

## Passive Heat Control Module

### Power Environmental Module (PEM)

#### Global's Passive Heat Control Module

The Global Power Environmental Module (PEM) is a thermally regulated ducting system which recovers clean, dry heat from a thermoelectric generator for space heating purposes.

A sealed bellows actuator controls the operation of the PEM, no electrical power is required. The PEM is used primarily in equipment shelters to protect electronics and batteries from sub-zero temperatures. Some design features include: fail safe shelter temperature control, natural convective air flow, and long design life. Use of the PEM allows for servicing of the thermoelectric generators to be done from inside the equipment shelter.

The PEM is designed to be used with either one or two Model 5060, 5120 or 5220 thermoelectric generators. The system is designed for a gaseous fluid supply. An optional fuel vaporizing system is available to handle a liquid LPG supply for extremely cold weather applications.

#### Materials of Construction

Aluminium.



#### TECHNICAL SPECIFICATIONS

PEM System	Available Heat		Net Weight	
	BTU/hr	kW (heat)	lb	kg
1 x 5060	3,000	0.88	205	93
1 x 5120	6,000	1.76	260	118
1 x 5220	11,000	3.23	360	163
2 x 5060	6,000	1.76	285	129
2 x 5120	12,000	3.52	360	163
2 x 5220	22,000	6.47	525	238

#### MAINTENANCE

Inspection of the PEM should be completed during routine annual maintenance of the thermoelectric generator. Any obstructions around the duct openings should be removed.

#### INSTALLATION DIMENSIONS

Installation is made in the building wall and can be completed by two men in approximately 8 hours. The rough opening required to adapt the PEM to any shelter is:

**Wall Thickness** - (3.0 in) 76 mm nominal

All PEM configurations **except** 2 x 5220

**Vertical Dimensions** - (56.60 in) 1438 mm

**Horizontal Dimensions** - (24.4 in) 620 mm

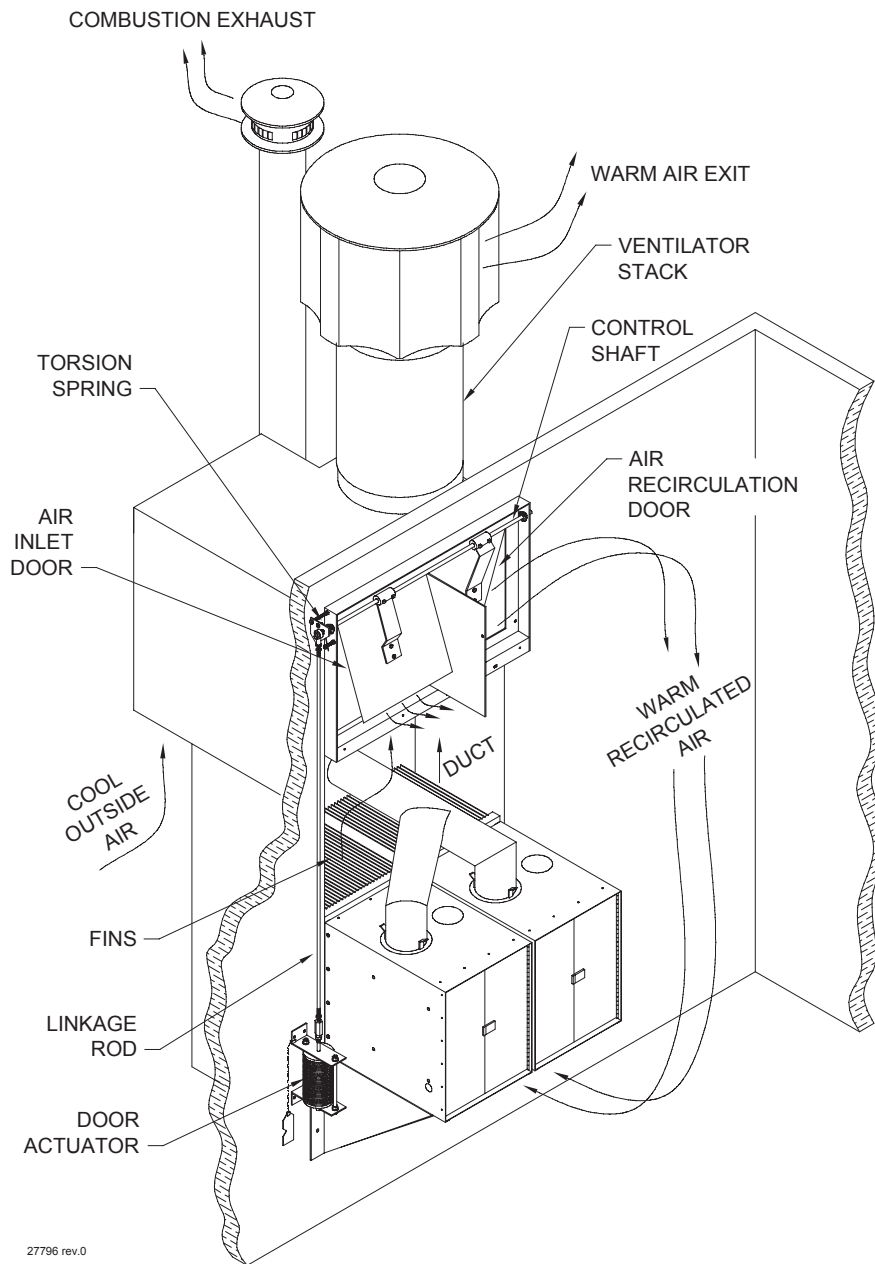
PEM configuration 2 x 5220

**Vertical Dimensions** - (65.6 in) 1666 mm

**Horizontal Dimensions** - (24.88 in) 632 mm



# Typical Installation



Power where you need it.

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