



PROCESS COOLING
SOLUTIONS

ARIES TECH 2

AIR-COOLED INDUSTRIAL CHILLERS WITH SCROLL COMPRESSORS - R410A
NOMINAL COOLING CAPACITY 57-195 TONS



The **ARIES TECH 2** is an industrial-grade chiller that combines MTA's reliable packaged refrigeration with on-board coolant pumping & storage to provide single point cooling solutions up to 195 Tons. A full range of sizes and options makes **ARIES TECH 2** the right fit for any application, and built-in capability for modularity allows these chillers to grow with increasing process cooling demands.

EVAPORATOR

The industrial-grade shell & tube evaporator is ASME code designed and stamped for use in North America. The shell & tube allows higher flow rates, lower pressure drops and lower susceptibility to fouling than brazed plate type evaporators. The evaporator is insulated with closed cell foam and features a standard differential pressure switch to sense any loss of flow. The available stainless-steel option provides extra protection against corrosion.

COMPRESSORS

Scroll compressors are mounted on rubber antivibration dampers and include protection against high temperature and excessive current, resulting in reduced energy consumption and a long service life.

CONDENSING SECTION

Standard micro-tube condensers provide enhanced performance with less refrigerant volume. V-type condenser orientation provides a large heat transfer surface while reducing the footprint. For all units the air plenum is an isolated section allowing for troubleshooting during operation. Cleanable, aluminum condenser air filters/hail guards are included as standard.

COOLANT PUMPS

Optional factory-installed centrifugal pumps include silicon carbide seals, and can be supplied with 43 psig (P3) nominal head pressure. Duplex (redundant) pumps are available for all models with automatic time-based switching, and in the event of an alarm.

COOLANT TANK

An optional coolant buffer tank is available to provide enhanced outlet temperature stability. The tank assembly includes insulation, vent and drain connections and a level switch.

STRUCTURE

The heavy-duty cabinet has galvanized carbon steel construction protected by an epoxy polyester powder coating in light gray (RAL 7035). The design of the base allows for easy handling.

ELECTRICAL PANEL

The chiller control section includes an interlocked main door switch to prevent access while power supply is on. A control power transformer is included providing single-point power connection. Electrical panel equipment is UL508a compliant with a protection level of IP54. The chiller is tested for electromagnetic compatibility in accordance with applicable EMC standards. The standard phase monitor provides protection against phase loss and reversal.



AST2	MODEL	075	090	105	115	140	150	170	190	210	240
Cooling capacity (1)	Tons	57.0	67.1	80.5	93.9	105.7	121.3	143.3	154.8	178.9	195.4
Absorbed power (1)	kW	66.7	79.7	90.4	111.4	127.1	138.0	164.0	177.6	210.8	227.2
Flow rate (1)	gpm	137	161	193	225	254	291	344	372	429	469
Cooling circuits	Nº	2	2	2	2	2	2	2	2	2	2
Compressors per circuit	Nº	2	2	2	2	2	2	3	3	3	3
Power	V/Ph/Hz	460/3/60									
Pump power P3 (43 psig)	kW	7.5	7.5	7.5	9.2	9.2	11.0	15.0	15.0	18.5	18.5
Tank volume	gal	132	132	132	132	132	211	211	211	211	211
Water connections	Vic	3"	3"	4"	4"	5"	5"	5"	6"	6"	6"
Sound pressure (@ 10m)	dB(A)	64.9	66.4	67.3	68.1	68.1	69.1	67.6	68.8	70.1	71.5
Width	inch	95	95	95	95	95	95	95	95	95	95
Length	inch	140	140	140	140	140	179	218	218	257	257
Height	inch	86	86	86	86	86	86	86	86	86	86
Weight (installed)	lbs	4,950	5,206	6,531	6,774	7,590	9,029	10,386	10,919	12,833	12,997

(1) @ nominal conditions of 54°F water inlet, 44°F water outlet & 95°F ambient air temperatures



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