CLIVET

Inspiring Solutions. Since 1989

Large EVO

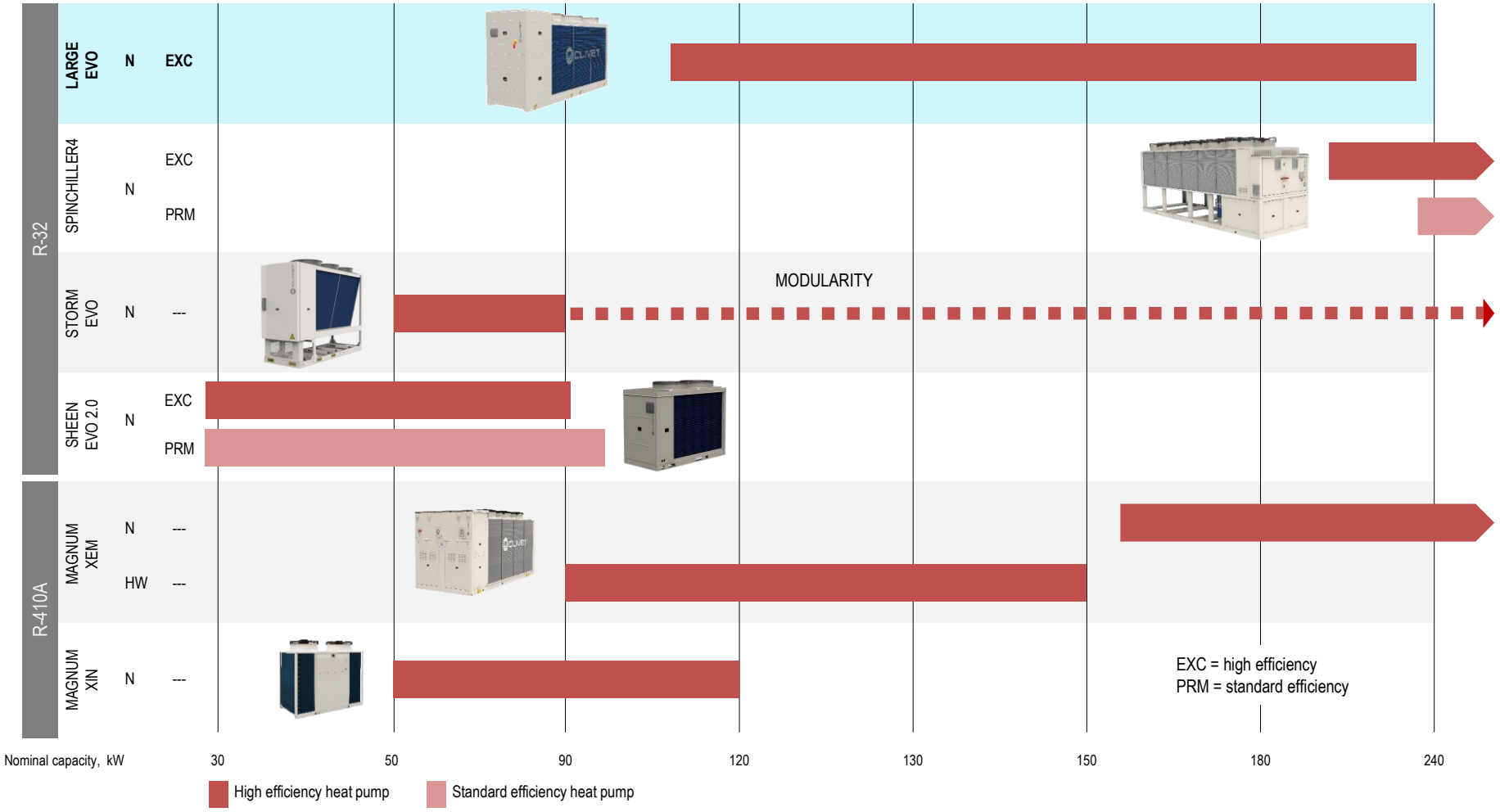
WiSAN-YEE1 45.4 – 85.4

Product presentation

MideaGroup

humanizing technology

Applied / Commercial Heat Pump – air source: capacity range



Large EVO: Main features

WiSAN-YEE1

- **Suitable for harsh climates:**
  - Leaving water temperature up to 60°C
  - Minimum OAT down to -20°C
- **Outstanding seasonal efficiency** both in heating and cooling
  - SCOP(W35) up to 4,22
  - SEER(W7) up to 4,48
- Quieter operation thanks also **to silent and super-silent versions** available
- Modular operation **up to 8 units**

Nominal cooling capacity: (**A35/W7**) from **115** to **233 kW**

Nominal heating capacity: (**A7/W45**) from **118** to **268 kW**

R-32

Large EVO: Capacity range

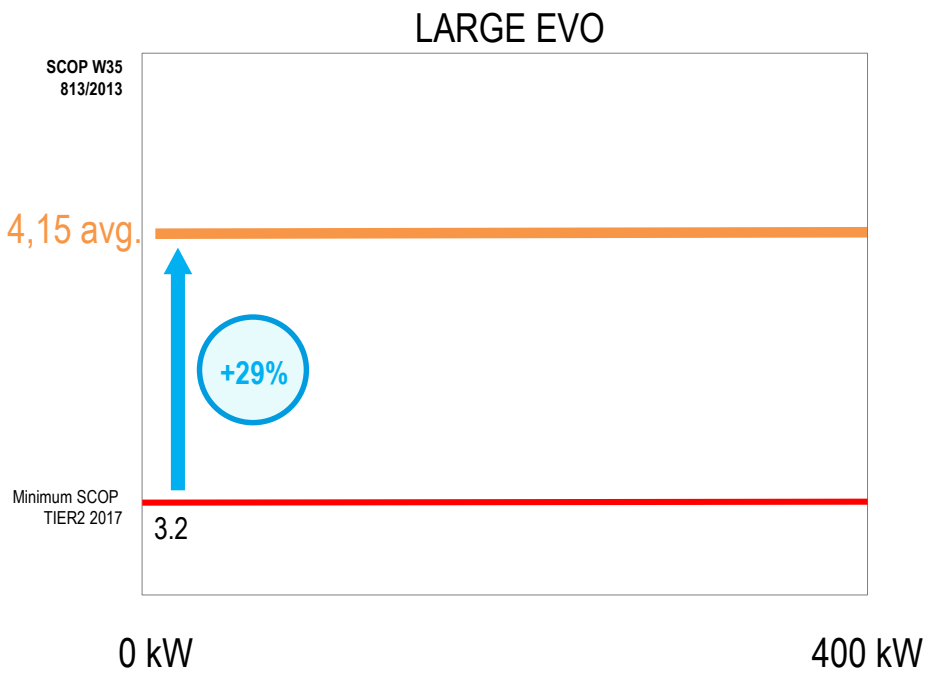
WiSAN-YEE1

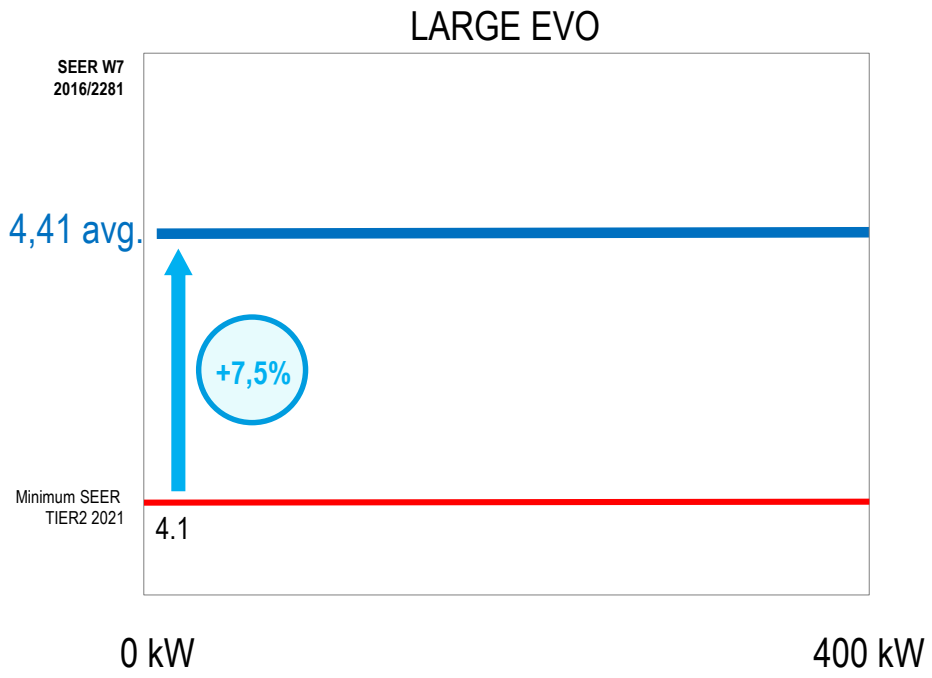
Capacity range: 115 - 233 kW

Series	WiSAN-YEE1 45.4 - 85.4								
Size	**45.4**	**50.4**	**55.4**	**60.4**	**65.4**	**70.4**	**75.4**	**80.4**	**85.4**
Cooling Capacity [kW] (A35/W7)	115	127	139	152	164	176	196	215	233
Heating Capacity [kW] (A7/W45)	118	130	150	170	190	210	230	250	268
Layout									
Compressors / Circuits	4/2		4/2		4/2				
Compressors type	Rotary inverter		2 Rotary / 2 Scroll inverter		Scroll inverter				
Fans	2 Brushless DC motor				3 Brushless DC motor				
Length [mm]	3310				4300				

Large EVO: Seasonal Efficiency

WiSAN-YEE1 is characterized by very high seasonal efficiency values, largely overcoming the Erp requirements both in **cooling** and **heating**





Large EVO: High performances technology

New DC Inverter fans, for high seasonal efficiency and lower noise operation

Electrical Box
based on Sheen EVO 2.0 technology, allows modular operation up to 8 units without additional accessories

New coils treatment are available (Opt.)
for added resistance in critical installations

Integrated REMAU option for additional functions installed on the electrical panel board

Rotary/Scroll Full-inverter compressors
Partial load operations at the top of the category

Double refrigerant circuit

Copper / Aluminium coils
with hydrophilic treatment as standard

User interface in common with Sheen and Storm units

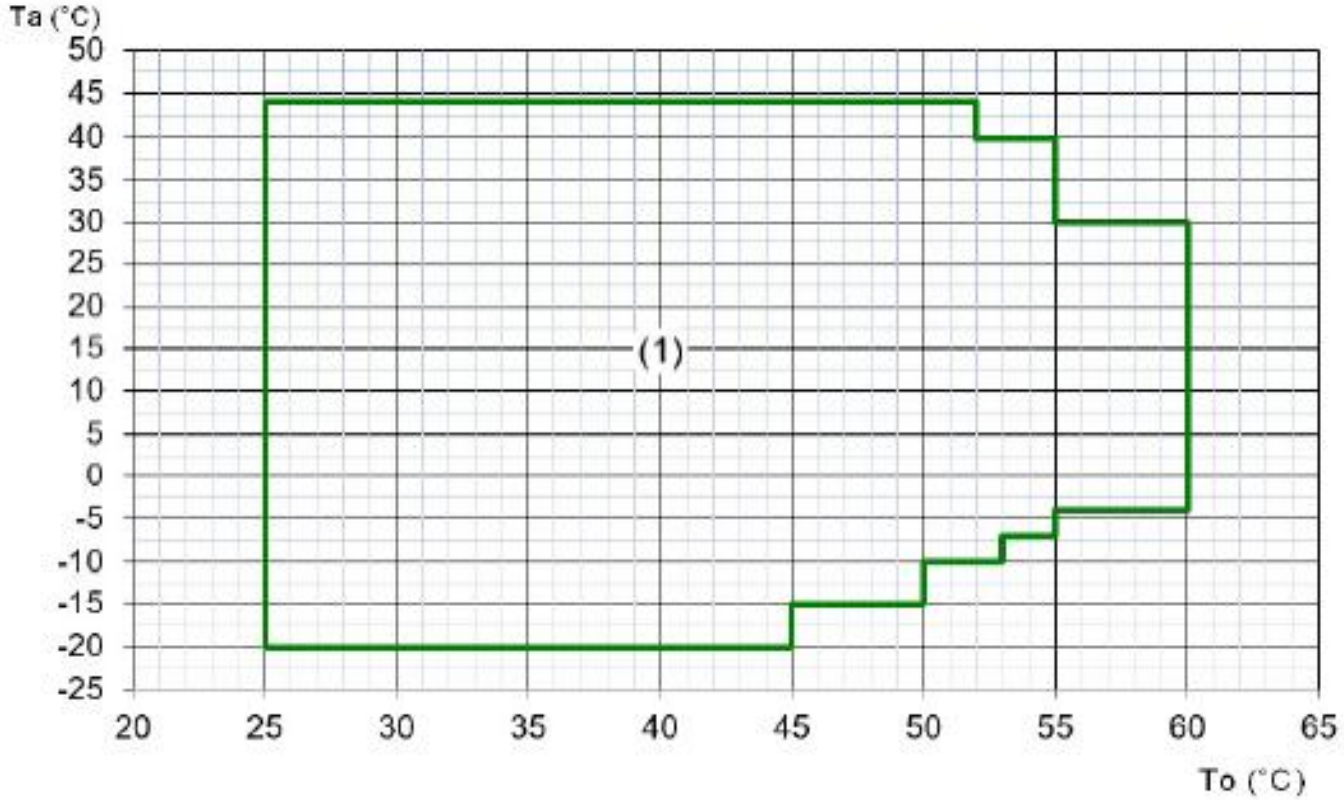
New generation integrated user interface, that guarantees a **complete control solution**:

- Unit ON/OFF
- Auto-restart function
- Time setting: 12H/24H
- Timer ON/OFF setting, Day/Weekly
- Display components status
- Query, malfunction code, parameters
- Two multi-authorization control levels
- **Modbus connection** as standard
- **Connection of up to 16 units in parallel**
- Adapt for **remote** use
- **Optional** Serial **communication module** for **BACnet-IP** supervisor
- **Optional** Serial **communication module** for **BACnet-MSTP** supervisor

Large EVO: Limiti operativi in riscaldamento

Minimum outdoor temperature = **-20°C**

Maximum water temperature = **+60°C**



To [°C] = Leaving exchanger water temperature

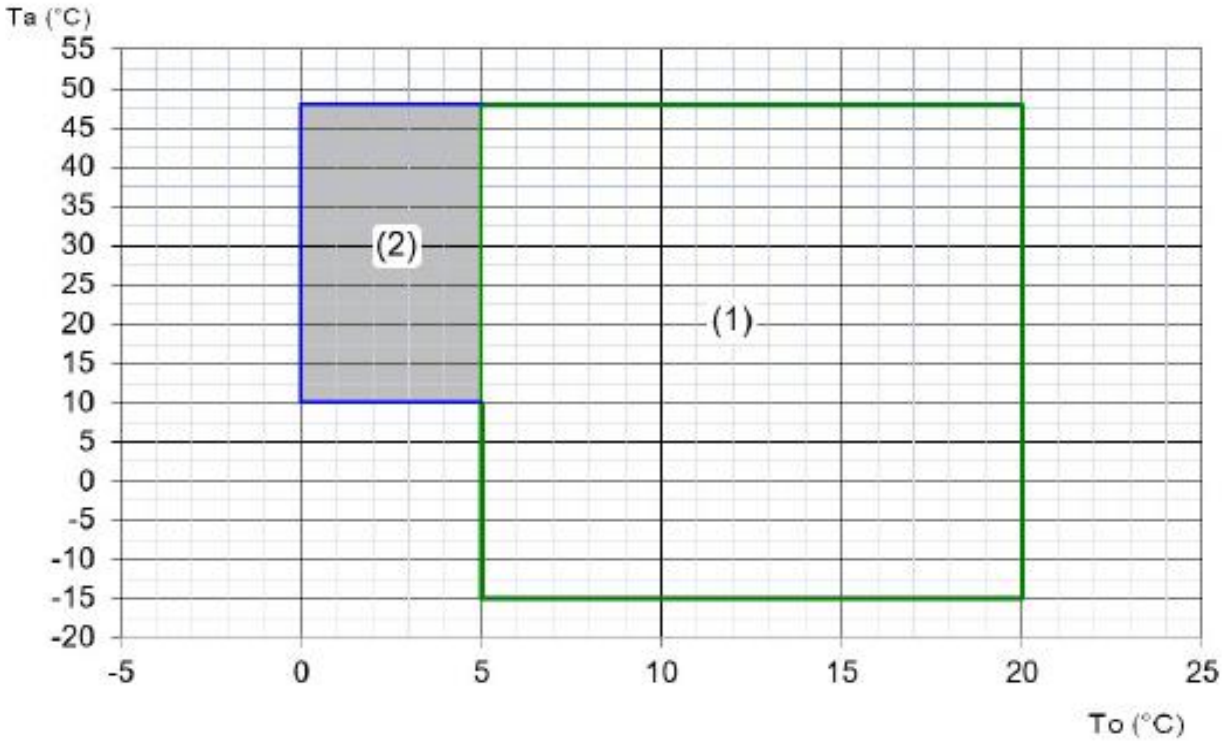
Ta [°C] = External exchanger inlet air temperature

1. Standard unit operating range

Large EVO: Limiti operativi in raffreddamento

Maximum outdoor temperature = **+48°C**

Minimum water temperature = **+0°C**



To [°C] = Leaving exchanger water temperature

Ta [°C] = External exchanger inlet air temperature

1. Standard unit operating range
2. Operating range where the use of glycol is mandatory in relation to the temperature of the outlet water from the user side exchanger

Large EVO: Features & Specifications

SC = Acoustic version with compressor soundproofing

LN = **Silenced** version (same lenght of SC)

-4 dB(A)

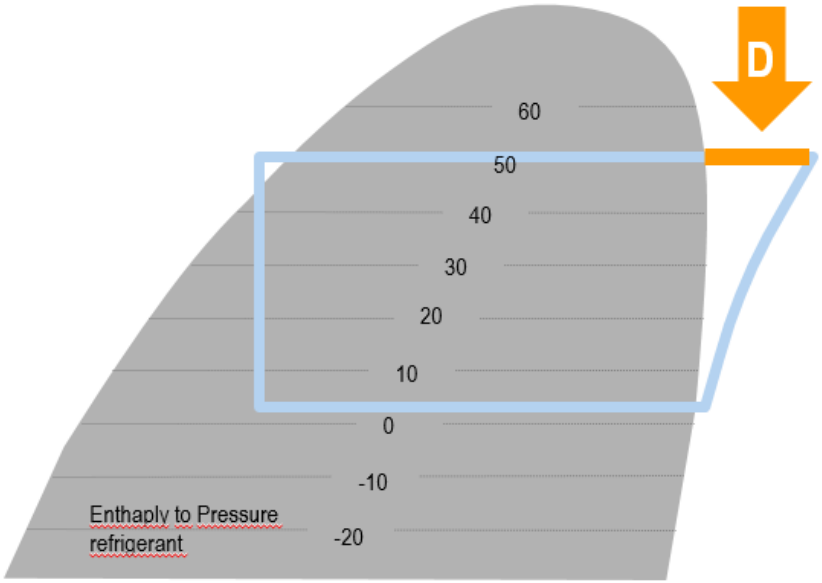
EN = **Super-silenced** version (same lenght of SC)

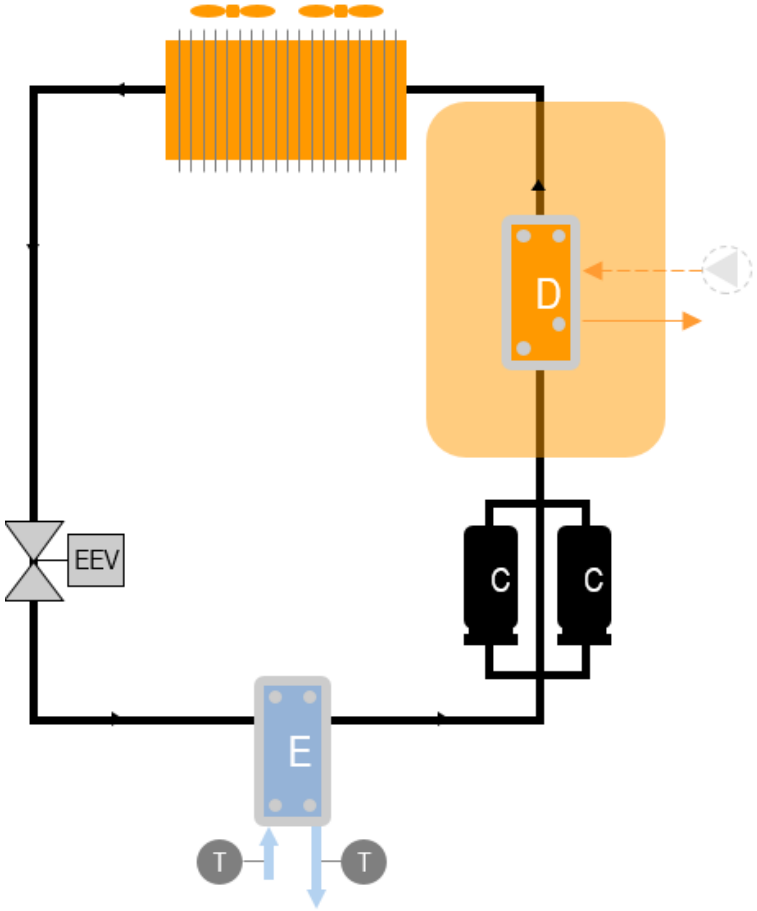
-8 dB(A)

Large EVO: Features & Specifications

Partial heat recovery (D)

- Around **24%** of the available heat rejection
- **Control** is activated by the User





DHW mode

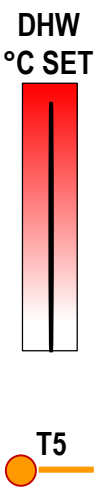
Large EVO allows the DHW production up to **60°C**, directly managing the main components of the system.

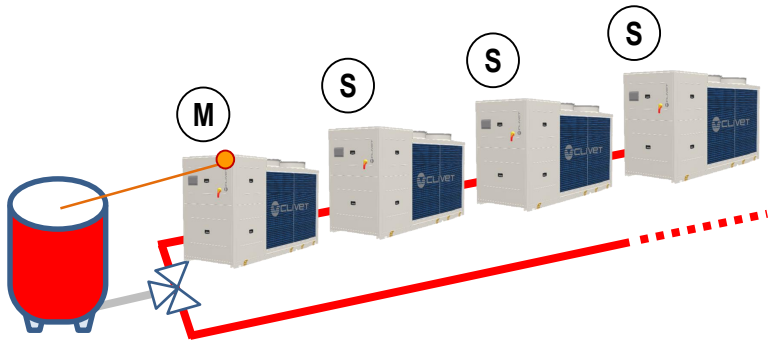
- Management of domestic hot water has **priority** over the system
- The **3-way valve** is available as **a built-in** solution

Modular system: DHW management

DHW tank: ***1 x System***
DHW 3-way valve: ***1 x System***
DHW request: ***YES***

Operation: ***master commands, slave follow master operation.***





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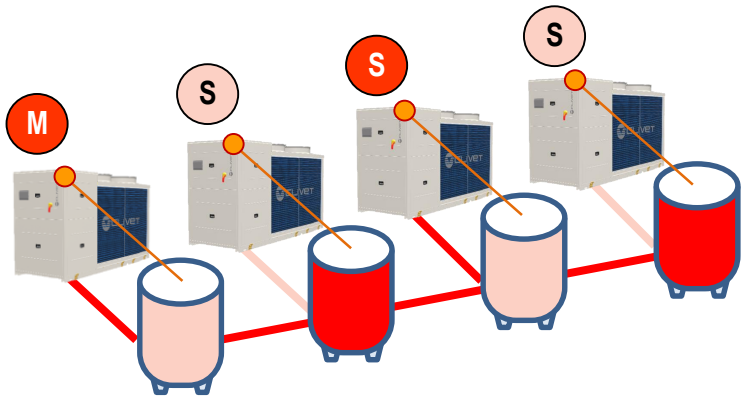
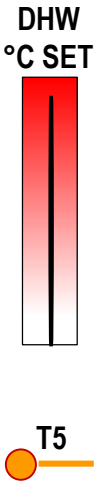




DHW tank: ***1 x Unit***
DHW 3-way valve: ***1 x Unit***

Operation: ***independent. Each unit manages its own DHW production.***

Large EVO: Features & Specifications

Modularity

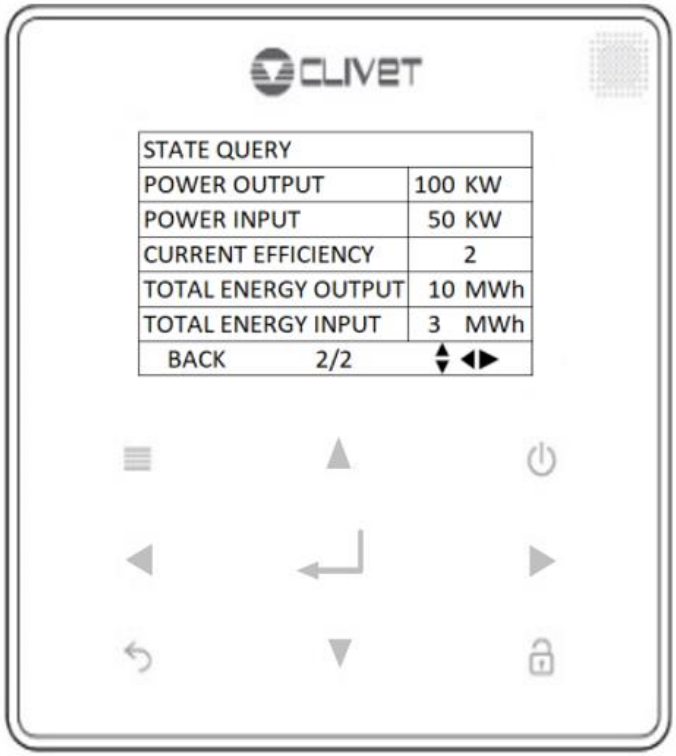
- Management of **up to 8 units** in a local network
- Up to **1860kW** of installed capacity (cooling)
- **Easy** to connect and set the system throught the user interface
- Possibility to manage it throught a BMS system thanks to the **Modbus connection as standard**

Which benefits?

- ✓ System efficiency increased
- ✓ Higher reliability
- ✓ Simplified handling and installation
- ✓ Scalability

Large EVO: Energy metering

The energy calculation function is implemented in the HMI without any additional device, and will be possible to look at the following parameters:



- Power output = produced power in kW
- Power input = absorbed power in kW
- Current efficiency = EER/COP
- Total energy output = cumulative produced power in MWh
- Total energy input = cumulative absorbed power in MWh

All energy meter display items are available with Modbus

Auxiliary heater control

New **Large EVO** will allow also hybrid version in combination by **third-party heater**, thanks to auxiliary heater control:

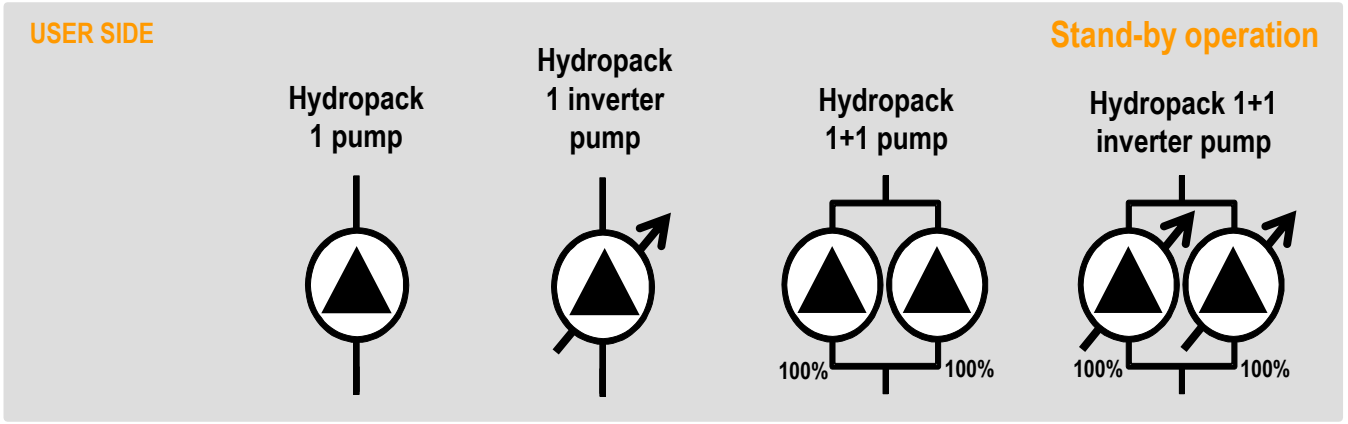
- ON/OFF signal
- Auxiliary operation when the heat pump does not work
- Auxiliary operation with low ambient temperature
- Auxiliary operation when the heat pump capacity is not sufficient
- Auxiliary operation when DHW starts and stops frequently
- Auxiliary operation when the tank temperature is too low
- Sterilization process

Large EVO: Features & Specifications

Optional integrated pumping groups save:

- Time and cost for the **set-up**
- Floor area for pumping equipment and relevant clearance

Options available with **standard and high head**:

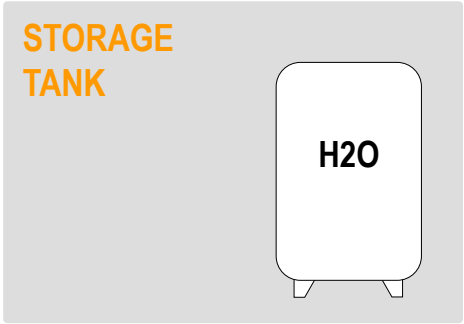


With **inverter pump**, the unit can manage **variable water flows**

Storage Tank (optional):

Recommended for applications with insufficient water content for the properly function of the unit:

Size	45.4	50.4	55.4	60.4	65.4	70.4	75.4	80.4	85.5
Storage Tank Capacity [Liters]	300	300	300	300	500	500	500	500	500



Large EVO: Drain pan

Drain pan layout for easy maintenance

NEW WATER DRAINAGE

AUTOMATIC HEATER

Resistance is activated when the external temperature is < 5°C

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