



Refrigerated Compressed Air Dryers

H-RT Series



H-RT Series

Refrigerated Compressed Air Dryers

The H-RT Series refrigerated compressed air dryers are specifically designed for industrial compressed air systems.

With high-efficiency heat exchangers and reliable refrigeration technology, the H-RT series ensures a continuous and stable pressure dew point, effectively preventing condensation, corrosion, and damage to downstream pneumatic equipment.

It is suitable for a wide range of applications, from small workshops to large industrial systems.



Key Advantages

Stable Dew Point

Full counter-flow heat exchanger design combined with hot gas by-pass control ensures stable performance and prevents freezing even at low load conditions.

High Energy Efficiency

Different compressor technologies are matched to each capacity range, optimizing energy consumption.

Reliable Structure

ALU-DRY aluminum heat exchanger with low pressure drop and extended service life.

Eco-friendly Refrigerants

Use of R407C / R134a refrigerants with zero Ozone Depletion Potential (ODP = 0).

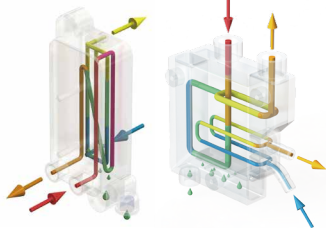
Easy Maintenance

Modular design with well-arranged components for convenient inspection and servicing.

Key Components

High-Efficiency Heat Exchanger

- Small models: Stainless steel brazed plate heat exchanger
- Medium & large models: ALU-DRY aluminum heat exchanger



Refrigerant Compressor

- Reciprocating / Rotary / Scroll type
Selected according to model size and capacity



Intelligent Controller

- Dry Smart / Dry Plus / Dry Pro
- Real-time monitoring of dew point, temperature, and operating status
- RS485 communication available



Protection Devices

- Compressor overload protection
- High temperature and high/low pressure protection
- Phase loss and phase reversal protection (for large models)
- Manual / automatic reset to ensure system safety



Technical Specifications Range

Item	Specification
Flow Rate	24–5280 m³/h
Rated Inlet Temperature	35°C
Max. Inlet Temperature	70°C
Ambient Temperature	1–50°C
Working Pressure	Standard 7 bar (customizable)
Pressure Dew Point	3°C
Cooling Method	Air-cooled

Applications

- Manufacturing & automation
- Automotive & components
- Electronics & semiconductor
- Food & packaging
- Chemical & pharmaceutical
- General industrial compressed air systems

Technical Specifications

Model	Refrigerant	Flow Rate (m³/h)	Pressure Drop (bar)	Connection	Power Supply (Ph/V/Fr)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
H24RT	R134a	24	0.24	1/2"	1/230/50-60	331	425	439	16
H54RT	R134a	54	0.33	1/2"	1/230/50-60	331	425	439	18
H72RT	R134a	72	0.13	1"	1/230/50-60	351	450	491	35
H108RT	R134a	108	0.28	1"	1/230/50-60	351	450	491	36
H138RT	R134a	138	0.23	1"	1/230/50-60	351	450	491	38
H180RT	R134a	180	0.28	1"	1/230/50-60	449	595	548	45
H252RT	R407C	252	0.27	1 1/2"	1/230/50-60	449	595	548	53
H360RT	R407C	360	0.22	1 1/2"	1/230/50-60	511	785	858	73
H486RT	R407C	486	0.18	1 1/2"	1/230/50-60	511	785	858	83
H630RT	R407C	630	0.27	1 1/2"	1/230/50-60	511	785	858	85
H780RT	R407C	780	0.13	2"	1/230/50-60	511	785	858	106
H1080RT	R407C	1080	0.23	2"	1/230/50-60	691	910	976	123
H1260RT	R407C	1260	0.17	2 1/2"	1/230/50-60	691	910	976	140
H1440RT	R407C	1440	0.23	2 1/2"	3/400/50-60	691	910	976	178
H1920RT	R407C	1920	0.22	DN80	3/400/50-60	743	1208	1021	251
H2640RT	R407C	2640	0.24	DN80	3/400/50-60	743	1208	1021	267
H3840RT	R407C	3840	0.22	DN100	3/400/50-60	1592	880	1471	380
H5280RT	R407C	5280	0.24	DN100	3/400/50-60	1592	880	1471	428

Data refer to the following nominal conditions:

Ambient temperature: 25°C / Inlet air pressure: 7 barg / Inlet air temperature: 35°C / Pressure dew point: 3°C

Correction Factors

Correction factor for operating pressure changes

Inlet air pressure (barg)	4	5	6	7	8	10	12	14	16
Correction factor	0.77	0.86	0.93	1	1.05	1.14	1.21	1.27	1.33

Correction factor for inlet air temperature changes

Air temperature (°C)	≤30	35	40	45	50	55
Correction factor	1.11	1	0.81	0.67	0.55	0.45

Correction factor for ambient temperature changes

Ambient temperature (°C)	≤25	30	35	40	45
Correction factor	1	0.95	0.88	0.79	0.68

Correction factor for outlet air dew point changes

Dew Point (°C)	3	5	7	10
Correction factor	1	1.09	1.19	1.37

* Actual flow capacity = rated flow × pressure factor × ambient temperature factor × inlet air temperature factor × dew point factor





Contact Us

North America: Hankison, 647 SW 40 Avenue, Cala, Florida 34474, USA

Service Hotline: 1-724-745-1555

China Region: 11th Floor, Shangjia Center, No. 99 Xianxia Road, Changning District,
Shanghai, China

Service Hotline: +86 21 2221 6000

Website: <https://www.hankisonair.com>

SN: H-A-E-05-2607-EN



Hankison
WeChat Account