

Unit description



Outdoor unit for the production of chilled water with semi-hermetic screw compressors optimized for HFO refrigerant R1234ze, axial-flow fans, micro-channel full-aluminum condensing coils, single-pass shell and tubes evaporator designed by Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A. and electronic expansion valve. Base and supporting structure and panels are of galvanized epoxy powder coated steel with increased thickness. Eurovent certification. Flexible and reliable unit; it easily adapts itself to different thermal load conditions thanks to the precise thermoregulation and the accurate sizing of all internal components. The compressors feature an enhanced lubrication system, an innovative internal geometry and a different control of capacity steps. Innovations that grant a remarkable performance improvement especially at partial loads.

Versions

- **A** - High efficiency
- **SL-A** - Super low noise, high efficiency

Configurations

- - - Basic function
- **D** - Partial condensing heat recovery function

Features

- **HFO REFRIGERANT**
4th generation refrigerant HFO 1234ze, with negligible greenhouse effect in comparison with traditional HFC refrigerants (Global Warming Potential GWP of HFO 1234ze < 1, GWP of R134a = 1300 as per IPCC rev. 5th) and zero impact on the ozone layer.
- **HIGH EFFICIENCY**
Very high efficiency at full and partial load, at the highest market levels,

thanks to the adopted technological solutions. These units ensure low operating costs and therefore a quick payback time.

- **EXTREMELY SILENT OPERATION**
As the result of a systematic design oriented to minimize the noise level, the silenced version units give the best combination of quietness and efficiency on the market.
- **FLEXIBILITY**
Flexibility in the applications thanks to the many configurations and versions available.
- **WIDE OPERATING RANGE**
The accurate condensation control (variable fan speed regulation as per standard on every model) and devoted kits allow unit's operation from -10°C (-15°C with accessories) to 48°C (52°C with accessories) of outdoor air temperature and up to 18°C (20°C with accessories) of evaporator leaving water temperature.
- **ALUMINIUM MICRO-CHANNEL HEAT EXCHANGERS**
The full aluminium micro-channel condenser coils deliver high efficiency whilst ensuring a reduced refrigerant volume and a lower unit weight. The e-coating protection (optional) grants the highest level of resistance to corrosion in any condition, even in the most aggressive environments.
- **INTEGRATED HYDRONIC GROUP**
The built-in hydronic group (optional) includes the main water circuit components. The 2 pumps are in twin configuration and available with 2 or 4-pole motor, fixed or variable speed, high or low head, to satisfy the different installation requirements.

Accessories

- Noise reducer (only on not silenced versions)
- EC fans with electronic DC brushless motor
- Microchannel coils with e-coating protection
- Traditional coils with copper tubes and aluminium fins, also available with prepainted fins or Fin Guard Silver protective treatment.
- Compressor enclosure (standard on silenced versions)
- Leak detector
- Kit HT to increase the unit operating range
- Compressor power factor correction
- Soft start
- Fast restart
- Double power supply with automatic changeover (ATS) or motorized changeover
- Hydronic group
- VPF (Variable Primary Flow) system

- Set-up for remote connectivity with ModBus, Echelon, Bacnet, Bacnet over-IP.
- Remote control keyboard (distance to 200m and to 500m)