Gardner Denver

HIGH INLET TEMPERATURE REFRIGERATED AIR DRYERS

RHT Series

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High Inlet Temperature Refrigerated Compressed Air Dryers

Dryer-Filter Combination Saves Space

Gardner Denver RHT Series High Inlet Temperature Refrigerated Dryers feature a unique design which integrates Gardner Denver FIL Series coalescing filters into the refrigerated dryer. This allows users to receive dry compressed air which has also been filtered for solid particulates like dust and for oil aerosols – without extra installation space or time. The end result is:

- A reliable 50° F (10° C) pressure dew point for dry air
- FIL Series Grade B Separator/Filter which provides filtration of solid particulates to 3 micron and of oil aerosols to 5 ppm w/w (6 mg/m^3)

Space-Saving Design for use with Reciprocating Compressors up to 30 HP

Gardner Denver specializes in delivering the best air quality for all working environments. Designed to work with reciprocating compressors, the RHT Series is ideally suited for auto body shops, auto service centers, and light industrial facilities with 5 to 30 horsepower compressors. A unique heat exchanger allows the dryer to accept high inlet temperatures, up to 180° F (82° C). This allows compressed air users to send high temperature air straight from their compressor directly to the RHT Series refrigerated dryer. Separate aftercooler and separator installations are no longer necessary. This provides important savings in installation space and installation time. The models match to most reciprocating compressor sizes and can also be easily sized if the compressor already has a tank-mounted air-cooled aftercooler.

Reduce Overhead Costs

Removing water, solid particulates and oil from your compressed air system has many benefits which all lead to increased productivity and reduced overhead costs. One typical use for compressed air is for painting. Modern refinish materials and spray guns deliver superior paint finishes. Moisture and oil in the compressed air will result in paint rejects and lead to unnecessary purchases of extra unthinned color-coat paints, thinners and hardeners.

RHT Series Features

- Stainless steel heat exchangers with high heat transfer coefficients allow inlet temperatures to 180° F (82° C). All models feature air-to-air and air-to-refrigerant heat exchangers.
- FIL Series Grade B Separator/Filter
- Zero air-loss condensate drains with reliable pneumatic operation
- Environmentally-friendly R407c refrigeration system maintains reliable dewpoint temperatures automatically Hermetic, no-maintenance refrigeration compressors
- Fan switch allows operation in low (35° F, 2° C) ambient temperatures
- Power cord with molded plug
- Instrumentation has convenient on/off switch for start-up and fault light for system malfunction
- CSA Certified on 115 volt models

Data & Figures

CAPACITY FOR FLOWS BASED ON 180° F, 82° C INLET

(for typical applications where there is no aftercooler installed upstream)

MODEL NUMBER	FLOW CAPACITY SCF* @ 175 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF* @ 150 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF* @ 125 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF* @ 100 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)	
	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ
RHT020	23	20	5	5	22	18	5	5	20	17	5	5	18	15	5	5
RHT025	29	24	7.5	7.5	27	23	7.5	7.5	25	21	7.5	5	23	19	5	5
RHT035	41	31	10	7.5	38	29	10	7.5	35	27	10	7.5	32	24	7.5	7.5
RHT050	58	58	15	15	54	54	15	15	50	50	15	10	45	45	10	10
RHT075	87	71	20	20	81	66	20	15	75	61	20	15	68	55	15	15
RHT100	116	97	25	25	108	90	25	20	100	83	25	20	91	76	20	15
RHT125	145	121	30	30	135	112	30	30	125	104	30	25	114	95	25	20

* Capacity @ 180° F, 82° C inlet temperature, 160° F, 71° C inlet pressure dew point, 95° F, 35° C ambient temperature, 50° F, 10° C outlet pressure dew point, and less than 5 psi, 0.35 kgf/cm² pressure drop.

CAPACITY FOR FLOWS BASED ON 100° F, 38° C INLET

(for typical applications where there is an aftercooler installed upstream)

MODEL NUMBER	FLOW CAPACITY SCF** @ 175 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF** @ 150 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF** @ 125 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)		FLOW CAPACITY SCF** @ 100 PSIG		USE WITH AIR COMPRESSOR SIZE (HP)	
	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ	60 HZ	50 HZ
RHT020	32	27	10	7.5	30	25	7.5	7.5	28	23	7.5	7.5	20	21	7.5	5
RHT025	40	33	10	10	37	31	10	7.5	34	29	10	7.5	31	26	7.5	7.5
RHT035	55	43	15	10	51	40	15	10	47	37	10	10	43	33	10	10
RHT050	78	78	20	20	73	73	20	20	67	67	15	15	61	61	15	15
RHT075	118	96	25	25	110	90	25	25	102	85	25	20	92	75	20	20
RHT100	157	131	30	30	146	122	30	30	136	113	30	25	123	102	25	20
RHT125	197	164	2 x 20	2 x 20	183	152	2 x 20	30	170	142	2 x 20	30	155	129	30	25

** Capacity @ 100° F, 38° C inlet temperature, 100° F, 38° C inlet pressure dew point, 100° F, 38° C ambient temperature, 50° F, 10° C outlet pressure dew point, and less than 10 psi, 0.7 kgf/cm² pressure drop.

SPECIFICATIONS

MODEL NUMBER	VOLTAGE	MAXIMUM WORKING PRESSURE	MAXIMUM INLET TEMPERATURE	AMBIENT TEMPERATURE RANGE	IN/OUT CONNECTIONS NPT OR BSP	DIMENSIONS IN (MM) H	W	D	WEIGHT LB (KG)
RHT020	115/1/60 or 220-240/1/50	250 PSIG 14 KG/Cm²	180° F 82° C	35–110° F 2-43° C	½"	28 (718)	10 (257)	13 (327)	79 (36)
RHT025					½"	28 (718)	10 (257)	13 (327)	80 (36)
RHT035					½"	28 (718)	10 (257)	13 (327)	81 (37)
RHT050					¾"	37 (933)	17 (429)	17 (429)	150 (68)
RHT075					¾"	37 (933)	17 (429)	17 (429)	155 (70)
RHT100	230/1/60				1"	46 (1162)	17 (429)	17 (429)	187 (85)
RHT125					1"	46 (1162)	17 (429)	17 (429)	189 (86)

CALCULATE THE COST OF PAINT REJECTS

COST OF LABOR, MATERIALS & THROUGH-PUT DELAYS		PAINT REJECTS PER WEEK × NUMBER OF WEEKS	COST OF PAINT REJECTS
$150	×	1 × 52	= $7,800
$150	×	2 × 52	= $15,600
$200	×	1 × 52	= $10,400
$200	×	2 × 52	= $20,800

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Gardner Denver, Inc.
1800 Gardner Expressway
Quincy, IL 62305
866-440-6241
www.gardnerdenver.com/gdproducts

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Supersedes GA-RHT-104 1st Ed. 1/14

Please recycle after use.