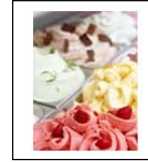




Energy Saving HVAC-R Intelligent Control

Single Stage or Dual Stage Compressors

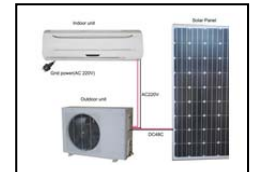
- **Suitability:**
 - Scroll or Reciprocating compressors (not centrifugal)
 - Works with existing thermostat controls (analog, digital, BMS – On-Off type)
 - Wired in series with existing thermostat and on the same circuit
 - Override /bypass capability; Fail Safe in Bypass Mode
 - Screen Display for data verification (both on/off modes)
- **How Does it Work:**
 - Dynamically analyzes compressor operation (on/off, cycling, rest-time)
 - Does not violate thermostat settings
 - Predictive algorithm monitors & adapts to changing heat loads/compressor demand
 - Limits cycling to no more than 6-cycles per hour (typical Mfr. set is 10 cycles/hour)
- **Energy Savings:**
 - Typical Energy Savings Payback: 1–3 years
 - Through less compressor operation time and efficient cooling process
 - Compressors consume 75%-90% of energy – so less equates to more savings



Ultra Efficient Split A/C Systems

9000 / 12,000 / 18,000 / 24,000 BTUs

- **Suitability:**
 - Residential /Small Commercial /Small Office
 - Grid-Tied/ Off-grid with Solar PV or Solar Thermal
 - Cooling only or Cooling/Heating, Hot Water option
- **How Does it Work:**
 - Ultra Efficient DC Inverter Compressor (BLDC) Motor aided by Solar PV/ Thermal
- **Energy Savings:**
 - High EER rating >14.5 (BTU/h/W); >5.3 (W/W),
 - Energy Savings > 35%

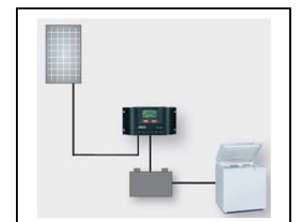


Ultra Efficient Refrigerators/Freezers

Chest Freezer: 100-525 Litres (3.5-18.5 Cu. ft.)

Refrigerator: 92-212 Litres (3.3-7.5 cu. ft.)

- **Suitability:**
 - Residential /Small Commercial /Small Office
 - Grid-Tied/ Off-grid with Solar PV
 - AC (120/240V) or DC (12/24V) Systems capable
- **How Does it Work:**
 - Ultra Efficient DC Inverter Compressor (BLDC) Motor; Noise < 40 dBA
 - Self-Defrosting; Refrigerant R600a/R134a
- **Energy Savings:**
 - **Freezer:** Input Power 70-110 watts; Temp. < -18 deg. C; Refrigerant R600a/R134a
 - **Refrigerator:** Input Power 62-77 watts; Temp. < 3 deg C (FR. <-18 deg C);
 - Energy Savings > 35%



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