



Siberian HP

Roof top Heat Pump unit for electrical buses

As completion of the Siberian product platform, MCC developed a highly efficient and reliable electrical Heatpump variant. The Siberian HP as self-contained HVAC unit with scroll compressor technology including glycol battery cooling and PTC heating option will suit

best to moderate and cold climate conditions. High part similarity with conventional and heat pump variant, same interface to the bus roof and optimal accessibility to service parts perfectly meet bus producer and bus operator expectations.

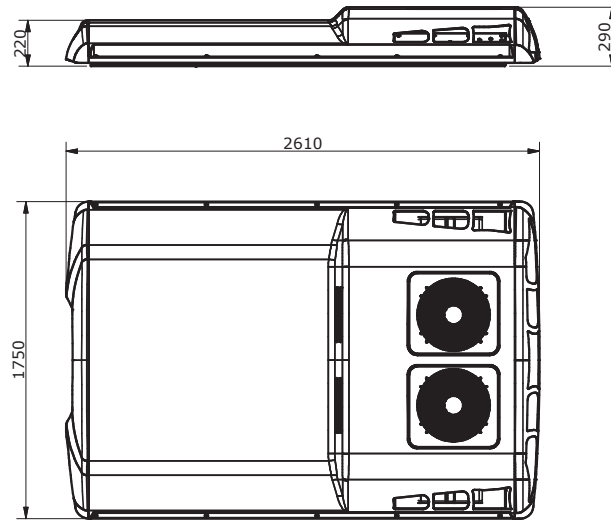


Features

- Many common parts with a conventional and electrical unit
- Slim design (max height 290mm)
- Integrated scroll compressors 750VDC / condensing section designed for optimal airflow / high flexible control logic
- Access to the air filter, filter dryer, TXV from return air opening. Access of other internal parts through the hinged one-piece cover
- Brushless evaporator blowers, 380mm fans
- Compact design, aluminum heat exchangers
- One roof interface for all-electric and heat pump variant, different roof adaptors
- Options: PTC heater (10/15kW), integrated battery cooler, 20 or 40% FA, central air variant, different MCC controllers from basic to high end
- Heating (glycol), battery cooler (glycol), front box connection flexible left or right

Benefits

- Fewer part numbers reduced the spare part variety
- Modern appearance reduced total bus height
- Allows high efficient, silent operation and best performance in high ambient conditions. No additional inverter needed.
- Best serviceability. Saves time for seasonal maintenance or another service
- High reliability and efficiency, up to 40.000 hours life cycle
- Low weight, environmentally friendly
- No change of fixation points or roof structure needed, fits for roof curvatures from flat to 6m
- Multiple options, high flexibility
- Easy to apply to any bus model & variant



Technical Data

Cooling capacity MAX ^[1]	22 kW
Cooling capacity ARI ^[2]	16 kW
Heating capacity ^[3]	15 kW
Heating capacity electric* (750VDC)	10 / 15 kW
Length x Width x Height	2610 mm x 1750 mm x 220/290 mm
Weight	180 kg
Air flow (Max)	4400 m ³ /h
Current draw Max (24VDC)	64 A
Current draw Nom (24VDC)	42 A
Current draw compressor Max (750VDC)	18 A
Current draw heating (750VDC)	13 / 20 A
Refrigerant	R134a

* Optional

[1] Maximum cooling condition (MAX) ti 40 °C/ ta 35 °C/ 50%

[2] Nominal cooling condition (ARI) ti 27 °C/ ta 35°C/ 50%

[3] Heating condition ti 20 °C/ ta 10°C



Mobile Climate Control