Refrigerator

From GridLAB-D Wiki

TODO: This page needs to be completed.

Refrigerator - Residential Refrigerator (explicit model)

Synopsis

```
object refrigerator {
        // residential_enduse properties
        shape "type: unknown";
        load "power_factor: 0.950000; power.r: 0.000000";
        energy +0+0i kVAh;
        power +0+0j kVA;
        peak_demand +0+0i kVA;
        heatgain +0 Btu/h;
        cumulative_heatgain +0 Btu;
        heatgain_fraction +0 pu;
        current_fraction +0 pu;
        impedance_fraction +0 pu;
        power_fraction +0 pu;
        power_factor +0.95;
        constant_power +0+0i kVA;
        constant_current +0+0i kVA;
        constant_admittance +0+0i kVA;
        voltage_factor +0 pu;
        breaker_amps +0 A;
        configuration IS110;
        override NORMAL;
        power_state OFF;
        // refrigerator properties
        size +23.9374 cf;
        rated_capacity +816.743 Btu/h;
        temperature +38.1227 degF;
        setpoint +38.3484 degF;
        deadband +2.4032 degF;
        cycle_time +0 s;
        output +0;
        event_temp +0;
        UA +0.6 Btu/degF*h;
        compressor_off_normal_energy +40500;
        compressor_off_normal_power +15 W;
        compressor_on_normal_energy +252000;
        compressor_on_normal_power +120 W;
        defrost_energy +1.32e+06;
        defrost_power +550 W;
        icemaking_energy +18000;
        icemaking_power +300 W;
        ice_making_probability +0.02;
        FF_Door_Openings 0;
        door_opening_energy 0;
        door_opening_power 0;
        DO_Thershold +1.18576e-322;
        dr_mode_double +0;
        energy_needed +0;
        energy_used +0;
        refrigerator_power +0;
        icemaker_running FALSE;
        check_DO 0;
```

```
        is_240 FALSE;
        defrostDelayed +0;
        long_compressor_cycle_due FALSE;
        long_compressor_cycle_time +0;
        long_compressor_cycle_power +120;
        long_compressor_cycle_energy +720000;
        long_compressor_cycle_threshold +0.05;
        defrost_criterion TIMED;
        run_defrost FALSE;
        door_opening_criterion +0;
        compressor_defrost_time +0;
        delay_defrost_time +28800;
        daily_door_opening 0;
        state 0;
}
```

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