

# MLT HVJ



## AIR-WATER HEAT PUMPS FOR OUTDOOR INSTALLATION

### Options

#### Operating mode

R - Heating and cooling  
(reversible on refrigerant side)

#### Heat recovery

Base version  
Desuperheater version

#### Acoustic setting up

B - Base setting up  
S - Low noise setting up

#### Plant side flow rate management

None  
Standard pump  
Modulating pump  
High head pump



### Accessories

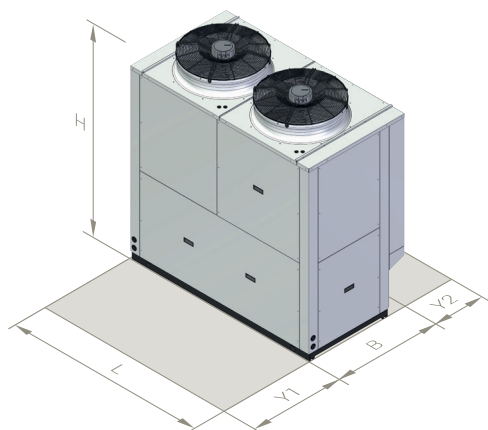
Vibration dampers  
Remote interface

| TECHNICAL DATA  | 50   |    |
|---|--|----|
| Efficiency class - EU reg 811/2013<br><i>average climate - medium temperature application</i> | <b>A++</b>   | -  |
| Power supply  | 400V - 3N - 50Hz   | -  |
| Refrigerant   | R410A  | -  |
| Type of compressors   | high temperature scroll inverter brushless DC (BLDC) with vapour injection | -  |
| N° of compressors / N° of refrigerant circuits  | 1 / 1  | -  |
| Type of plant side heat exchangers  | stainless steel brazed plates  | -  |
| Type of source side heat exchangers   | finned coil copper - hydrophilic aluminum                                  | -  |
| Type of fans  | axial EC   | -  |
| N° of fans  | 2  | -  |
| Hydraulic fittings  | 1"1/2 M  | -  |
| Weight *  | 425  | kg |
| Maximum power input *   | 24,5   | kW |

\* base unit without options and accessories

| OPERATING RANGE               | HEATING |      | COOLING |     |    |
|-------------------------------|---------|------|---------|-----|----|
|                               | min     | max  | min     | max |    |
| Water outlet temperature      | 15      | 62 * | 6       | 25  | °C |
| Outside air inlet temperature | -22     | 42   | 5       | 47  | °C |

\* The maximum water outlet temperature can be increased up to 67°C keeping a  $\Delta T$  of 10°C between inlet and outlet



|    | 50   |    |
|----|------|----|
| L  | 1730 | mm |
| B  | 930  | mm |
| H  | 1830 | mm |
| Y1 | 1000 | mm |
| Y2 | 500  | mm |

| HEATING |                            | A | W  | 50   |     |
|---------|----------------------------|---|----|------|-----|
| A7W35   | Heating capacity           | 7 | 35 | 48,7 | kW  |
|         | Power input                |   |    | 11,0 | kW  |
|         | COP                        |   |    | 4,43 | -   |
|         | Plant side water flow rate |   |    | 8390 | l/h |
|         | Plant side pressure drops  |   |    | 29   | kPa |
| A7W45   | Heating capacity           | 7 | 45 | 49,3 | kW  |
|         | Power input                |   |    | 13,7 | kW  |
|         | COP                        |   |    | 3,60 | -   |
|         | Plant side water flow rate |   |    | 8520 | l/h |
|         | Plant side pressure drops  |   |    | 29   | kPa |
| A7W55   | Heating capacity           | 7 | 55 | 50,0 | kW  |
|         | Power input                |   |    | 16,4 | kW  |
|         | COP                        |   |    | 3,05 | -   |
|         | Plant side water flow rate |   |    | 5440 | l/h |
|         | Plant side pressure drops  |   |    | 13   | kPa |
| A2W35   | Heating capacity           | 2 | 35 | 41,0 | kW  |
|         | Power input                |   |    | 11,0 | kW  |
|         | COP                        |   |    | 3,73 | -   |
|         | Plant side water flow rate |   |    | 7079 | l/h |
|         | Plant side pressure drops  |   |    | 21   | kPa |
| A2W45   | Heating capacity           | 2 | 45 | 41,7 | kW  |
|         | Power input                |   |    | 13,7 | kW  |
|         | COP                        |   |    | 3,04 | -   |
|         | Plant side water flow rate |   |    | 7217 | l/h |
|         | Plant side pressure drops  |   |    | 22   | kPa |
| A2W55   | Heating capacity           | 2 | 55 | 42,6 | kW  |
|         | Power input                |   |    | 16,4 | kW  |
|         | COP                        |   |    | 2,60 | -   |
|         | Plant side water flow rate |   |    | 4630 | l/h |
|         | Plant side pressure drops  |   |    | 9    | kPa |

| COOLING |                            | A  | W  | 50   |     |
|---------|----------------------------|----|----|------|-----|
| A35W7   | Cooling capacity           | 35 | 7  | 38,1 | kW  |
|         | Power input                |    |    | 12,2 | kW  |
|         | EER                        |    |    | 3,12 | -   |
|         | Plant side water flow rate |    |    | 6573 | l/h |
|         | Plant side pressure drops  |    |    | 18   | kPa |
| A35W18  | Cooling capacity           | 35 | 18 | 50,4 | kW  |
|         | Power input                |    |    | 13,2 | kW  |
|         | EER                        |    |    | 3,82 | -   |
|         | Plant side water flow rate |    |    | 8731 | l/h |
|         | Plant side pressure drops  |    |    | 31   | kPa |

| ACOUSTIC PERFORMANCES |                             | A | W  | 50 |       |
|-----------------------|-----------------------------|---|----|----|-------|
| Base                  | Sound power level           | 7 | 35 | 79 | dB(A) |
|                       | Sound pressure level - 1 m  |   |    | 62 | dB(A) |
|                       | Sound pressure level - 5 m  |   |    | 52 | dB(A) |
|                       | Sound pressure level - 10 m |   |    | 47 | dB(A) |
| Low noise             | Sound power level           | 7 | 35 | 76 | dB(A) |
|                       | Sound pressure level - 1 m  |   |    | 59 | dB(A) |
|                       | Sound pressure level - 5 m  |   |    | 50 | dB(A) |
|                       | Sound pressure level - 10 m |   |    | 45 | dB(A) |

Data declared according to EN 14511. Acoustic performances declared according to EN 12102. The data are related to units working at the **nominal frequency**, without options or accessories.

|        |            |                      |         |                        |       |            |                      |         |                        |
|--------|------------|----------------------|---------|------------------------|-------|------------|----------------------|---------|------------------------|
| A7W35  | = source : | air in 7°C db 6°C wb | plant : | water in 30°C out 35°C | A2W35 | = source : | air in 2°C db 1°C wb | plant : | water in 30°C out 35°C |
| A7W45  | = source : | air in 7°C db 6°C wb | plant : | water in 40°C out 45°C | A2W45 | = source : | air in 2°C db 1°C wb | plant : | water in 40°C out 45°C |
| A7W55  | = source : | air in 7°C dd 6°C wb | plant : | water in 47°C out 55°C | A2W55 | = source : | air in 2°C db 1°C wb | plant : | water in 47°C out 55°C |
| A7W65  | = source : | air in 7°C db 6°C wb | plant : | water in 55°C out 65°C | A2W65 | = source : | air in 2°C db 1°C wb | plant : | water in 55°C out 65°C |
| A35W7  | = source : | air in 35°C db       | plant : | water in 12°C out 7°C  |       |            |                      |         |                        |
| A35W18 | = source : | air in 35°C db       | plant : | water in 23°C out 18°C |       |            |                      |         |                        |