

HYBRID HVAC UPGRADE PACKAGE

S3 Energy Solar Thermal

AIR & HEAT

*We didn't invent solar A/C,
we perfected it.*



Available in various sizes and capacities for HVACR systems ranging from 5-Ton to 500-Ton+, this program can retrofit and upgrade existing R-22, R407C, R134C and R-410A systems and provides HVAC energy savings of 25% to 40%, while qualifying for various federal, state and utility incentives.

- Extend System Life
- Lower Energy Use
- Uses Renewable Energy
- 30% Federal Tax Credit (ITC), including all components, materials, and installation labor
- BMS Integration: BACNet

Our Manufacturer has teamed up with Emerson and KMC Controls to create a new solar hybrid energy-efficient HVACR upgrade solution for legacy commercial HVACR systems.

This program combines three technologies to create the most energy efficient commercial HVACR system available today:

- The Solar Thermal SmartPanel™ System
- Emerson's High Efficiency Variable Frequency Drive (VFD) with custom manufacturer programming & features
- The KMC Commercial Thermostat and Controls System with custom manufacturer programming & features



KMC
CONTROLS

EMERSON

SOLAR THERMAL SMARTPANEL

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CONSTRUCTION & SPECIFICATIONS



Collector Case/Frame	Aluminum enclosure constructed from .063" 5052-H32 aluminum
Cover	Tempered plate glass, 3/16" thick (0.1875", 0.476 cm)
Cover Sealing	EPDM extruded U gasket, vulcanized corners
Insulation	0.5" (1.27 cm) thick insulation
Capacity	Up to 7.5 tons/90,000 BTU's/26 kW/40 hp of cooling & heating per collector
Net Aperture Area	Reflector area: 4' x 8' = 32 sq. ft.
Weight/Dimensions	190 pounds/86 kg, 96" x 48" x 7" (2.44m x 1.22m x 17.8cm)
Concentrators	Extruded aluminum parabolic reflector; Metalized aluminum foil mirror (for reflector surface); Teflon bearings for high temperatures and low friction
Absorber	Copper tubing: 5/8" ACR (12.7 cm), 1-1/8" ACR (2.8575 cm) Black selective paint: absorptivity .92/.96, emissivity .2/.4
Sun Trackers	Two shaded phototransistors and brushless stepper motor Brushless stepper motor: 12vdc, 5W
Mounting Provisions	Recessed lip on frame for industry standard fasteners