

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

- **Package Chillers**
Air & Water-Cooled
20° - 70°F

- **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

- **Fluid Coolers**
Hybrid
Dry

- **Filters**
- **Heat Exchangers**
- **Heat Recovery Units**

WARRANTY

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

CUSTOM UNITS

If one of our standard 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

- **Air-Cooled Unit with Remote Condenser**
- **5 - 40 Tons**
- **20°F to 70°F**
- **Using Non-Ozone Depleting Refrigerants**

INDUSTRIAL DUTY PACKAGE CHILLERS



M1-10A-RC indoor unit.

When your process cooling requirements call for recirculated fluids at temperatures between 20°F and 70°F, the ADVANTAGE Maximum Series water chiller is your choice.

The Maximum Series chiller with remote condenser provides process cooling while rejecting the absorbed heat outside, eliminating heat gain to your building.

The included high flow pump circulates cooling water from the internal reservoir to process where heat is removed. The warmed process cooling water returns to the chiller where it is cooled by its refrigeration system.

Maximum Series chillers are controlled by a tailor made microprocessor control instrument that provides precise temperature control and system diagnostics.

The remote condenser is installed outside and requires field piping and system charging by a qualified installer.



Remote Condenser.

M1 CHILLER CONTROL



Designed for chilled water applications in industrial environments, offers digital temperature display and setpoint selection with machine function and diagnostic indicators.

Since 1977 Advantage has been applying, designing and servicing the best chillers available.

APPLICATIONS

Maximum Series chillers can be used on a variety of process applications that require 20°F to 70°F chilled water.



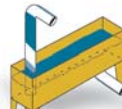
Molds & Dies



Nozzles, Barrels & Tools



Heat Exchangers



Troughs & Tanks



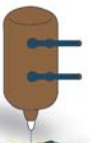
Rolls



Radiators and Air Coils



Jacketed Vessels and Mixers



Lasers



STANDARD FEATURES

CONSTRUCTION (Interior Unit):

- Powder coated steel upright frame members
- Galvanized steel cross frame members
- Powder coated lift-off enclosure panels
- Lift-off molded front panel

REFRIGERANT CIRCUIT:

- Compressors:
 - Hermetic scroll in 5 to 40 ton models
 - 20 to 40 ton models use tandem compressors
- Air-Cooled Condensers
 - Remote, located outdoors
 - Finned tube
 - Fan generated air flow
 - Ambient control to -20°F
- Filter-drier
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Microprocessor controlled hot gas bypass capacity control system
- Stainless Steel Brazed Plate evaporator
- Liquid receiver
- Oil separator

PRESSURE GAUGES:

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

COOLANT CIRCUIT:

- Coolant pump
 - High flow stainless steel centrifugal pump in 5 to 30 tons models (up to 5 HP)
 - High flow cast iron centrifugal pump on the 40 ton model (above 5 HP)
- Large capacity insulated non-ferrous reservoir
- Reservoir level sight tube
- Automatic water make-up system
- Standard NPT process fittings

LIMIT DEVICES:

- High refrigerant pressure
- Low refrigerant pressure
- Refrigerant pressure relief valve
- Process pump motor overload
- Instrument control circuit fuse

ELECTRICAL:

- Process pump motor starter
- Compressor motor
- Fused transformer
- Power entry terminal block

WARRANTY:

- 1 Year covering parts and labor
- Free preventative maintenance check in the 2nd year
- 4 Years on the control instrument

Standard unit features listed. Customized models may include other or different features.

OPTIONS

REFRIGERANT CIRCUIT:

- Compressor CCPR valve for setpoints above 70°F
- Flooded head pressure control for extreme environments

COOLANT CIRCUIT:

- Overhead piping kit - prevents tank overflow when overhead piping is used
- No tank for gravity return applications
- Low flow bypass circuit - manual or automatic
- Process line shut-off valves
- Larger process pump

ALARMS:

- Audible alarm
- Visual / audible alarm beacon

WARRANTIES:

- Extended compressor warranty

ELECTRICAL:

- Branch circuit fusing
- UL rated electrical enclosures

CUSTOM MACHINE DESIGNS



If one of our standard chiller models does not meet your application needs, then we can custom build a unit that will! Our Engineering Department is staffed with experienced machine designers to provide you with a machine built to your exact specifications.

OTHER PRODUCTS

Pump Tank Stations

Chilled & Tower Water, 450-3600 Gallons

Central Chilling Modules

Air & Water-Cooled, 5-300 Tons



Cooling Tower Cells

Fiberglass or Metal, 45-540 tons

Central Chilling Packages

Air & Water-Cooled, 20-200 Tons

Temperature Controllers

Water & Oil Units, 30°-500°F



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

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

ADVANTAGE ENGINEERING, INC. 525 East Stop 18 Road Greenwood, IN 46142 phone: 317-887-0729 fax: 317-881-1277

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SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.

SPECIFICATIONS

Maximum Liquid Chillers With Remote Air-Cooled Condenser 5 - 40 Tons

MODEL ¹ M1-		5A-RC	7.5A-RC	10A-RC	15A-RC	20A-RC	25A-RC	30A-RC	40A-RC
CAPACITY ² @ 50°F LWT	Tons ²	4.9	7.1	9.8	14.5	18.5	23.1	30	36.7
	KW ²	17.2	24.9	34.4	50.9	64.9	81	105.3	128.8
COMPRESSOR	Type	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Tandem Scroll
REFRIGERANT		410A	410A	410A	410A	410A	410A	410A	410A
PROCESS PUMP	HP	2	2	2	3	3	5	5	7½
	GPM	12	19	26	36	48	60	72	92
	PSI	52	48	47	55	50	59	57	61
	Type ³	C	C	C	C	C	C	C	C
	Construction ⁴	SS	SS	SS	SS	SS	SS	SS	C
WATER CONNECTION	Process (to/from)	1¼	1¼	1¼	2	2	2	2	2½
SIZES	Make-Up	½	½	½	½	½	½	½	½
FULL LOAD ⁵	230 volt	28	40	48	70	76	106	134	158
AMPERAGE	460 volt	14	20	24	35	38	53	67	79
	@ 3Ø / 60 Hz 575 volt	12	16	20	28	31	43	57	64
TANK CAPACITY (gallons)	Holding	25	25	25	65	65	65	65	65
	Tank Lid	S	S	S	S	S	S	S	S
	Auto Make Up	S	S	S	S	S	S	S	S
DIMENSIONS ⁷ (inches)	Height	40	40	40	57	57	57	57	57
	Width	32	32	32	34	34	34	34	34
	Depth	40	40	40	80	80	80	80	80
WEIGHT (pounds)	Shipping ⁶	655	740	760	1,500	1,900	2,100	2,200	2,500

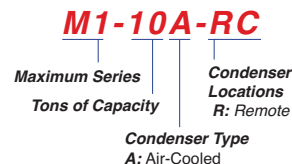
REMOTE AIR-COOLED CONDENSER

CONNECTIONS	Liquid & Hot Gas	1½ & 1⅝	1⅝ & 1⅝	1⅝ & 1⅝	1¾ & 2⅛	1⅝ & 2⅛	1⅝ & 2⅝	2⅛ & 2⅝	2⅛ & 2⅝
AIR FLOW	Fan Quantity	1	1	1	2	2	3	3	3
FULL LOAD ⁵	230 Volts	3.6	3.6	3.6	12.4	12.4	18.6	18.6	24.8
AMPERAGE	460 Volt	1.3	1.3	1.3	6.2	6.2	9.3	9.3	12.4
	@ 3Ø / 60 Hz 575 Volt	1.0	1.0	1.0	5.0	5.0	7.5	7.5	9.9
DIMENSIONS ⁷ (inches)	Height	54	54	54	54	54	54	54	54
	Width	45	45	45	45	45	45	45	45
	Depth	58	58	58	112.5	112.5	167.5	167.5	167.5
WEIGHT (pounds)	Shipping ⁶	400	400	400	680	740	1,050	1,150	1,200
FACTORY ID		012	014	017	025	032	041	050	056

Notes

- Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.
- Tons or Kilowatts capacity at 12,000 Btu/hr/ton @ 50°F LWT, 95°F ambient and 115°F condensing. Consult factory for capacity at other conditions. The minimum recommended operating temperature when no glycol is used is 48°F.
- C = centrifugal.
- SS = stainless steel. C = cast iron.
- Full load amps are higher than run load amps and must be used for sizing disconnects and supply wiring.
- Approximate unit weight crated for shipment.
- Selection of certain options may change dimensions, weight and amps required. Confirm with factory before starting construction.

Model Designator for Maximum Package Chillers



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