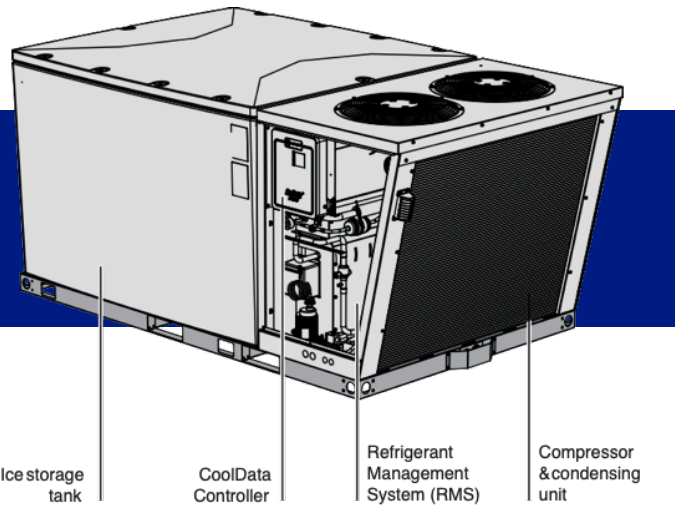


# Ice Bear 40

## Technical Specifications



### Modes of Operation

Ice cooling  
Thermal Energy Storage (TES)

### Cooling and TES Characteristics

|                             |                                   |
|-----------------------------|-----------------------------------|
| AC and ice cooling capacity | 15 Tons                           |
| Charge time @ 75° F         | 10.5 hours                        |
| Storage capacity            | Up to 40 Ton-hours / Up to 56 kWh |
| Discharge duration          | Up to 4.5 hours @ 10T             |

### Peak Power Reduction

|   |             |
|---|-------------|
| On-peak demand reduction                | up to 21 kW |
| On-peak electric demand                 | 300 watts   |
| Round trip efficiency w/12 IEER AC unit | 95%         |
| Energy shifted to off-peak              | 56 kWh      |

### Line Set Restrictions

|                                     |             |
|-------------------------------------|-------------|
| Length (Ice Bear to airside coil)   | 75–150 feet |
| Height (Ice Bear to coil above/max) | 35 feet     |
| Height (Ice Bear to coil below/max) | 20 feet     |

### Ice Storage

|                                   |             |
|-----------------------------------|-------------|
| Tank capacity (tap water)         | 480 gallons |
| Thermal storage capacity (latent) | 480,000 BTU |

### Refrigerant Management System (RMS) & Compressor

|                   |        |
|-------------------|--------|
| Refrigerant       | R-410A |
| Scroll compressor | 5 Ton  |

### SmartGrid Controller

Built-in web server and data logging  
Historian  
One-wire sensor network

### Electrical Requirements

| Model                              | MCA   | FLA   | MOCP |
|------------------------------------|-------|-------|------|
| IB40-521: 208/230V, 1 Phase, 60 Hz | 48.5A | 39.9A | 60A  |
| IB40-523: 208/230V, 3 Phase, 60 Hz | 33.0A | 27.5A | 40A  |
| IB40-543: 460V, 3 Phase, 60 Hz     | 17.0A | 14.7A | 20A  |

### Physical Properties

|                            |                                     |
|----------------------------|-------------------------------------|
| Size                       | 100 7/16" L x 60 3/8" W x 48 1/8" H |
| Weight (dry)               | 1,400 lb. (approx.)                 |
| Weight (filled)            | 5,400 lb. (approx.)                 |
| Load distribution (filled) | 152 lbs. per sq.ft.                 |