

Global Carbon Dioxide Heat Pump Market 2025 by Manufacturers, Regions, Type and Application, Forecast to 2031

<https://marketpublishers.com/r/G930FE1C5AF2EN.html>

Date: September 2025

Pages: 118

Price: US\$ 3,132.00 (Single User License)

ID: G930FE1C5AF2EN

Abstracts

According to our (Global Info Research) latest study, the global Carbon Dioxide Heat Pump market size was valued at US\$ million in 2024 and is forecast to a readjusted size of USD million by 2031 with a CAGR of %during review period.

Carbon dioxide heat pump is a kind of heat pump equipment that absorbs the heat of air in the environment or industrial exhaust heat through evaporator and transports the energy to water to obtain hot water at higher temperature.

This report is a detailed and comprehensive analysis for global Carbon Dioxide Heat Pump market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2025, are provided.

Key Features:

Global Carbon Dioxide Heat Pump market size and forecasts, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2020-2031

Global Carbon Dioxide Heat Pump market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2020-2031

Global Carbon Dioxide Heat Pump market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (K Units), and average selling prices (US\$/Unit), 2020-2031

Global Carbon Dioxide Heat Pump market shares of main players, shipments in revenue (\$ Million), sales quantity (K Units), and ASP (US\$/Unit), 2020-2025

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Carbon Dioxide Heat Pump

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Carbon Dioxide Heat Pump market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include DENSO CORPORATION, HANONSYSTEMS, MAHLE, VALEO, Shanghai Kelai Mechatronics Engineering, Zhejiang Sanhua Intelligent Controls Co.,Ltd., Zhejiang Dun'an Artificial Environment Co.,Ltd., Changzhou Tenglong Auto Parts Co.,Ltd., Zhejiang Yinlun Machinery Co., Ltd., Aotecar, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Market Segmentation

Carbon Dioxide Heat Pump market is split by Type and by Application. For the period 2020-2031, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Single Heat Air Source Heat Pumps

Single Cooling Air Source Heat Pumps

Air Source Heat Pumps With Integrated Cooling And Heating

Market segment by Application

Automotive

Industrial

Other

Major players covered

DENSO CORPORATION

HANONSYSTEMS

MAHLE

VALEO

Shanghai Kelai Mechatronics Engineering

Zhejiang Sanhua Intelligent Controls Co.,Ltd.

Zhejiang Dun'an Artificial Environment Co.,Ltd.

Changzhou Tenglong Auto Parts Co.,ltd.

Zhejiang Yinlun Machinery Co., Ltd.

Aotecar

Songz Automobile Air Conditioning Co.,ltd.

JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD

Shenzhen Frd Science&technology Co.,ltd.

Market segment by region, regional analysis covers

North America (United States, Canada, and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Carbon Dioxide Heat Pump product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Carbon Dioxide Heat Pump, with price, sales quantity, revenue, and global market share of Carbon Dioxide Heat Pump from 2020 to 2025.

Chapter 3, the Carbon Dioxide Heat Pump competitive situation, sales quantity, revenue, and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Carbon Dioxide Heat Pump breakdown data are shown at the regional level, to show the sales quantity, consumption value, and growth by regions, from 2020 to 2031.

Chapter 5 and 6, to segment the sales by Type and by Application, with sales market share and growth rate by Type, by Application, from 2020 to 2031.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value, and market share for key countries in the world, from 2020 to 2025. and Carbon Dioxide Heat Pump market forecast, by regions, by Type, and by Application, with sales and revenue, from 2026 to 2031.

Chapter 12, market dynamics, drivers, restraints, trends, and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Carbon Dioxide Heat Pump.

Chapter 14 and 15, to describe Carbon Dioxide Heat Pump sales channel, distributors, customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Carbon Dioxide Heat Pump Consumption Value by Type: 2020 Versus 2024 Versus 2031

1.3.2 Single Heat Air Source Heat Pumps

1.3.3 Single Cooling Air Source Heat Pumps

1.3.4 Air Source Heat Pumps With Integrated Cooling And Heating

1.4 Market Analysis by Application

1.4.1 Overview: Global Carbon Dioxide Heat Pump Consumption Value by Application: 2020 Versus 2024 Versus 2031

1.4.2 Automotive

1.4.3 Industrial

1.4.4 Other

1.5 Global Carbon Dioxide Heat Pump Market Size & Forecast

1.5.1 Global Carbon Dioxide Heat Pump Consumption Value (2020 & 2024 & 2031)

1.5.2 Global Carbon Dioxide Heat Pump Sales Quantity (2020-2031)

1.5.3 Global Carbon Dioxide Heat Pump Average Price (2020-2031)

2 MANUFACTURERS PROFILES

2.1 DENSO CORPORATION

2.1.1 DENSO CORPORATION Details

2.1.2 DENSO CORPORATION Major Business

2.1.3 DENSO CORPORATION Carbon Dioxide Heat Pump Product and Services

2.1.4 DENSO CORPORATION Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.1.5 DENSO CORPORATION Recent Developments/Updates

2.2 HANONSYSTEMS

2.2.1 HANONSYSTEMS Details

2.2.2 HANONSYSTEMS Major Business

2.2.3 HANONSYSTEMS Carbon Dioxide Heat Pump Product and Services

2.2.4 HANONSYSTEMS Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.2.5 HANONSYSTEMS Recent Developments/Updates

2.3 MAHLE

2.3.1 MAHLE Details

2.3.2 MAHLE Major Business

2.3.3 MAHLE Carbon Dioxide Heat Pump Product and Services

2.3.4 MAHLE Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.3.5 MAHLE Recent Developments/Updates

2.4 VALEO

2.4.1 VALEO Details

2.4.2 VALEO Major Business

2.4.3 VALEO Carbon Dioxide Heat Pump Product and Services

2.4.4 VALEO Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.4.5 VALEO Recent Developments/Updates

2.5 Shanghai Kelai Mechatronics Engineering

2.5.1 Shanghai Kelai Mechatronics Engineering Details

2.5.2 Shanghai Kelai Mechatronics Engineering Major Business

2.5.3 Shanghai Kelai Mechatronics Engineering Carbon Dioxide Heat Pump Product and Services

2.5.4 Shanghai Kelai Mechatronics Engineering Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.5.5 Shanghai Kelai Mechatronics Engineering Recent Developments/Updates

2.6 Zhejiang Sanhua Intelligent Controls Co.,Ltd.

2.6.1 Zhejiang Sanhua Intelligent Controls Co.,Ltd. Details

2.6.2 Zhejiang Sanhua Intelligent Controls Co.,Ltd. Major Business

2.6.3 Zhejiang Sanhua Intelligent Controls Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

2.6.4 Zhejiang Sanhua Intelligent Controls Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.6.5 Zhejiang Sanhua Intelligent Controls Co.,Ltd. Recent Developments/Updates

2.7 Zhejiang Dun'an Artificial Environment Co.,Ltd.

2.7.1 Zhejiang Dun'an Artificial Environment Co.,Ltd. Details

2.7.2 Zhejiang Dun'an Artificial Environment Co.,Ltd. Major Business

2.7.3 Zhejiang Dun'an Artificial Environment Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

2.7.4 Zhejiang Dun'an Artificial Environment Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.7.5 Zhejiang Dun'an Artificial Environment Co.,Ltd. Recent Developments/Updates

2.8 Changzhou Tenglong Auto Parts Co.,Ltd.

- 2.8.1 Changzhou Tenglong Auto Parts Co.,Ltd. Details
- 2.8.2 Changzhou Tenglong Auto Parts Co.,Ltd. Major Business
- 2.8.3 Changzhou Tenglong Auto Parts Co.,Ltd. Carbon Dioxide Heat Pump Product and Services
- 2.8.4 Changzhou Tenglong Auto Parts Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)
- 2.8.5 Changzhou Tenglong Auto Parts Co.,Ltd. Recent Developments/Updates
- 2.9 Zhejiang Yinlun Machinery Co., Ltd.
- 2.9.1 Zhejiang Yinlun Machinery Co., Ltd. Details
- 2.9.2 Zhejiang Yinlun Machinery Co., Ltd. Major Business
- 2.9.3 Zhejiang Yinlun Machinery Co., Ltd. Carbon Dioxide Heat Pump Product and Services
- 2.9.4 Zhejiang Yinlun Machinery Co., Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)
- 2.9.5 Zhejiang Yinlun Machinery Co., Ltd. Recent Developments/Updates
- 2.10 Aotecar
- 2.10.1 Aotecar Details
- 2.10.2 Aotecar Major Business
- 2.10.3 Aotecar Carbon Dioxide Heat Pump Product and Services
- 2.10.4 Aotecar Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)
- 2.10.5 Aotecar Recent Developments/Updates
- 2.11 Songz Automobile Air Conditioning Co.,Ltd.
- 2.11.1 Songz Automobile Air Conditioning Co.,Ltd. Details
- 2.11.2 Songz Automobile Air Conditioning Co.,Ltd. Major Business
- 2.11.3 Songz Automobile Air Conditioning Co.,Ltd. Carbon Dioxide Heat Pump Product and Services
- 2.11.4 Songz Automobile Air Conditioning Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)
- 2.11.5 Songz Automobile Air Conditioning Co.,Ltd. Recent Developments/Updates
- 2.12 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD
- 2.12.1 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Details
- 2.12.2 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Major Business
- 2.12.3 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Carbon Dioxide Heat Pump Product and Services
- 2.12.4 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)
- 2.12.5 JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Recent Developments/Updates

2.13 Shenzhen Frd Science&technology Co.,Ltd.

2.13.1 Shenzhen Frd Science&technology Co.,Ltd. Details

2.13.2 Shenzhen Frd Science&technology Co.,Ltd. Major Business

2.13.3 Shenzhen Frd Science&technology Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

2.13.4 Shenzhen Frd Science&technology Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2020-2025)

2.13.5 Shenzhen Frd Science&technology Co.,Ltd. Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: CARBON DIOXIDE HEAT PUMP BY MANUFACTURER

3.1 Global Carbon Dioxide Heat Pump Sales Quantity by Manufacturer (2020-2025)

3.2 Global Carbon Dioxide Heat Pump Revenue by Manufacturer (2020-2025)

3.3 Global Carbon Dioxide Heat Pump Average Price by Manufacturer (2020-2025)

3.4 Market Share Analysis (2024)

3.4.1 Producer Shipments of Carbon Dioxide Heat Pump by Manufacturer Revenue (\$MM) and Market Share (%): 2024

3.4.2 Top 3 Carbon Dioxide Heat Pump Manufacturer Market Share in 2024

3.4.3 Top 6 Carbon Dioxide Heat Pump Manufacturer Market Share in 2024

3.5 Carbon Dioxide Heat Pump Market: Overall Company Footprint Analysis

3.5.1 Carbon Dioxide Heat Pump Market: Region Footprint

3.5.2 Carbon Dioxide Heat Pump Market: Company Product Type Footprint

3.5.3 Carbon Dioxide Heat Pump Market: Company Product Application Footprint

3.6 New Market Entrants and Barriers to Market Entry

3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

4.1 Global Carbon Dioxide Heat Pump Market Size by Region

4.1.1 Global Carbon Dioxide Heat Pump Sales Quantity by Region (2020-2031)

4.1.2 Global Carbon Dioxide Heat Pump Consumption Value by Region (2020-2031)

4.1.3 Global Carbon Dioxide Heat Pump Average Price by Region (2020-2031)

4.2 North America Carbon Dioxide Heat Pump Consumption Value (2020-2031)

4.3 Europe Carbon Dioxide Heat Pump Consumption Value (2020-2031)

4.4 Asia-Pacific Carbon Dioxide Heat Pump Consumption Value (2020-2031)

4.5 South America Carbon Dioxide Heat Pump Consumption Value (2020-2031)

4.6 Middle East & Africa Carbon Dioxide Heat Pump Consumption Value (2020-2031)

5 MARKET SEGMENT BY TYPE

- 5.1 Global Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 5.2 Global Carbon Dioxide Heat Pump Consumption Value by Type (2020-2031)
- 5.3 Global Carbon Dioxide Heat Pump Average Price by Type (2020-2031)

6 MARKET SEGMENT BY APPLICATION

- 6.1 Global Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 6.2 Global Carbon Dioxide Heat Pump Consumption Value by Application (2020-2031)
- 6.3 Global Carbon Dioxide Heat Pump Average Price by Application (2020-2031)

7 NORTH AMERICA

- 7.1 North America Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 7.2 North America Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 7.3 North America Carbon Dioxide Heat Pump Market Size by Country
 - 7.3.1 North America Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2031)
 - 7.3.2 North America Carbon Dioxide Heat Pump Consumption Value by Country (2020-2031)
 - 7.3.3 United States Market Size and Forecast (2020-2031)
 - 7.3.4 Canada Market Size and Forecast (2020-2031)
 - 7.3.5 Mexico Market Size and Forecast (2020-2031)

8 EUROPE

- 8.1 Europe Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 8.2 Europe Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 8.3 Europe Carbon Dioxide Heat Pump Market Size by Country
 - 8.3.1 Europe Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2031)
 - 8.3.2 Europe Carbon Dioxide Heat Pump Consumption Value by Country (2020-2031)
 - 8.3.3 Germany Market Size and Forecast (2020-2031)
 - 8.3.4 France Market Size and Forecast (2020-2031)
 - 8.3.5 United Kingdom Market Size and Forecast (2020-2031)
 - 8.3.6 Russia Market Size and Forecast (2020-2031)
 - 8.3.7 Italy Market Size and Forecast (2020-2031)

9 ASIA-PACIFIC

- 9.1 Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 9.2 Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 9.3 Asia-Pacific Carbon Dioxide Heat Pump Market Size by Region
 - 9.3.1 Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Region (2020-2031)
 - 9.3.2 Asia-Pacific Carbon Dioxide Heat Pump Consumption Value by Region (2020-2031)
 - 9.3.3 China Market Size and Forecast (2020-2031)
 - 9.3.4 Japan Market Size and Forecast (2020-2031)
 - 9.3.5 South Korea Market Size and Forecast (2020-2031)
 - 9.3.6 India Market Size and Forecast (2020-2031)
 - 9.3.7 Southeast Asia Market Size and Forecast (2020-2031)
 - 9.3.8 Australia Market Size and Forecast (2020-2031)

10 SOUTH AMERICA

- 10.1 South America Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 10.2 South America Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 10.3 South America Carbon Dioxide Heat Pump Market Size by Country
 - 10.3.1 South America Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2031)
 - 10.3.2 South America Carbon Dioxide Heat Pump Consumption Value by Country (2020-2031)
 - 10.3.3 Brazil Market Size and Forecast (2020-2031)
 - 10.3.4 Argentina Market Size and Forecast (2020-2031)

11 MIDDLE EAST & AFRICA

- 11.1 Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2031)
- 11.2 Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2031)
- 11.3 Middle East & Africa Carbon Dioxide Heat Pump Market Size by Country
 - 11.3.1 Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2031)
 - 11.3.2 Middle East & Africa Carbon Dioxide Heat Pump Consumption Value by Country (2020-2031)

- 11.3.3 Turkey Market Size and Forecast (2020-2031)
- 11.3.4 Egypt Market Size and Forecast (2020-2031)
- 11.3.5 Saudi Arabia Market Size and Forecast (2020-2031)
- 11.3.6 South Africa Market Size and Forecast (2020-2031)

12 MARKET DYNAMICS

- 12.1 Carbon Dioxide Heat Pump Market Drivers
- 12.2 Carbon Dioxide Heat Pump Market Restraints
- 12.3 Carbon Dioxide Heat Pump Trends Analysis
- 12.4 Porters Five Forces Analysis
 - 12.4.1 Threat of New Entrants
 - 12.4.2 Bargaining Power of Suppliers
 - 12.4.3 Bargaining Power of Buyers
 - 12.4.4 Threat of Substitutes
 - 12.4.5 Competitive Rivalry

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Carbon Dioxide Heat Pump and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Carbon Dioxide Heat Pump
- 13.3 Carbon Dioxide Heat Pump Production Process
- 13.4 Industry Value Chain Analysis

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel
 - 14.1.1 Direct to End-User
 - 14.1.2 Distributors
- 14.2 Carbon Dioxide Heat Pump Typical Distributors
- 14.3 Carbon Dioxide Heat Pump Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

- 16.1 Methodology
- 16.2 Research Process and Data Source
- 16.3 Disclaimer

List Of Figures

LIST OF FIGURES

Table 1. Global Carbon Dioxide Heat Pump Consumption Value by Type, (USD Million), 2020 & 2024 & 2031

Table 2. Global Carbon Dioxide Heat Pump Consumption Value by Application, (USD Million), 2020 & 2024 & 2031

Table 3. DENSO CORPORATION Basic Information, Manufacturing Base and Competitors

Table 4. DENSO CORPORATION Major Business

Table 5. DENSO CORPORATION Carbon Dioxide Heat Pump Product and Services

Table 6. DENSO CORPORATION Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 7. DENSO CORPORATION Recent Developments/Updates

Table 8. HANONSYSTEMS Basic Information, Manufacturing Base and Competitors

Table 9. HANONSYSTEMS Major Business

Table 10. HANONSYSTEMS Carbon Dioxide Heat Pump Product and Services

Table 11. HANONSYSTEMS Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 12. HANONSYSTEMS Recent Developments/Updates

Table 13. MAHLE Basic Information, Manufacturing Base and Competitors

Table 14. MAHLE Major Business

Table 15. MAHLE Carbon Dioxide Heat Pump Product and Services

Table 16. MAHLE Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 17. MAHLE Recent Developments/Updates

Table 18. VALEO Basic Information, Manufacturing Base and Competitors

Table 19. VALEO Major Business

Table 20. VALEO Carbon Dioxide Heat Pump Product and Services

Table 21. VALEO Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 22. VALEO Recent Developments/Updates

Table 23. Shanghai Kelai Mechatronics Engineering Basic Information, Manufacturing Base and Competitors

Table 24. Shanghai Kelai Mechatronics Engineering Major Business

Table 25. Shanghai Kelai Mechatronics Engineering Carbon Dioxide Heat Pump

Product and Services

Table 26. Shanghai Kelai Mechatronics Engineering Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 27. Shanghai Kelai Mechatronics Engineering Recent Developments/Updates

Table 28. Zhejiang Sanhua Intelligent Controls Co.,Ltd. Basic Information, Manufacturing Base and Competitors

Table 29. Zhejiang Sanhua Intelligent Controls Co.,Ltd. Major Business

Table 30. Zhejiang Sanhua Intelligent Controls Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

Table 31. Zhejiang Sanhua Intelligent Controls Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 32. Zhejiang Sanhua Intelligent Controls Co.,Ltd. Recent Developments/Updates

Table 33. Zhejiang Dun'an Artificial Environment Co.,Ltd. Basic Information, Manufacturing Base and Competitors

Table 34. Zhejiang Dun'an Artificial Environment Co.,Ltd. Major Business

Table 35. Zhejiang Dun'an Artificial Environment Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

Table 36. Zhejiang Dun'an Artificial Environment Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 37. Zhejiang Dun'an Artificial Environment Co.,Ltd. Recent Developments/Updates

Table 38. Changzhou Tenglong Auto Parts Co.,Ltd. Basic Information, Manufacturing Base and Competitors

Table 39. Changzhou Tenglong Auto Parts Co.,Ltd. Major Business

Table 40. Changzhou Tenglong Auto Parts Co.,Ltd. Carbon Dioxide Heat Pump Product and Services

Table 41. Changzhou Tenglong Auto Parts Co.,Ltd. Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 42. Changzhou Tenglong Auto Parts Co.,Ltd. Recent Developments/Updates

Table 43. Zhejiang Yinlun Machinery Co., Ltd. Basic Information, Manufacturing Base and Competitors

Table 44. Zhejiang Yinlun Machinery Co., Ltd. Major Business

Table 45. Zhejiang Yinlun Machinery Co., Ltd. Carbon Dioxide Heat Pump Product and Services

Table 46. Zhejiang Yinlun Machinery Co., Ltd. Carbon Dioxide Heat Pump Sales

Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 47. Zhejiang Yinlun Machinery Co., Ltd. Recent Developments/Updates

Table 48. Aotecar Basic Information, Manufacturing Base and Competitors

Table 49. Aotecar Major Business

Table 50. Aotecar Carbon Dioxide Heat Pump Product and Services

Table 51. Aotecar Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 52. Aotecar Recent Developments/Updates

Table 53. Songz Automobile Air Conditioning Co.,ltd. Basic Information, Manufacturing Base and Competitors

Table 54. Songz Automobile Air Conditioning Co.,ltd. Major Business

Table 55. Songz Automobile Air Conditioning Co.,ltd. Carbon Dioxide Heat Pump Product and Services

Table 56. Songz Automobile Air Conditioning Co.,ltd. Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 57. Songz Automobile Air Conditioning Co.,ltd. Recent Developments/Updates

Table 58. JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Basic Information, Manufacturing Base and Competitors

Table 59. JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Major Business

Table 60. JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Carbon Dioxide Heat Pump Product and Services

Table 61. JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 62. JIANGSU OLIVE SENSORS HIGH-TECH CO.,LTD Recent Developments/Updates

Table 63. Shenzhen Frd Science&technology Co.,ltd. Basic Information, Manufacturing Base and Competitors

Table 64. Shenzhen Frd Science&technology Co.,ltd. Major Business

Table 65. Shenzhen Frd Science&technology Co.,ltd. Carbon Dioxide Heat Pump Product and Services

Table 66. Shenzhen Frd Science&technology Co.,ltd. Carbon Dioxide Heat Pump Sales Quantity (K Units), Average Price (US\$/Unit), Revenue (USD Million), Gross Margin and Market Share (2020-2025)

Table 67. Shenzhen Frd Science&technology Co.,ltd. Recent Developments/Updates

Table 68. Global Carbon Dioxide Heat Pump Sales Quantity by Manufacturer (2020-2025) & (K Units)

Table 69. Global Carbon Dioxide Heat Pump Revenue by Manufacturer (2020-2025) & (USD Million)

Table 70. Global Carbon Dioxide Heat Pump Average Price by Manufacturer (2020-2025) & (US\$/Unit)

Table 71. Market Position of Manufacturers in Carbon Dioxide Heat Pump, (Tier 1, Tier 2, and Tier 3), Based on Revenue in 2024

Table 72. Head Office and Carbon Dioxide Heat Pump Production Site of Key Manufacturer

Table 73. Carbon Dioxide Heat Pump Market: Company Product Type Footprint

Table 74. Carbon Dioxide Heat Pump Market: Company Product Application Footprint

Table 75. Carbon Dioxide Heat Pump New Market Entrants and Barriers to Market Entry

Table 76. Carbon Dioxide Heat Pump Mergers, Acquisition, Agreements, and Collaborations

Table 77. Global Carbon Dioxide Heat Pump Consumption Value by Region (2020-2024-2031) & (USD Million) & CAGR

Table 78. Global Carbon Dioxide Heat Pump Sales Quantity by Region (2020-2025) & (K Units)

Table 79. Global Carbon Dioxide Heat Pump Sales Quantity by Region (2026-2031) & (K Units)

Table 80. Global Carbon Dioxide Heat Pump Consumption Value by Region (2020-2025) & (USD Million)

Table 81. Global Carbon Dioxide Heat Pump Consumption Value by Region (2026-2031) & (USD Million)

Table 82. Global Carbon Dioxide Heat Pump Average Price by Region (2020-2025) & (US\$/Unit)

Table 83. Global Carbon Dioxide Heat Pump Average Price by Region (2026-2031) & (US\$/Unit)

Table 84. Global Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2025) & (K Units)

Table 85. Global Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 86. Global Carbon Dioxide Heat Pump Consumption Value by Type (2020-2025) & (USD Million)

Table 87. Global Carbon Dioxide Heat Pump Consumption Value by Type (2026-2031) & (USD Million)

Table 88. Global Carbon Dioxide Heat Pump Average Price by Type (2020-2025) & (US\$/Unit)

Table 89. Global Carbon Dioxide Heat Pump Average Price by Type (2026-2031) &

(US\$/Unit)

Table 90. Global Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 91. Global Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 92. Global Carbon Dioxide Heat Pump Consumption Value by Application (2020-2025) & (USD Million)

Table 93. Global Carbon Dioxide Heat Pump Consumption Value by Application (2026-2031) & (USD Million)

Table 94. Global Carbon Dioxide Heat Pump Average Price by Application (2020-2025) & (US\$/Unit)

Table 95. Global Carbon Dioxide Heat Pump Average Price by Application (2026-2031) & (US\$/Unit)

Table 96. North America Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2025) & (K Units)

Table 97. North America Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 98. North America Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 99. North America Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 100. North America Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2025) & (K Units)

Table 101. North America Carbon Dioxide Heat Pump Sales Quantity by Country (2026-2031) & (K Units)

Table 102. North America Carbon Dioxide Heat Pump Consumption Value by Country (2020-2025) & (USD Million)

Table 103. North America Carbon Dioxide Heat Pump Consumption Value by Country (2026-2031) & (USD Million)

Table 104. Europe Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2025) & (K Units)

Table 105. Europe Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 106. Europe Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 107. Europe Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 108. Europe Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2025) & (K Units)

Table 109. Europe Carbon Dioxide Heat Pump Sales Quantity by Country (2026-2031) & (K Units)

Table 110. Europe Carbon Dioxide Heat Pump Consumption Value by Country (2020-2025) & (USD Million)

Table 111. Europe Carbon Dioxide Heat Pump Consumption Value by Country (2026-2031) & (USD Million)

Table 112. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2025) & (K Units)

Table 113. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 114. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 115. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 116. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Region (2020-2025) & (K Units)

Table 117. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity by Region (2026-2031) & (K Units)

Table 118. Asia-Pacific Carbon Dioxide Heat Pump Consumption Value by Region (2020-2025) & (USD Million)

Table 119. Asia-Pacific Carbon Dioxide Heat Pump Consumption Value by Region (2026-2031) & (USD Million)

Table 120. South America Carbon Dioxide Heat Pump Sales Quantity by Type (2020-2025) & (K Units)

Table 121. South America Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 122. South America Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 123. South America Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 124. South America Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2025) & (K Units)

Table 125. South America Carbon Dioxide Heat Pump Sales Quantity by Country (2026-2031) & (K Units)

Table 126. South America Carbon Dioxide Heat Pump Consumption Value by Country (2020-2025) & (USD Million)

Table 127. South America Carbon Dioxide Heat Pump Consumption Value by Country (2026-2031) & (USD Million)

Table 128. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Type

(2020-2025) & (K Units)

Table 129. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Type (2026-2031) & (K Units)

Table 130. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Application (2020-2025) & (K Units)

Table 131. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Application (2026-2031) & (K Units)

Table 132. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Country (2020-2025) & (K Units)

Table 133. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity by Country (2026-2031) & (K Units)

Table 134. Middle East & Africa Carbon Dioxide Heat Pump Consumption Value by Country (2020-2025) & (USD Million)

Table 135. Middle East & Africa Carbon Dioxide Heat Pump Consumption Value by Country (2026-2031) & (USD Million)

Table 136. Carbon Dioxide Heat Pump Raw Material

Table 137. Key Manufacturers of Carbon Dioxide Heat Pump Raw Materials

Table 138. Carbon Dioxide Heat Pump Typical Distributors

Table 139. Carbon Dioxide Heat Pump Typical Customers

LIST OF FIGURES

Figure 1. Carbon Dioxide Heat Pump Picture

Figure 2. Global Carbon Dioxide Heat Pump Revenue by Type, (USD Million), 2020 & 2024 & 2031

Figure 3. Global Carbon Dioxide Heat Pump Revenue Market Share by Type in 2024

Figure 4. Single Heat Air Source Heat Pumps Examples

Figure 5. Single Cooling Air Source Heat Pumps Examples

Figure 6. Air Source Heat Pumps With Integrated Cooling And Heating Examples

Figure 7. Global Carbon Dioxide Heat Pump Consumption Value by Application, (USD Million), 2020 & 2024 & 2031

Figure 8. Global Carbon Dioxide Heat Pump Revenue Market Share by Application in 2024

Figure 9. Automotive Examples

Figure 10. Industrial Examples

Figure 11. Other Examples

Figure 12. Global Carbon Dioxide Heat Pump Consumption Value, (USD Million): 2020 & 2024 & 2031

Figure 13. Global Carbon Dioxide Heat Pump Consumption Value and Forecast

(2020-2031) & (USD Million)

Figure 14. Global Carbon Dioxide Heat Pump Sales Quantity (2020-2031) & (K Units)

Figure 15. Global Carbon Dioxide Heat Pump Price (2020-2031) & (US\$/Unit)

Figure 16. Global Carbon Dioxide Heat Pump Sales Quantity Market Share by Manufacturer in 2024

Figure 17. Global Carbon Dioxide Heat Pump Revenue Market Share by Manufacturer in 2024

Figure 18. Producer Shipments of Carbon Dioxide Heat Pump by Manufacturer Sales (\$MM) and Market Share (%): 2024

Figure 19. Top 3 Carbon Dioxide Heat Pump Manufacturer (Revenue) Market Share in 2024

Figure 20. Top 6 Carbon Dioxide Heat Pump Manufacturer (Revenue) Market Share in 2024

Figure 21. Global Carbon Dioxide Heat Pump Sales Quantity Market Share by Region (2020-2031)

Figure 22. Global Carbon Dioxide Heat Pump Consumption Value Market Share by Region (2020-2031)

Figure 23. North America Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 24. Europe Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 25. Asia-Pacific Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 26. South America Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 27. Middle East & Africa Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 28. Global Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 29. Global Carbon Dioxide Heat Pump Consumption Value Market Share by Type (2020-2031)

Figure 30. Global Carbon Dioxide Heat Pump Average Price by Type (2020-2031) & (US\$/Unit)

Figure 31. Global Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 32. Global Carbon Dioxide Heat Pump Revenue Market Share by Application (2020-2031)

Figure 33. Global Carbon Dioxide Heat Pump Average Price by Application (2020-2031) & (US\$/Unit)

Figure 34. North America Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 35. North America Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 36. North America Carbon Dioxide Heat Pump Sales Quantity Market Share by Country (2020-2031)

Figure 37. North America Carbon Dioxide Heat Pump Consumption Value Market Share by Country (2020-2031)

Figure 38. United States Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 39. Canada Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 40. Mexico Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 41. Europe Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 42. Europe Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 43. Europe Carbon Dioxide Heat Pump Sales Quantity Market Share by Country (2020-2031)

Figure 44. Europe Carbon Dioxide Heat Pump Consumption Value Market Share by Country (2020-2031)

Figure 45. Germany Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 46. France Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 47. United Kingdom Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 48. Russia Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 49. Italy Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 50. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 51. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 52. Asia-Pacific Carbon Dioxide Heat Pump Sales Quantity Market Share by Region (2020-2031)

Figure 53. Asia-Pacific Carbon Dioxide Heat Pump Consumption Value Market Share

by Region (2020-2031)

Figure 54. China Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 55. Japan Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 56. South Korea Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 57. India Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 58. Southeast Asia Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 59. Australia Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 60. South America Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 61. South America Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 62. South America Carbon Dioxide Heat Pump Sales Quantity Market Share by Country (2020-2031)

Figure 63. South America Carbon Dioxide Heat Pump Consumption Value Market Share by Country (2020-2031)

Figure 64. Brazil Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 65. Argentina Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 66. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity Market Share by Type (2020-2031)

Figure 67. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity Market Share by Application (2020-2031)

Figure 68. Middle East & Africa Carbon Dioxide Heat Pump Sales Quantity Market Share by Country (2020-2031)

Figure 69. Middle East & Africa Carbon Dioxide Heat Pump Consumption Value Market Share by Country (2020-2031)

Figure 70. Turkey Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 71. Egypt Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

Figure 72. Saudi Arabia Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)

- Figure 73. South Africa Carbon Dioxide Heat Pump Consumption Value (2020-2031) & (USD Million)
- Figure 74. Carbon Dioxide Heat Pump Market Drivers
- Figure 75. Carbon Dioxide Heat Pump Market Restraints
- Figure 76. Carbon Dioxide Heat Pump Market Trends
- Figure 77. Porters Five Forces Analysis
- Figure 78. Manufacturing Cost Structure Analysis of Carbon Dioxide Heat Pump in 2024
- Figure 79. Manufacturing Process Analysis of Carbon Dioxide Heat Pump
- Figure 80. Carbon Dioxide Heat Pump Industrial Chain
- Figure 81. Sales Channel: Direct to End-User vs Distributors
- Figure 82. Direct Channel Pros & Cons
- Figure 83. Indirect Channel Pros & Cons
- Figure 84. Methodology
- Figure 85. Research Process and Data Source

I would like to order

Product name: Global Carbon Dioxide Heat Pump Market 2025 by Manufacturers, Regions, Type and Application, Forecast to 2031

Product link: <https://marketpublishers.com/r/G930FE1C5AF2EN.html>

Price: US\$ 3,132.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G930FE1C5AF2EN.html>