

Data Center Liquid Cooling Market by Component (Solution and Services), End User (Cloud Providers, Colocation Providers, Enterprises, and Hyperscale Data Centers), Data Center Type, Enterprise, and Region - Global Forecast to 2024

https://marketpublishers.com/r/DF3D2C96030EN.html

Date: January 2020 Pages: 150 Price: US\$ 5,650.00 (Single User License) ID: DF3D2C96030EN

Abstracts

Growing demand for energy-efficient cooling solutions along with the increasing need for compact and noise-free solutions to drive the adoption of data center liquid cooling solutions and services

The global data center liquid cooling market is expected to grow from USD 1.2 billion in 2019 to USD 3.2 billion by 2024, at a Compound Annual Growth Rate (CAGR) of 22.6% during the forecast period. Major factors driving the growth of the data center liquid cooling market include increasing need for energy-efficient cooling solutions, growing demand for compact and noise-free solutions, need for lower operating costs, and need for better overclocking potential.

Based on solutions, direct liquid cooling solutions segment to grow at the higher CAGR during the forecast period"

Direct Liquid cooling involves the direct immersion of data center servers into special sealed containers filled with fluids that are non-corrosive and non-toxic. Direct cooling solutions are anticipated to experience good growth opportunities in warmer regions of the world, such as APAC and MEA. Single-phase direct cooling solutions are cheaper to set up, but they tend to reduce the server lifespan. These solutions are, therefore, gaining popularity among data center vendors that utilize servers for a shorter time span.



Based on enterprises, the BFSI segment to hold the highest market share in 2019 in the data center liquid cooling market

The data centers in BFSI are characterized by larger server densities that generate high amounts of heat and require powerful cooling infrastructure. Moreover, with increasing budget constraints, cost-effective infrastructure solutions are becoming essential in the BFSI industry. Thus, this industry focuses on lowering energy consumption by installing advanced data center cooling and innovative building management tools. Data center cooling solutions are increasingly gaining traction in this sector, globally; this can be attributed to their capacity to provide reliable and efficient high performance cooling to large data center facilities.

Based on regions, data center liquid cooling market in Europe to grow at the highest CAGR during the forecast period

The high growth of the market in Europe is attributed to the large number of colocation facilities in the region and the increasing adoption of indirect liquid cooling solutions. Data center colocation providers are increasingly adopting liquid cooling due significant benefits in reducing energy consumption. Moreover, rising green data center initiatives are propelling the demand for direct liquid cooling solutions across the region.

Further, in-depth interviews were conducted with the Chief Executive Officers (CEOs), Chief Marketing Officers (CMO), Vice Presidents (VPs), Managing Directors (MDs), technology and innovation directors, and related key executives from various key companies and organizations operating in the data center liquid cooling market.

By Company – Tier 1–10%, Tier 2–25%, and Tier 3–65%

By Designation – C-Level–25%, Director Level–50%, and Others–25%

By Region – North America–40%, Europe–30%, and APAC–20%, RoW – 10%

The data center liquid cooling market comprises major providers, such as Asetek (Denmark), Rittal (Germany), Vertiv (US), Green Revolution Cooling (US), Midas Green Technologies (US), Allied Control (Hong Kong), Schneider Electric (France), Chilldyne (US), CoolIT Systems (Canada), Submer (Spain), Iceotope (UK), Fujitsu (Japan), Aspen Systems (US), DCX The Liquid Cooling Company (Poland), Ebullient (US), Aquila Group (US), ExaScaler (Japan), Cooler Master Co (China), Asperitas (Netherland),



Liqit.io (Ukraine). The study includes an in-depth competitive analysis of these key players in the data center liquid cooling market with their company profiles, recent developments, and key market strategies.

Research Coverage

The data center liquid cooling market revenue is primarily classified into revenues from solutions and services. Solutions revenue is associated with data center liquid cooling solutions, such as direct liquid cooling and indirect liquid cooling. Furthermore, services revenue is associated with design and consulting, installation and deployment, support and maintenance services. The market is also segmented on the basis of end user, data center type, enterprises, and region.

Key benefits of the report

The report would help the market leaders/new entrants in this market with the information on the closest approximations of the revenue numbers for the overall data center liquid cooling market and the subsegments. This report would help stakeholders understand the competitive landscape and gain insights to better position their businesses and plan suitable go-to-market strategies. The report would also help stakeholders understand the pulse of the market and provide them with information on the key market drivers, restraints, challenges, and opportunities.



Contents

1 INTRODUCTION

1.1 OBJECTIVES OF THE STUDY

1.2 MARKET DEFINITION

1.2.1 INCLUSIONS AND EXCLUSIONS

- 1.3 MARKET SCOPE
- 1.3.1 MARKET SEGMENTATION
- 1.3.2 LIQUID COOLING SOLUTIONS
- 1.3.3 REGIONS COVERED
- 1.3.4 YEARS CONSIDERED FOR THE STUDY
- 1.4 CURRENCY CONSIDERED
- 1.5 STAKEHOLDERS

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

- 2.1.1 SECONDARY DATA
- 2.1.2 PRIMARY DATA
 - 2.1.2.1 Breakup of primaries
- 2.1.2.2 Key industry insights
- 2.2 MARKET BREAKUP AND DATA TRIANGULATION
- 2.3 MARKET SIZE ESTIMATION
- 2.4 MARKET FORECAST
- 2.5 COMPETITIVE LEADERSHIP MAPPING RESEARCH METHODOLOGY
- 2.5.1 VENDOR INCLUSION CRITERIA
- 2.6 ASSUMPTIONS FOR THE STUDY
- 2.7 LIMITATIONS OF THE STUDY

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE MARKET OPPORTUNITIES IN THE DATA CENTER LIQUID COOLING MARKET
4.2 NORTH AMERICA DATA CENTER LIQUID COOLING MARKET, BY COMPONENT AND COUNTRY
4.3 DATA CENTER LIQUID COOLING MARKET: MAJOR COUNTRIES

Data Center Liquid Cooling Market by Component (Solution and Services), End User (Cloud Providers, Colocation...



5 MARKET OVERVIEW AND INDUSTRY TRENDS

- 5.1 INTRODUCTION
- 5.2 MARKET DYNAMICS
- 5.2.1 DRIVERS
 - 5.2.1.1 Growing need for energy-efficient cooling solutions
 - 5.2.1.2 Increasing demand for compact and noise-free solutions
 - 5.2.1.3 Need for lower operating costs
 - 5.2.1.4 Need for better overclocking potential
- 5.2.2 RESTRAINTS
 - 5.2.2.1 Susceptibility to leakage
 - 5.2.2.2 High capital expenditure and maintenance
- **5.2.3 OPPORTUNITIES**
 - 5.2.3.1 Emergence of AI, blockchain, and other advanced technologies
 - 5.2.3.2 High-density cooling requirements
- 5.2.4 CHALLENGES
 - 5.2.4.1 Lack of standardization
- 5.3 USE CASES

5.3.1 CASE STUDY 1: REDUCTION IN DATA CENTER ENERGY SPENDING BY ADOPTING IMMERSION COOLING

5.3.2 CASE STUDY 2: BETTER PER RACK POWER DENSITY AND SCALABILITY 5.3.3 CASE STUDY 3: IMPROVEMENT IN POWER USAGE EFFECTIVENESS

6 DATA CENTER LIQUID COOLING MARKET, BY COMPONENT

6.1 INTRODUCTION

6.2 SOLUTIONS

6.2.1 INDIRECT LIQUID COOLING

6.2.1.1 Growing demand for precision cooling to drive growth of indirect liquid cooling

- 6.2.1.2 Single phase
- 6.2.1.3 Two phase
- 6.2.2 DIRECT LIQUID COOLING

6.2.2.1 Growing demand for high-density cooling to drive growth of direct liquid cooling

6.2.2.2 Single phase

6.2.2.3 Two phase

- 6.3 SERVICES
 - 6.3.1 DESIGN AND CONSULTING



6.3.1.1 Growing demand for technical evaluation of liquid cooling systems to drive growth of direct liquid cooling

6.3.2 INSTALLATION AND DEPLOYMENT

6.3.2.1 Increasing need for integration with traditional cooling devices to drive growth of installation and deployment services

6.3.3 SUPPORT AND MAINTENANCE

6.3.3.1 Growing demand for maintenance of coolants to drive growth of support and maintenance services

7 DATA CENTER LIQUID COOLING MARKET, BY DATA CENTER TYPE

7.1 INTRODUCTION

7.2 SMALL AND MID-SIZED DATA CENTERS

7.2.1 GROWING NEED FOR INDIRECT LIQUID COOLING SOLUTIONS TO DRIVE THE DEMAND FOR SMALL AND MID-SIZED DATA CENTERS

7.3 LARGE DATA CENTERS

7.3.1 GROWING REQUIREMENT FOR DIRECT LIQUID COOLING IN LARGE DATA CENTERS

8 DATA CENTER LIQUID COOLING MARKET, BY END USER

8.1 INTRODUCTION

8.2 CLOUD PROVIDERS

8.2.1 INCREASING DEMAND FOR CLOUD SERVICES TO DRIVE THE GROWTH OF THE DATA CENTER LIQUID COOLING MARKET

8.3 COLOCATION PROVIDERS

8.3.1 AVAILABILITY OF LOW-COST, DISASTER-PROOF SYSTEMS TO CONTRIBUTE TO A HIGHER ADOPTION AMONG COLOCATION PROVIDERS 8.4 ENTERPRISES

8.4.1 RAPID DEPLOYMENT CAPABILITIES TO DRIVE THE ADOPTION OF ENTERPRISES

8.5 HYPERSCALE DATA CENTERS

8.5.1 REQUIREMENT FOR SCALABLE COOLING SOLUTIONS TO DRIVE THE ADOPTION IN HYPERSCALE DATA CENTERS

9 DATA CENTER LIQUID COOLING MARKET, BY ENTERPRISE

9.1 INTRODUCTION

9.2 BANKING, FINANCIAL SERVICES, AND INSURANCE

Data Center Liquid Cooling Market by Component (Solution and Services), End User (Cloud Providers, Colocation...



9.2.1 FOCUS ON LOWERING ENERGY CONSUMPTION TO DRIVE THE ADOPTION OF DATA CENTER LIQUID COOLING IN THE BANKING, FINANCIAL SERVICES, AND INSURANCE SECTOR

9.3 IT AND TELECOM

9.3.1 GROWING ADOPTION OF ADVANCED SERVERS TO DRIVE THE GROWTH OF DATA CENTER LIQUID COOLING SOLUTIONS IN THE IT AND TELECOM SECTOR

9.4 MEDIA AND ENTERTAINMENT

9.4.1 REQUIREMENT FOR SCALE-OUT SOLUTIONS TO DRIVE THE ADOPTION OF DATA CENTER LIQUID COOLING SOLUTIONS IN THE MEDIA AND ENTERTAINMENT INDUSTRY

9.5 HEALTHCARE

9.5.1 GROWING DEMAND FOR CUSTOMIZED DATA CENTER COOLING SOLUTIONS TO DRIVE THEIR ADOPTION IN HEALTHCARE 9.6 GOVERNMENT AND DEFENSE

9.6.1 GROWING DIGITALIZATION INITIATIVES TO DRIVE THE ADOPTION OF DATA CENTER LIQUID COOLING SOLUTIONS IN GOVERNMENT AND DEFENSE INDUSTRY

9.7 RETAIL

9.7.1 INCREASED NEED FOR ROBUST COOLING TO DRIVE THE ADOPTION OF DATA CENTER LIQUID COOLING SOLUTIONS IN RETAIL INDUSTRY 9.8 RESEARCH AND ACADEMIA

9.8.1 ADOPTION OF HIGH-PERFORMANCE COMPUTING TO DRIVE THE DEMAND FOR EFFICIENT COOLING SOLUTIONS IN RESEARCH AND ACADEMIA INDUSTRY

9.9 OTHERS

10 DATA CENTER LIQUID COOLING MARKET, BY REGION

10.1 INTRODUCTION

10.2 NORTH AMERICA

10.2.1 UNITED STATES

10.2.1.1 Surge in demand from cryptocurrency providers to drive the growth of data center liquid cooling solutions in the US

10.2.2 CANADA

10.2.2.1 Increased digitalization and huge data generation to drive the adoption of data center liquid cooling solutions in Canada

10.3 EUROPE

10.3.1 UNITED KINGDOM



10.3.1.1 Eco-design requirements set by the European Parliament for servers and data storage products to drive the growth of the direct liquid cooling market in the UK

10.3.2 GERMANY

10.3.2.1 Attractive investment climate of German locations for data centers to drive the demand for liquid cooling solutions in the country

10.3.3 FRANCE

10.3.3.1 Growing demand from cloud providers to drive the adoption of data center liquid cooling solutions in France

10.3.4 REST OF EUROPE

10.4 ASIA PACIFIC

10.4.1 CHINA

10.4.1.1 Growing number of colocation facilities coupled with rising data center revenues to drive the adoption of data center liquid cooling in China

10.4.2 AUSTRALIA

10.4.2.1 Government initiatives toward infrastructure development to drive the adoption of data center liquid cooling in Australia

10.4.3 INDIA

10.4.3.1 Surging data demand to drive the rapid adoption of liquid cooling in India 10.4.4 REST OF ASIA PACIFIC

10.5 MIDDLE EAST AND AFRICA

10.5.1 SOUTH AFRICA

10.5.1.1 Developed telecommunication infrastructure to drive the demand for data center liquid cooling solutions in South Africa

10.5.2 SAUDI ARABIA

10.5.2.1 Increasing demand for rugged data center solutions to drive the demand for data center liquid cooling solutions in Saudi Arabia

10.5.3 REST OF MIDDLE EAST AND AFRICA

10.6 LATIN AMERICA

10.6.1 BRAZIL

10.6.1.1 Growing IT spending across enterprises to drive the adoption of data center liquid cooling solutions in Brazil

10.6.2 MEXICO

10.6.2.1 Increasing data demand to drive the data center liquid cooling market growth in Mexico

10.6.3 REST OF LATIN AMERICA

11 COMPETITIVE LANDSCAPE

11.1 INTRODUCTION

Data Center Liquid Cooling Market by Component (Solution and Services), End User (Cloud Providers, Colocation...



- 11.2 COMPETITIVE SCENARIO
 - 11.2.1 NEW PRODUCT/SOLUTION LAUNCHES AND PRODUCT ENHANCEMENTS
 - 11.2.2 BUSINESS EXPANSIONS
 - 11.2.3 PARTNERSHIPS
- 11.2.4 ACQUISITIONS
- 11.3 COMPETITIVE LEADERSHIP MAPPING
 - 11.3.1 VISIONARY LEADERS
 - 11.3.2 DYNAMIC DIFFERENTIATORS
 - 11.3.3 INNOVATORS
 - 11.3.4 EMERGING COMPANIES

12 COMPANY PROFILES

12.1 INTRODUCTION

12.2 ASETEK

(Business Overview, Products Offered, Recent Developments, and SWOT Analysis)*

- 12.3 RITTAL
- 12.4 VERTIV
- 12.5 GREEN REVOLUTION COOLING
- 12.6 MIDAS GREEN TECHNOLOGIES
- 12.7 ALLIED CONTROL
- **12.8 SCHNEIDER ELECTRIC**
- 12.9 CHILLDYNE
- 12.10 COOLIT SYSTEMS
- 12.11 SUBMER
- 12.12 ICEOTOPE
- 12.13 FUJITSU
- 12.14 ASPEN SYSTEMS
- 12.15 DCX THE LIQUID COOLING COMPANY
- 12.16 EBULLIENT
- 12.17 AQUILA
- 12.18 EXASCALER
- 12.19 COOLER MASTER
- **12.20 ASPERITAS**
- 12.21 LIQIT.IO

*Details on Business Overview, Products Offered, Recent Developments, and SWOT Analysis might not be captured in case of unlisted companies.

12.22 RIGHT TO WIN



13 APPENDIX

13.1 INSIGHTS OF INDUSTRY EXPERTS
13.2 DISCUSSION GUIDE
13.3 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL
13.4 AVAILABLE CUSTOMIZATIONS
13.5 RELATED REPORTS

13.6 AUTHOR DETAILS



List Of Tables

LIST OF TABLES

TABLE 1 UNITED STATES DOLLAR EXCHANGE RATE, 2016–2018

TABLE 2 FACTOR ANALYSIS

TABLE 3 EVALUATION CRITERIA

TABLE 4 POWER USAGE FOR AIR-COOLED VERSUS LIQUID-COOLED DATA CENTERS

TABLE 5 POWER USAGE FOR AIR-COOLED VERSUS LIQUID-COOLED DATA CENTERS WITH 1 MW OF TECHNICAL LOAD

TABLE 6 DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 7 SOLUTIONS: DATA CENTER LIQUID COOLING MARKET SIZE, BY TYPE, 2017–2024 (USD MILLION)

TABLE 8 SOLUTIONS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 9 INDIRECT LIQUID COOLING MARKET SIZE, BY TYPE, 2017–2024 (USD MILLION)

TABLE 10 INDIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 11 SINGLE-PHASE INDIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 12 TWO-PHASE INDIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 13 DIRECT LIQUID COOLING MARKET SIZE, BY TYPE, 2017–2024 (USD MILLION)

TABLE 14 DIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 15 SINGLE-PHASE DIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 16 TWO-PHASE DIRECT LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 17 SERVICES: DATA CENTER LIQUID COOLING MARKET SIZE, BY TYPE, 2017–2024 (USD MILLION)

TABLE 18 SERVICES: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 19 DESIGN AND CONSULTING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)



TABLE 20 INSTALLATION AND DEPLOYMENT MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 21 SUPPORT AND MAINTENANCE MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 22 DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 23 SMALL AND MID-SIZED DATA CENTERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 24 LARGE DATA CENTERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 25 DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017–2024 (USD MILLION)

TABLE 26 CLOUD PROVIDERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 27 COLOCATION PROVIDERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 28 ENTERPRISES: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD MILLION)

TABLE 29 HYPERSCALE DATA CENTERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 30 DATA CENTER LIQUID COOLING MARKET SIZE, BY ENTERPRISE, 2017–2024 (USD THOUSAND)

TABLE 31 BANKING, FINANCIAL SERVICES, AND INSURANCE: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND) TABLE 32 IT AND TELECOM: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 33 MEDIA AND ENTERTAINMENT: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 34 HEALTHCARE: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 35 GOVERNMENT AND DEFENSE: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 36 RETAIL: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 37 RESEARCH AND ACADEMIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 38 OTHERS: DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024 (USD THOUSAND)

TABLE 39 DATA CENTER LIQUID COOLING MARKET SIZE, BY REGION, 2017–2024



(USD MILLION)

TABLE 40 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 41 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SOLUTION, 2017–2024 (USD MILLION)

TABLE 42 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY INDIRECT LIQUID COOLING, 2017–2024 (USD MILLION)

TABLE 43 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DIRECT LIQUID COOLING, 2017–2024 (USD MILLION)

TABLE 44 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SERVICE, 2017–2024 (USD MILLION)

TABLE 45 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 46 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017–2024 (USD MILLION)

TABLE 47 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY ENTERPRISE, 2017–2024 (USD THOUSAND)

TABLE 48 NORTH AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COUNTRY, 2017–2024 (USD MILLION)

TABLE 49 UNITED STATES: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 50 UNITED STATES: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 51 CANADA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 52 CANADA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 53 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 54 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY SOLUTION, 2017–2024 (USD MILLION)

TABLE 55 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY INDIRECT LIQUID COOLING, 2017–2024 (USD MILLION)

TABLE 56 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY DIRECT LIQUID COOLING, 2017–2024 (USD MILLION)

TABLE 57 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY SERVICE, 2017–2024 (USD MILLION)

TABLE 58 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)



TABLE 59 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017-2024 (USD MILLION) TABLE 60 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY ENTERPRISE, 2017–2024 (USD THOUSAND) TABLE 61 EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY COUNTRY, 2017-2024 (USD MILLION) TABLE 62 UNITED KINGDOM: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 63 UNITED KINGDOM: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 64 GERMANY: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017-2024 (USD MILLION) TABLE 65 GERMANY: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 66 FRANCE: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017-2024 (USD MILLION) TABLE 67 FRANCE: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 68 REST OF EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 69 REST OF EUROPE: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 70 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 71 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY SOLUTION, 2017–2024 (USD MILLION) TABLE 72 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY INDIRECT LIQUID COOLING, 2017–2024 (USD MILLION) TABLE 73 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY DIRECT LIQUID COOLING, 2017–2024 (USD MILLION) TABLE 74 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY SERVICE, 2017–2024 (USD MILLION) TABLE 75 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 76 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017–2024 (USD MILLION) TABLE 77 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY

ENTERPRISE, 2017–2024 (USD THOUSAND)

TABLE 78 ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY



COUNTRY, 2017-2024 (USD MILLION) TABLE 79 CHINA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 80 CHINA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 81 AUSTRALIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017-2024 (USD MILLION) TABLE 82 AUSTRALIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 83 INDIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 84 INDIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 85 REST OF ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 86 REST OF ASIA PACIFIC: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 87 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 88 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SOLUTION, 2017-2024 (USD MILLION) TABLE 89 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY INDIRECT LIQUID COOLING, 2017–2024 (USD MILLION) TABLE 90 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DIRECT LIQUID COOLING, 2017–2024 (USD MILLION) TABLE 91 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SERVICE, 2017–2024 (USD THOUSAND) TABLE 92 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION) TABLE 93 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017–2024 (USD MILLION) TABLE 94 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY ENTERPRISE, 2017–2024 (USD THOUSAND) TABLE 95 MIDDLE EAST AND AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COUNTRY, 2017–2024 (USD MILLION) TABLE 96 SOUTH AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION) TABLE 97 SOUTH AFRICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY

DATA CENTER TYPE, 2017-2024 (USD MILLION)



TABLE 98 SAUDI ARABIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 99 SAUDI ARABIA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 100 REST OF MIDDLE EAST AND AFRICA: DATA CENTER LIQUIDCOOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 101 REST OF MIDDLE EAST AND AFRICA: DATA CENTER LIQUID

COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 102 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 103 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SOLUTION, 2017–2024 (USD MILLION)

TABLE 104 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY INDIRECT LIQUID COOLING, 2017–2024 (USD THOUSAND)

TABLE 105 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DIRECT LIQUID COOLING, 2017–2024 (USD THOUSAND)

TABLE 106 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY SERVICE, 2017–2024 (USD THOUSAND)

TABLE 107 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 108 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY END USER, 2017–2024 (USD THOUSAND)

TABLE 109 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY ENTERPRISE, 2017–2024 (USD THOUSAND)

TABLE 110 LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COUNTRY, 2017–2024 (USD MILLION)

TABLE 111 BRAZIL: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 112 BRAZIL: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 113 MEXICO: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD THOUSAND)

TABLE 114 MEXICO: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD THOUSAND)

TABLE 115 REST OF LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY COMPONENT, 2017–2024 (USD MILLION)

TABLE 116 REST OF LATIN AMERICA: DATA CENTER LIQUID COOLING MARKET SIZE, BY DATA CENTER TYPE, 2017–2024 (USD MILLION)

TABLE 117 NEW PRODUCT/SOLUTION LAUNCHES AND PRODUCT



+357 96 030922 info@marketpublishers.com

ENHANCEMENTS, 2019 TABLE 118 BUSINESS EXPANSIONS, 2019 TABLE 119 PARTNERSHIPS, 2019 TABLE 120 ACQUISITIONS, 2018 TABLE 121 EVALUATION CRITERIA



List Of Figures

LIST OF FIGURES

FIGURE 1 GLOBAL DATA CENTER LIQUID COOLING MARKET: RESEARCH DESIGN FIGURE 2 DATA CENTER LIQUID COOLING MARKET: TOP-DOWN AND BOTTOM-**UP APPROACHES** FIGURE 3 DATA CENTER LIQUID COOLING MARKET OVERVIEW FIGURE 4 HIGHEST GROWING SEGMENTS OF THE DATA CENTER LIQUID **COOLING MARKET** FIGURE 5 SOLUTIONS SEGMENT TO ACCOUNT FOR A LARGER MARKET SIZE DURING THE FORECAST PERIOD FIGURE 6 LARGE DATA CENTERS SEGMENT TO HOLD A HIGHER MARKET SHARE IN 2019 FIGURE 7 ENTERPRISES SEGMENT TO HOLD THE LARGEST MARKET SIZE DURING THE FORECAST PERIOD FIGURE 8 RETAIL SEGMENT TO HOLD THE HIGHEST CAGR DURING THE FORECAST PERIOD FIGURE 9 DATA CENTER LIQUID COOLING MARKET: REGIONAL SNAPSHOT FIGURE 10 RISING DEMAND FOR GREEN DATA CENTER SOLUTIONS TO DRIVE DATA CENTER LIQUID COOLING MARKET FIGURE 11 SOLUTIONS SEGMENT AND THE US TO DOMINATE THE NORTH AMERICAN DATA CENTER LIQUID COOLING MARKET IN 2019 FIGURE 12 DATA CENTER LIQUID COOLING MARKET IN INDIA TO GROW AT THE HIGHEST RATE DURING THE FORECAST PERIOD FIGURE 13 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: DATA CENTER LIQUID COOLING MARKET FIGURE 14 SERVICES SEGMENT TO GROW AT A HIGHER RATE DURING THE FORECAST PERIOD FIGURE 15 SMALL AND MID-SIZED DATA CENTERS SEGMENT TO GROW AT A HIGHER RATE DURING THE FORECAST PERIOD FIGURE 16 HYPERSCALE DATA CENTERS TO GROW AT THE HIGHEST RATE DURING THE FORECAST PERIOD FIGURE 17 RETAIL SEGMENT TO GROW AT THE HIGHEST RATE DURING THE FORECAST PERIOD FIGURE 18 EUROPE TO GROW AT THE HIGHEST RATE DURING THE FORECAST PERIOD

FIGURE 19 NORTH AMERICA: MARKET SNAPSHOT



FIGURE 20 ASIA PACIFIC: MARKET SNAPSHOT FIGURE 21 KEY DEVELOPMENTS BY THE LEADING PLAYERS IN THE DATA CENTER LIQUID COOLING MARKET, 2017–2019 FIGURE 22 DATA CENTER LIQUID COOLING MARKET (GLOBAL) COMPETITIVE LEADERSHIP MAPPING, 2019 FIGURE 23 ASETEK: COMPANY SNAPSHOT FIGURE 24 ASETEK: SWOT ANALYSIS FIGURE 25 RITTAL: SWOT ANALYSIS FIGURE 26 VERTIV: SWOT ANALYSIS FIGURE 27 GREEN REVOLUTION COOLING: SWOT ANALYSIS FIGURE 28 MIDAS GREEN TECHNOLOGIES: SWOT ANALYSIS FIGURE 29 SCHNEIDER ELECTRIC: COMPANY SNAPSHOT



I would like to order

Product name: Data Center Liquid Cooling Market by Component (Solution and Services), End User (Cloud Providers, Colocation Providers, Enterprises, and Hyperscale Data Centers), Data Center Type, Enterprise, and Region - Global Forecast to 2024

Product link: https://marketpublishers.com/r/DF3D2C96030EN.html

Price: US\$ 5,650.00 (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 <u>https://marketpublishers.com/r/DF3D2C96030EN.html</u>