

# Grow Room Precision Temperature & Humidity Control

Split System Direct Expansion Units



A perfectly-engineered growing environment could help you achieve the ultimate genetic potential of your plants. Trane designs and installs complete HVAC systems, controls, energy and building services for critical environments. At Trane, we consider it all. We have the practical experience and engineering expertise to help solve some of the biggest challenges facing indoor agriculture.

Trane addresses the biggest design challenge in the grow room industry by customizing the controller for precision temperature and humidity control, preventing crop loss in the grow room and helping improve the return on your investment.

## Advanced Dehumidification Features

Trane's proprietary coil temperature control system lowers the temperature of the coil to just above freezing for short periods of time to rapidly reduce the moisture content in the space. This helps prevent the formation of white mold and mildew.

## Microprocessor Controller

The series microprocessor based controller continually monitors grow space conditions and maintains the proper temperature and relative humidity, utilizing Trane's unique control method.



### Maximize crop yield:

Advanced precision environmental control units maintain tight control of temperature and humidity over the plant life cycle

### Address relative humidity spikes during lights off cycles:

Special dehumidifier controls in the system monitor and adjust temperature and air flow across the heat exchanger to maximize moisture removal as needed

### Reduce the formation of white mold and mildew:

Enhanced dehumidification capabilities and tight moisture content control helps prevent crop loss due to mold or mildew

### Pest control:

UV-C lighting helps control micro pests

## Technical Data

Model: TR-	COS-060	COS-096	COS-120	CFS-053	CFS-070	CFS-105
NET DX COOLING CAPACITY - BTU/H, (includes standard DX evaporator motor heat @ std CFM & e.s.p. ratings)						
75°FDB/62.5°FWB, 50% RH						
<b>Air Cooled</b>						
Total (BTU/hr)	57,583	Consult Factory	113,915	164,670	219,890	324,863
Sensible (BTU/hr)	50,938	Consult Factory	94,319	152,846	184,490	283,016
<b>Water Cooled</b>						
Total (BTU/hr)	63,855	100,580	126,423	186,254	247,987	368,872
Sensible (BTU/hr)	53,049	86,188	98,966	161,149	195,729	300,357
<b>Glycol Cooled</b>						
Total (BTU/hr)	55,799	87,721	110,524	159,682	212,965	313,194
Sensible (BTU/hr)	50,347	81,663	93,220	150,953	181,770	278,499
<b>Electric Reheat / Heat - Finned Tubular Heaters, (Standard) Performance Capacities Do Not Include Motor Heat</b>						
Htr kW Rating (# of Stages)	9 kW (1-stg)	9 kW (1-stg)	9 kW (1-stg)	18 kW (2-stg)	18 kW (2-stg)	27 kW (3-stg)
<b>Hot Gas Reheat - with 3-way Heat Reclaim Value (Optional)</b>						
Total Capacity kW (MBH)	5.0 (17.2)	7.8 (26.6)	10.3 (35.1)	7.9 (26)	10.3 (35)	15.6 (53)
<b>Evaporator Blower / Motor - Backward Curved, Direct-Drive, EC Plug Fan</b>						
Horsepower	3.6 Hp, (1)	4.1 Hp, (1)	4.1 Hp, (1)	4.2 Hp	4.2 Hp	4.2 Hp
CFM @ ext. st. press.	2,700 @ 0.5"	4,400 @ 0.5"	4,800 @ 0.5"	9,000 @ 0.2"	10,000 @ 0.2"	15,750 @ 0.2"
Drive Method	Direct Driven	Direct Driven	Direct Driven	Direct Driven	Direct Driven	Direct Driven
Qty. of Fans	1	1	1	2	2	3
Dimensions ( H" x W" x D" )	76x30.63x30.61	76x47.63x33.61	76x47.63x33.61	88.1x88.2x40.3	88.1x88.2x40.3	88.1x118.4x40.3
Approx. Weight	520 lbs	800 lbs	810 lbs	2,400 lbs	2,400 lbs	3,100 lbs
<b>Advanced Dehumidification Mode (75°F and 60% RH)</b>						
Latent Capacity (BTU/hr)	28,710	45,380	56,185	72,609	96,359	140,619
Rate of Moisture Removal (GPH*)	3.3	5.1	6.4	8.3	11.0	16.0
Rate of Moisture Removal (GPD**)	77.9	123.2	152.5	198.5	263.4	384.4
Dehumidification CFM	1,200	2,000	2,000	3,700	4,800	7,000

\* Gallons Per Hour    \*\* Gallons Per Day



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.com](http://trane.com) or [tranetechnologies.com](http://tranetechnologies.com).

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