

# Trane® Series R® Air-Cooled Chillers



Reliability coupled with proven performance

## Model RTAC – 140-500 tons

You need performance that is dependable and reliability you can count on. We are committed to the highest level of design and manufacturing accuracy to make sure your chiller performs as expected.

Our rigorous design verification helps ensure reliable operation over a wide range of operating conditions.

Testing involves:

- Extreme testing, including cold ambient starts, hot water starts and high ambient operation
- Compressor-accelerated lifecycle testing, including high-pressure ratio, high load test, flooded starts/stops, start/stop testing and phase reversal
- FEA analysis to confirm the unit structure can withstand shipping, rigging and operational activity
- Electrical testing with destructive testing for short-circuit withstand rating
- Performance modeling and verification, both during design and for the life of the chiller



## Thermal energy storage

RTAC supports an energy-efficient thermal storage system by making ice at night, when utility companies charge less for electricity. The stored ice supplements, or even replaces, mechanical cooling during the day when utility rates are at their peak. In addition, the RTAC can often make ice at the same efficiency (or better) than producing 44°F water during the day. This is because of reduced ambient temperatures at night when ice is made.

Trane air-cooled chillers are ideal for making ice and can be a key component in ice-enhanced chiller plants, helping to improve building owners' bottom lines. Additional benefits include the reduction of the chiller plant's environmental impact, since the nighttime electricity it consumes often comes from a greater mix of renewable and cleaner sources—including wind energy and natural gas-powered electrical plants.

## World-class testing facilities

Trane's world-class testing facilities set us apart from the competition. We look at environmental performance, operating longevity, and overall operating efficiency in order to provide you with the most reliable product for the long term. On-site factory performance testing confirms that the actual chiller performance matches predicted performance, and test results serve as a benchmark during the commissioning process.

## Ideal for Thermal Battery™ Cooling Systems

Ice-enhanced chiller plants can substantially reduce cooling costs by making and storing ice during nighttime hours—when utility rates are usually at their lowest—and then using the ice to help cool buildings during peak-rate daytime hours.

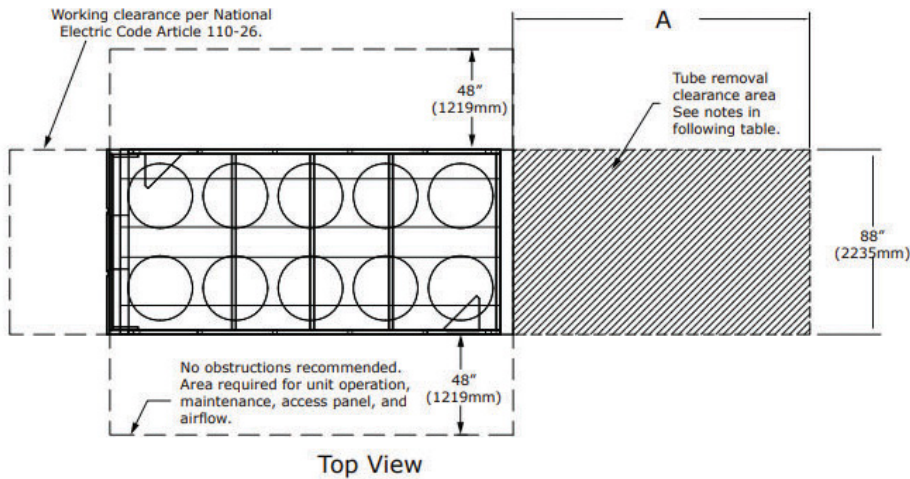
## Ultimate control under all conditions

Trane controls offer performance and efficiency advantages that other controls simply can't match. The Tracer® CH530 provides the intelligence behind the RTAC chiller and features Adaptive Control™ algorithms—proprietary control strategies that respond to a variety of conditions to maintain efficient chiller plant operation. Add to this advanced controls and rapid restart capabilities, and you've got a chiller you can count on.

## General Data

Size	Operating Weight (lb)	Length (in)	Width (in)	Height (in)	Flow (gmp)		Water Connection (in)
					min	max	
140	11,146	196	88	94	195	715	3.5
155	11,146	196	88	94	195	715	3.5
170	11,218	196	88	94	204	748	4
185	12,899	232	88	94	204	748	4
200	13,193	232	88	94	219	803	4
225	14,966	268	88	94	219	803	4
250	15,191	268	88	94	219	803	4
275	19,685	360	89	95	267	979	6
300	21,214	432	89	95	312	1144	6
350	22,005	432	89	95	342	1254	6
400	25,854	468	89	95	384	1408	8
450	57,393	540	89	95	408	1496	8
500	27,912	540	89	95	426	1562	8

## Service Clearances



## Tube Removal Clearance

Base Length (ft)	Units	Clearance		Notes
		Minimum	Full Tube Removal	
15 to 21, 30 (225 or 250T units)	in	72	109	Non-control panel end
	mm	1829	2769	
30 (all except 225 or 250T) to 36	in	72	157	Non-control panel end
	mm	1829	3975	
39 to 45	in	48	157	End of unit with non-DynaView panel
	mm	1219	3975	



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