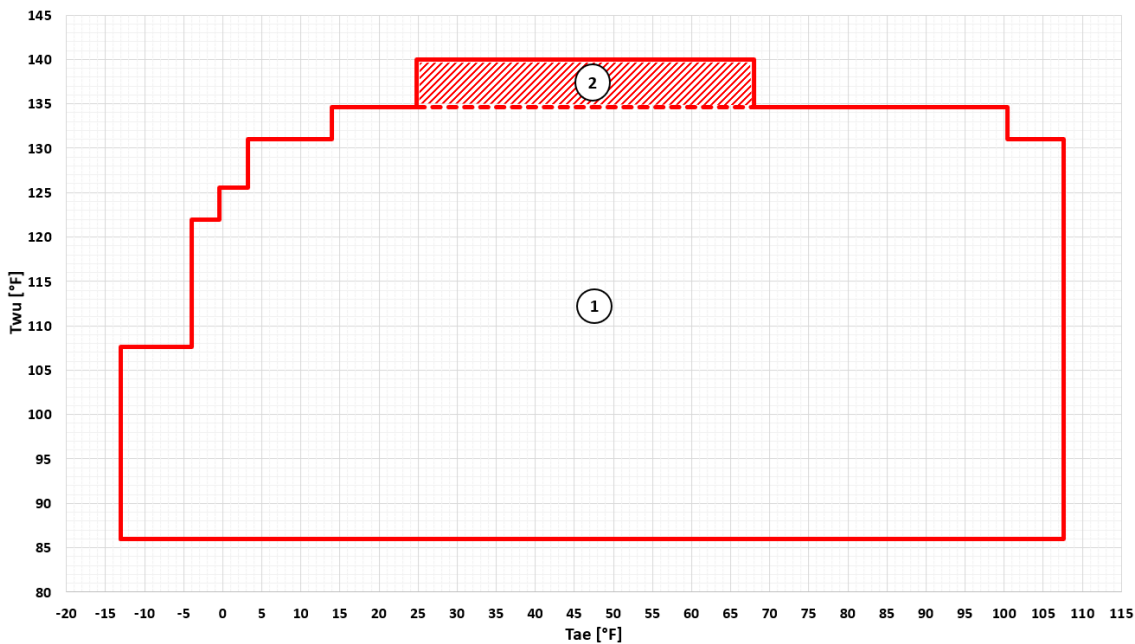


$T_{wu}$  [°F] = Temperature of the outlet water from the exchanger.

$T_{ae}$  [°F] = External exchanger inlet air temperature

1. Standard unit operating range
2. Operating range where the use of ethylene or propylene glycol is mandatory in relation to the temperature of the outlet water from the user side exchanger, the set-point needs to be coherent with type and quantity of glycol in the system.

### Heating



$T_{wu}$  [°F] = Temperature of the outlet water from the exchanger

$T_{ae}$  [°F] = External exchanger inlet air temperature

1. Standard unit operating range
2. Data provides on request - Please refer to Clivet S.p.A.

# General technical data

## Correction factors when using ethylene glycol - Heating

Ethylene glycol concentration (%)	Modification coefficient				Freezing point	
	Freezing point	Power supply	Water resistance	Water flow	°C	°F
0	1.000	1.000	1.000	1.000	0	32
10	0.993	0.997	1.013	1.034	-3	26.6
20	0.984	0.994	1.149	1.051	-8	17.6
30	0.975	0.989	1.343	1.075	-14.1	6.62
40	0.969	0.984	1.623	1.110	-23.3	-9.94
50	0.961	0.978	2.026	1.150	-33.8	-28.84

Propylene glycol concentration (%)	Modification coefficient				Freezing point	
	Freezing point	Power supply	Water resistance	Water flow	°C	°F
0	1.000	1.000	1.000	1.000	0	32
10	0.987	0.992	1.071	1.007	-3	26.6
20	0.975	0.985	1.215	1.010	-7	19.4
30	0.962	0.978	1.420	1.021	-13	8.6
40	0.946	0.971	1.716	1.036	-21	-5.8
50	0.929	0.965	2.228	1.061	-33	-27.4

The correction factors reported refer to water and ethylene glycol mixes used to prevent ice from forming in the exchanger connected to the hydraulic circuit during inactivity in winter.

## Fouling Correction Factors

[h ft <sup>2</sup> F/Btu]	[m <sup>2</sup> °C /W]	cooling mode		heating mode	
		F1	FK1	F2	FK2
0.10 x 10 (-3)	0.18 x 10 (-4)	1.000	1.000	1.000	1.000
0.25 x 10 (-3)	0.44 x 10 (-4)	1.000	1.000	1.000	1.000
0.50 x 10 (-3)	0.88 x 10 (-4)	0.970	0.990	0.970	1.080
0.75 x 10 (-3)	1.32 x 10 (-4)	0.955	0.985	0.945	1.065
1.00 x 10 (-3)	1.76 x 10 (-4)	0.940	0.980	0.920	1.050

F1 = Cooling capacity correction factors

FK1 = Compressor power input correction factor (cooling mode)

F2 = heating capacity correction factors

FK2 = Compressor power input correction factor (heating mode)

## Overload and control device calibrations

		OPEN	CLOSED
<b>Refrigerant side</b>			
High pressure safety pressure switch	bar	623.66	464.12
Safety thermostat against compressor drain overheating	°C	167	239
<b>Water side</b>			
Antifreeze protection	°C	44.6	39.2
High pressure safety valve	bar	87.02	-

Performance tables are based on sea level. Altitudes other than sea level affect the performance of the unit. Decreasing air density reduces condenser capacity and unit performance. The maximum altitude allowed is 1,800 metres.

$$D_Q = A_Q \cdot p^2 + B_Q \cdot p + C_Q$$

$$D_\eta = A_\eta \cdot p^2 + B_\eta \cdot p + C_\eta$$

$$(CF_Q)_{P=P_{test}} = 1 + \left(\frac{Q_{\%Load}}{Q_{100\%}}\right) \cdot (D_Q - 1) \cdot \exp\{-0.35 \cdot [(D_\eta \cdot \eta_{test,100\%}) - 9.6]\}$$

$$(CF_\eta)_{P=P_{test}} = 1 + \left(\frac{Q_{\%Load}}{Q_{100\%}}\right) \cdot (D_\eta - 1) \cdot \exp\{-0.35 \cdot [(D_\eta \cdot \eta_{test,100\%}) - 9.6]\}$$

$$Q_{corrected,application} = \frac{Q_{corrected,standard}}{(CF_Q)_{P=P_{rating}}}$$

$$\eta_{corrected,application} = \frac{\eta_{corrected,standard}}{(CF_\eta)_{P=P_{rating}}}$$

Measurement unit for P	Capacity DQ			Efficiency Dn			Atmospheric Pressure Corresponding to Altitude
	AQ	BQ	CQ	An	Bn	Cn	P
Value	0.001127	-0.04127	1.36304	0.002431	-0.09008	1.79872	According to the actual values; you can refer to the comparison table.

$Q_{standard}$	Capacity at sea level 0, unit: ton
$n_{standard}$	Efficiency at sea level 0, unit: Btu/W*h
$Q_{correct}$	Capacity at sea level P, unit: ton
$n_{correct}$	Efficiency at a height different than sea level, unit: Btu/W*h

# General technical data

Altitude and Atmospheric Pressure Comparison Table

Altitude (meters)	Altitude (feet)	Atmospheric Pressure (mmHg)	Atmospheric Pressure (psi)
0	0	760	15
500	1640	716	14
1000	3281	674	13
1500	4921	633	12
2000	6562	593	11

$$p_{atm} = p_0 \cdot \left[ \frac{T_0}{T_0 + \beta_1 \cdot (Z_H - Z_{H0})} \right]^{\left( \frac{g_0 \cdot M_0}{\beta_2 \cdot R^*} \right)}$$

Where:

$$\beta_1 = -0.00198 \text{ K/ft}$$

$$\beta_2 = -0.0065 \text{ K/m}$$

$$Z_{H0} = 0 \text{ ft}$$

$Z_H$  = installation height of the site in feet

$$g_0 = 9.80665 \text{ m/s}^2$$

$$M_0 = 28.96442 \text{ kg/kmol}$$

$$R^* = 8314.32 \text{ J/(K} \cdot \text{kmol)}$$

$$p_0 = 14.696 \text{ psia}$$

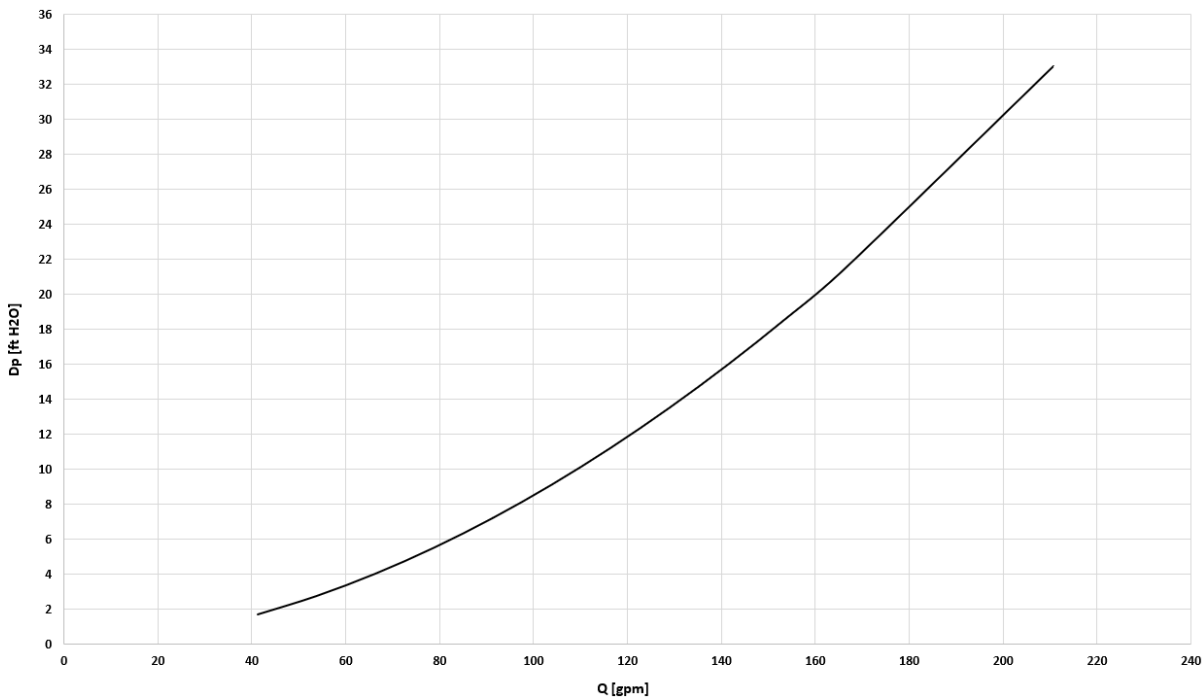
$$T_0 = 288.15 \text{ K}$$

### Plate exchanger pressure drops

The standard unit (Without 2/4 Pipes Kit) has 2" water connections. The recommended hydraulic connection is Victaulic or equivalent.

⚠ Hydraulic connections are not supplied with the unit.

### Internal exchanger pressure drop curves



The water side pressure drops are calculated considering an average water temperature of 7°C.

Q = Water flow-rate [gpm]

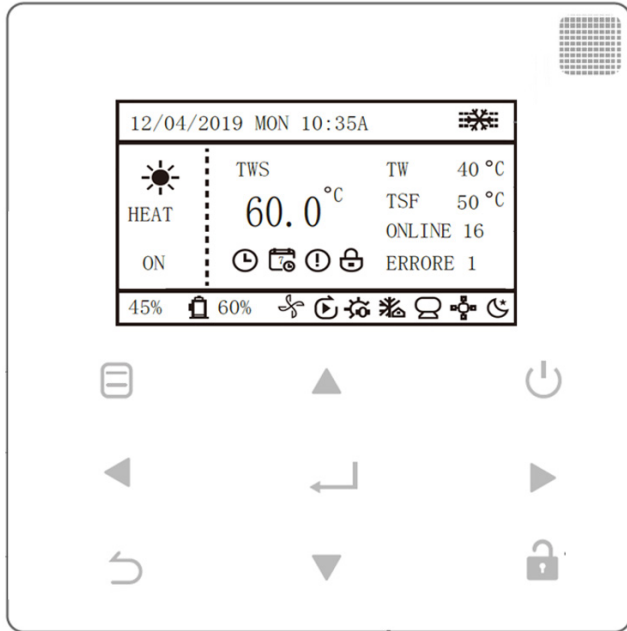
DP = Pressure drops [ft H2O]

⚠ The pressure losses of the internal heat exchanger must also be added to the pressure losses of all the various components in series with the unit, including the steel mesh filter that must be positioned on the water inlet line. This device is mandatory for the correct operation of the unit and is not supplied as standard.

Size	Operating Modes	UNIT WATER FLOW RATE LIMITS (gpm)	
		Min.	Max.
40.2	STANDARD	37.41	210.81

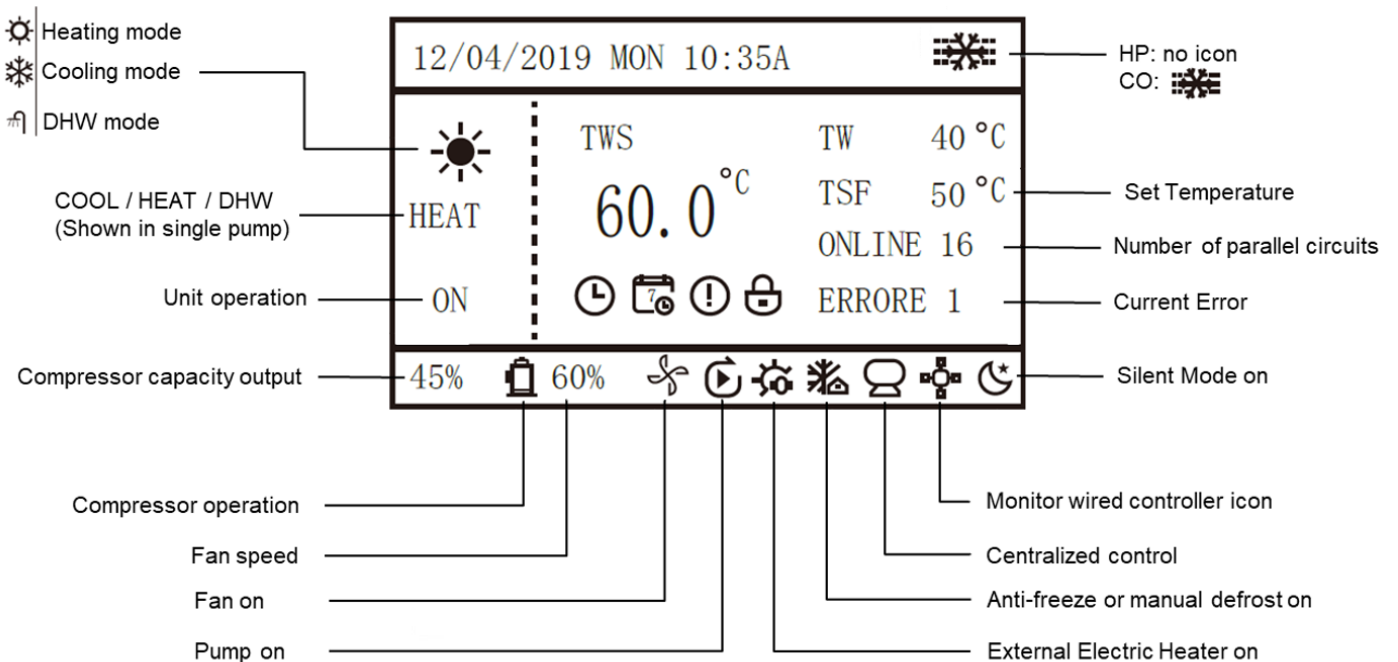
# Features and options

## User interface (HMI)



Resolution	1°F
Temperature sensor	NTC 5k 1%
Power input	< 1W
Storage temperature	-4+131°F
Communication	RS485
Wiring	Type Cavo schermato

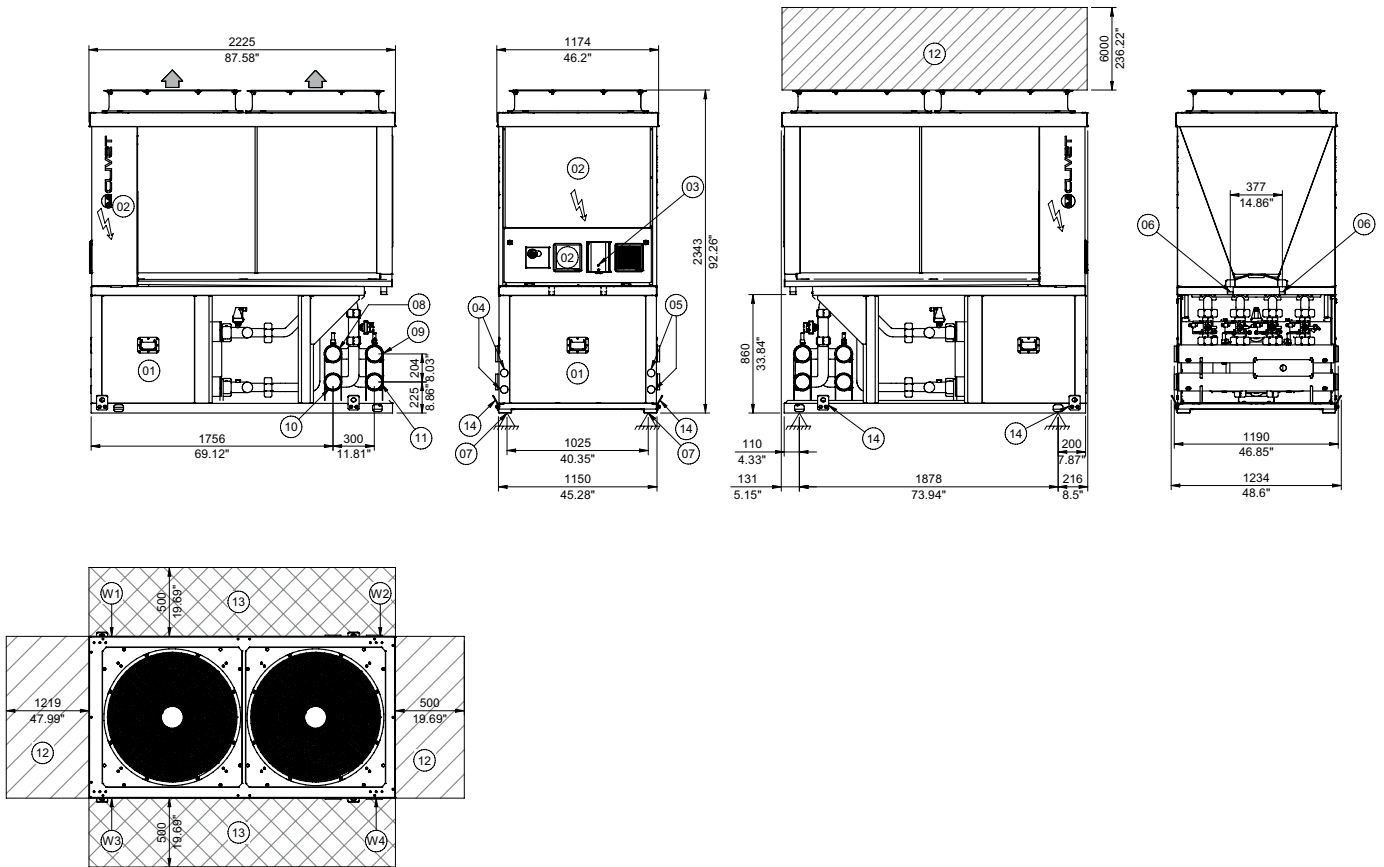
The user interface comes as standard with 11 selectable languages.



# Dimensional drawings

SIZE 40.2

DAABY0000 REV02  
DATA/DATE 15/12/2025



- |                          |   |
|--------------------------|---|
| 1. Compressors enclosure | 8. Water inlet PN20                         |
| 2. Electrical panel      | 9. Water inlet PN20 (4 tubes kit)           |
| 3. Control keypad        | 10. Water outlet                            |
| 4. Power input           | 11. Water outlet PN20 (4 tubes kit)         |
| 5. Signal input          | 12. Functional spaces                       |
| 6. Condensate drain      | 13. Functional spaces (Single machine only) |
| 7. Fixing point          | 14. Lifting brackets (removeable)           |

SIZE		Straight pipes kit	2 pipes manual kit	2 pipes motorized	4 pipes kit
Length	inch	87.58	87.58	87.58	87.58
Depth	inch	46.2	46.2	46.2	46.2
Height	inch	92.26	92.26	92.26	92.26
W1 Supporting point	lbs	588	585	585	675
W2 Supporting point	lbs	378	397	397	486
W3 Supporting point	lbs	589	680	680	680
W4 Supporting point	lbs	378	397	397	486
Shipping weight	lbs	1936	2107	2107	2332
Operation weight	lbs	1940	2187	2187	2479

For over 35 years we have been offering solutions to ensure sustainable comfort and the well-being of people and the environment

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