

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 @ 10 Tons

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	Up to 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	МОСР
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.