Freezer

From GridLAB-D Wiki

TODO: This page needs to be completed.

freezer - Residential freezer (explicit model)

Synopsis

```
class freezer {
	parent residential_enduse;
	class residential_enduse {
		loadshape shape;
		enduse load; // the enduse load description
		complex energy[kVAh]; // the total energy consumed since the last meter reading
		complex power[kVA]; // the total power consumption of the load
		complex peak_demand[kVA]; // the peak power consumption since the last meter reading
		double heatgain[Btu/h]; // the heat transferred from the enduse to the parent
		double heatgain_fraction[pu]; // the fraction of the heat that goes to the parent
		double current_fraction[pu]; // the fraction of total power that is constant current
		double impedance_fraction[pu]; // the fraction of total power that is constant impedance
		double power_fraction[pu]; // the fraction of the total power that is constant power
		double power_factor; // the power factor of the load
		complex constant_power[kVA]; // the constant power portion of the total load
		complex constant_current[kVA]; // the constant current portion of the total load
		complex constant_admittance[kVA]; // the constant admittance portion of the total load
		double voltage_factor[pu]; // the voltage change factor
		double breaker_amps[A]; // the rated breaker amperage
		set {IS220=1} configuration; // the load configuration options
		enumeration {OFF=4294967295, NORMAL=0, ON=1} override;
		enumeration {ON=1, OFF=0, UNKNOWN=4294967295} power_state;
	}

	double size[cf];
	double rated_capacity[Btu/h];
	double temperature[degF];
	double setpoint[degF];
	double deadband[degF];
	timestamp next_time;
	double output;
	double event_temp;
	double UA[Btu];
	enumeration {ON=1, OFF=0} state;
}
```

See also

- Residential module
  - User's Guide
  - Appliances
  - house class – Single-family home model.
  - residential_enduse class – Abstract residential end-use class.
  - occupantload – Residential occupants (sensible and latent heat).
  - ZIPload – Generic constant impedance/current/power end-use load.

- Technical Documents
  - Requirements
  - Specifications
  - Developer notes
  - Technical support document
  - Validation
