

- **Temperature Control Units**
Water & Oil
30° - 500°F

- **Portable Chillers**
Air & Water-Cooled

- **Central Chillers**
Air & Water-Cooled
Packages & Modules
20° - 70°F

- **Pump Tank Stations**
Chilled or Tower Water
200 - 3600 gallons

- **Cooling Tower Cells**
45 - 540 tons

- **Filters**
- **Heat Exchangers**

WARRANTY

- **1 Year:**
Covering parts and labor
- **2nd Year:**
FREE preventative
maintenance visit

CUSTOM UNITS

If one of our standard Maximum portable chiller models does not meet your application needs, then we can custom build a unit that will! Call us at 317-887-0729 for more details.

MAXIMUM SERIES

- **Models:**
M1-2A-CH
M1-2APT-CH
M1-1.5A-CH
M1-1ARX-CH
- **Air-Cooled**
- **20°F to 80°F Fluid Temperatures**
- **Non Ozone Depleting Refrigerant**
- **Indoor Units**
- **Purpose Built For EDM Machine Cooling Applications**
- **Over 4,000 Units in Service**



M1-1.5A-CH &
M1-1ARX-CH



M1-2A-CH &
M1-2APT-CH

STANDARD FEATURES

FEATURES COMMON TO ALL UNITS

Construction:

- Stainless steel frame and enclosure panels
- Casters for portability
- Standard NPT process fittings
- Designed for indoor installation

Refrigerant Circuit:

- Compressors:
 - Hermetic reciprocating in 1 - 1½ ton models
 - Hermetic scroll in 2 ton models
- Air-Cooled Condensers
 - Finned tube
 - Fan generated air flow
 - Air inlet filter
- Microprocessor controlled 50% hot gas by-pass capacity control system
- Evaporators
 - Copper tube-in-tube (M1-1.5A-CH models)
 - Stainless steel brazed plate with copper brazing (M1-2A-CH & M1-2APT-CH models)
 - Stainless steel brazed plate with nickel brazing (M1-1ARX-CH models)
- Filter-drier
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Crankcase pressure regulator valve (M1-1.5A-CH & M1-1ARX-CH models)

Pressure Gauges:

- Refrigerant high pressure
- Refrigerant low pressure
- Coolant pressure gauge

Limit Devices:

- High refrigerant pressure
- Low refrigerant pressure
- Instrument control circuit fuse

Electrical:

- Compressor motor starter
- Fused transformer
- 10' factory installed power cord with strain relief

Control Instrument:

- Accurate control
- Large & Bright LED temperature display
- Digital Setpoint selection with soft touch keys
- Illuminated Chiller On / Off switch
- Compressor On light
- Basic chiller diagnostics with Refrigeration Fault light
- Capacity control light

WARRANTY:

- 1 Year covering parts and labor
- Free preventative maintenance check in the 2nd year

Features Specific to M1-1.5A-CH & M1-2A-CH Models

- Coolant pump
 - Brass positive displacement pump (M1-1.5A-CH model)
 - High flow stainless steel centrifugal pump (M1-2A-CH model)
- Large capacity insulated non-ferrous reservoir
- Reservoir level sight tube
- Phase indicator

Features Specific to M1-2A-APT-CH Models

- No pump
- No reservoir
- Process flow provided by EDM machine
- Consent pressure switch for flow

Features Specific to M1-1ARX-CH Models

- No reservoir
- Draws coolant from EDM machine reservoir
- Stainless steel positive displacement pump
- Stainless steel piping
- Stainless steel brazed plate evaporator with nickel brazing material

SPECIFICATIONS

M1 PORTABLE CHILLERS		M1-1ARX-CH	M1-1.5A-CH	M1-2A-CH	M1-2APT-CH
COMPRESSOR	Capacity ³	1	1.5	2	2
	HP each	1	1.5	2	2
	Type ⁴	H	H	HS	HS
PROCESS PUMP	HP	1/3	1/2	3/4	n/a
	GPM	2.9	3.6	5.0	n/a
	PSI	60	60	30	n/a
TANK CAPACITY	Gallons	n/a	4	7	n/a
PIPE SIZE (NPT - inches)	PROCESS (to & from)	1/2	1/2	3/4	1/2
FULL LOAD	208/1/60	16.5	22.0	n/a	n/a
AMPERAGE ^{1, 2}	230/1/60	15.0	20.0	n/a	n/a
	208/3/60	n/a	n/a	15.0	13.0
	230/3/60	n/a	n/a	13.0	12.0
	460/3/60	n/a	n/a	7.0	6.0
	REFRIGERANT	Type	R134A	R134A	R410A
DIMENSIONS (inches)	Height	37	37	30	30
	Width	19	19	37	37
	Depth	28	28	24	24
WEIGHT (LBS)	Shipping	345	350	400	400

Notes:

1. No allowance for inrush. Service disconnect by owner. Full load amps must be used to size disconnects and supply conductors.
2. Consult factory for 50hz operation.
3. Tons capacity at 12,000 Btu/hr/ton @ 50 F LWT and 115 F condensing for air-cooled units. Capacity may be +/- 5% as reserved by the compressor manufacturer.
4. HS = hermetic scroll compressor. H = hermetic reciprocating compressor.

Phone: 317-887-0729 Web: www.AdvantageEngineering.com



OPTIONS

- 2 horsepower pump on M1-2A-CH
- UL 508A enclosed electrical panel
- Electrical disconnect switch

Cross Reference	
Older Models	New Models
SC-2AY	M1-2A-CH
IK-2AY	
SC-2APT	M1-2APT-CH
IK-2APT	
IK-1.5A	M1-1.5A-CH

ADVANTAGE PRODUCTS: TEMPERATURE CONTROLLERS · PORTABLE CHILLERS · CENTRAL CHILLERS · PUMP TANK STATIONS · TOWER SYSTEMS · FILTERS

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