





# **HVAC Unit**

## **Highly Reliable and Energy Saving Air Conditioning Systems**

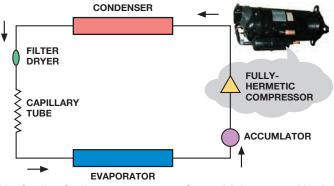


**Based on IRIS** Certified High level **QA** System



### **High Reliability**

#### **Fully Hermetic Cycle** (Proven track record starting in the 1950s)

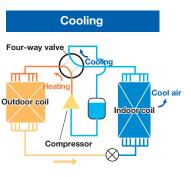


No Gasket Seal No Thread and No Flange Reduce mechanical devices

Saves Maintenance Work Saves Service Parts Stock Saves LCC

### **Energy Saving Proposal**

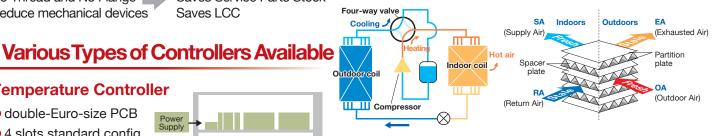
#### **Heat Pump Operation**



**Energy Recovery** Ventilation with Lossnay

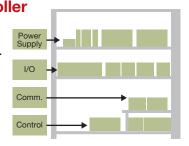


#### **Heating-Heat Pump**



# **Temperature Controller**

- double-Euro-size PCB
- 4 slots standard config.
  - 1. Power Supply
  - 2. I/O
  - 3. Communication I/F
  - 4. Control
  - (5. Back Board)



"Communication I/F Board" available



various COMM. PROTOCOL applicable

Reduce Power Consumption with highly efficient refrigerant cycle

50% reduction compared to Electric Heater

Reduce Outdoor Air

Heat Load

Reduce Power Consumption for Air Conditioning System

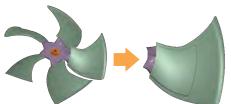
Cooling: 10% Energy reduction Heating: 60% Energy reduction

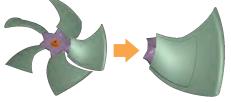
### **High Efficiency of Main Components**

#### **Condenser Fan**

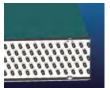
#### **Evaporator/Condenser Coil**

#### **Compressor Capacity Control**









The combination of winglet fan & backward-curved blade

Reduces swirl at the blade ends & realize the high efficiency, noise reduction

High Speed

Minimizes diameter of pipe for Evaporator/Condenser Coil



Reduces the size of heat exchanger & volume of refrigerant



 Returns a part of refrigerant in the compression process to a low pressure side



Realizes capacity control

The combination of multiple compressors

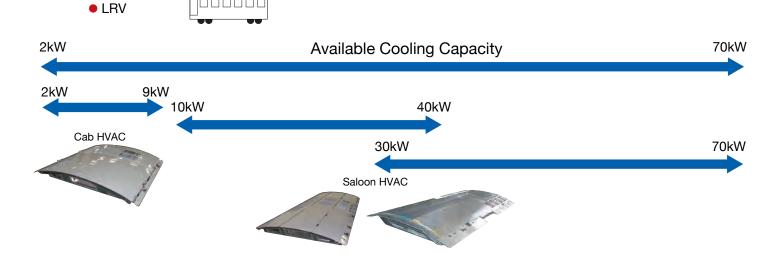


Enables multiple stages of refrigeration capacity control ex.) 100-85-70-50-35-0%

### **Experienced Manufacturer**

We have supplied over 150,000 HVAC units all over the world since the 1950s, and have experience with HVAC units of various types and capacities.

#### Type of HVAC UNIT **Roof Mounted Under Floor** Split Commuter LRV Subway High Speed Subway



### MITSUBISHI ELECTRIC CORPORATION

http://www.MitsubishiElectric.com