

Automotive Relay Market by Relay Type, Application, Ampere, Vehicle Type, Electric Vehicle Relay Market by Ampere, Electric Vehicle Relay Market by Relay Type, Electric Vehicle Relay Market by Vehicle Type, Region - Global Forecast to 2027

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Report description:

The automotive relay market is projected to grow from USD 12.2 billion in 2022 to USD 15.5 billion by 2027, at a CAGR of 5.0% for the same period. The key growth factor that drives the automotive relay demand is improving per capita income, especially in developing countries such as China, and India, which has shifted consumer preference from economy cars to mid-range cars. The mid-range vehicles are installed with more electronic components for advanced safety and comfort applications. Additionally, the demand for premium vehicles in European and North American countries contributes to the demand for automotive relays. On the other hand, an increase in electric and hybrid vehicle sales has spurred the demand for electric components such as electric compressors, batteries, tractor motors, electric motors, power electronics, and more. Also, the demand for a higher driving range and fast charging has made batteries and powerful motors an important aspect of electric vehicles. Many leading manufacturers offer high-voltage DC relays for electric vehicle applications. For instance, the Panasonic Corporation offers EV relays with a current range of 10A to 300A, available in various shapes with a switching capacity of around 2500A and 300V DC. Hongfa offers EV relays with a current range from 10A to 500A. Other key manufacturers invest heavily in research and development to develop EV relays for high-switching applications. Thus, the requirement of efficient relays with high power ratings and safety standards would become a critical element which is like to fuel the relay market from the electric and hybrid vehicles segment "PCB relays are speculated to drive the automotive relay market under the review period."

Printed circuit board (PCB) relays to lead the relay types in ICE vehicles globally. The benefits of PCB relays are compact, lower weight, and high power rating capacity, which aligns with the OEM requirement. PCB relays can switch current up to 200A; hence, these relays find applications for most automotive features where the relay needs to be small enough to fit in limited space. Some applications of PCB relays in vehicles are door locks, power windows, sunroofs, headlamps, and tail lights, among others. Hence, compact size, higher rating, and smaller package than plug-in relays make them preferable among all other types of relays, and

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with growing demand for applications mentioned above in the vehicles would further drive the demand for PCB relays in coming years.

"Intelligent Park Assist is expected to be the rapidly growing automotive relay application during the forecast period."

The Intelligent Park Assist (IPA) is one of the premium comfort features aiding parking in modern vehicles. This technology has been introduced as vehicles on the road are constantly growing, limiting the availability of convenient parking spaces in congested urban areas. Hence, premium automakers are incorporating IPA to automatically and conveniently park their vehicles. Several manufacturers, such as Toyota, BMW, Lexus, Volkswagen, and Tesla, offer this system in their passenger car models. The relays are used for intelligent park assist, frequent switching operations, and signal communications. Hence, offering IPA technologies is currently limited to select premium models. With rising demand for mid- and premium vehicles, especially in Europe and North America, the adoption of intelligent park assist is expected to grow as simultaneously demand automotive relays in the future.

"North America is anticipated to be the second largest automotive relay market by 2027."

According to MarketsandMarkets analysis, North America is projected to be the second-largest market for automotive relays by 2027. The region has a higher demand for passenger vehicles, particularly for mid-range & premium SUVs and pickup trucks, due to strong buying power, high per capita income, improved standard of living, and consumers' interest in off-roading purposes. According to the MarketsandMarkets Analysis, production share of mid-range and premium passenger vehicles in North America, stood at more than 80% in 2021. These vehicles are installed with more electronic components for advanced safety and comfort features such as automatic air conditioning, start-stop, EPS, heated steering and seats, traction control, adaptive cruise control, and so on. With increasing premium car sales, the region's demand for automotive relays for various applications would also grow. Further, increasing industrialization, growing logistic business, and e-commerce industry have created a significant demand for heavy truck production and sales in the US. This would subsequently create the demand for automotive relays for basic functions such as fuel pumps, headlights and tail lamps, steering, wiper, indicators, etc. In addition, electric and hybrid vehicles have also recently seen a considerable adoption rate in North America. All these factors are expected to drive the market of automotive relays in the North American region

In-depth interviews were conducted with CXOs, VPs, directors from business development, marketing, product development/innovation teams, independent consultants, and executives from various key organizations operating in this market.

-□By Company Type: Tier 1 companies - 90%, Others - 10%

-□By Designation: Director Level - 30%, C Level - 60%, and Others - 10%

-□By Region: Asia Pacific - 45, North America - 30%, %, Europe - 20%, and Rest of the World - 5%

The automotive relay market is led by globally established players such as TE Connectivity (Switzerland), Omron Corporation (Japan), Panasonic Corporation (Japan), Hongfa Technologies Co. (China), Denso Corporation (and Fujitsu Component Limited (Japan).

Research Coverage:

The study segments the automotive relay market and forecasts the market size based on Relay Type (PCB Relays, Plug In Relays, High Voltage Relays, Protective Relays, Signal Relays, Time Relays), By Application (Door Lock, Power Windows, Sunroof, Power Seat, Electronic Power Steering (EPS), Lighting, Fuel Injection, Air Conditioner, Starter, Anti-Lock Braking System (ABS), Traction Control System (TCS), Cooling Fan, Engine Management Module, Adaptive Cruise Control, Intelligent Park Assist), By Ampere (5A-15A, 16A-35A, >35A), By Vehicle Type (Economy cars, Mid-range cars, Premium cars, Light Commercial Vehicle, Heavy Duty Vehicles), Electric Vehicle Relay Market, By Ampere (5A-15A, 16A-35A, >35A), Electric Vehicle Relay Market, By Relay Type (Main Relay, Precharge Relay, Quick Charge Relay, Normal Charge Relay, High Voltage Accessories Relay), Electric Vehicle Relay Market, By Vehicle Type (Battery Electric Vehicle, Fuel Cell Electric Vehicle, Plug In Hybrid Electric Vehicle) and Region (Asia Pacific, Europe, North America, And Rest of The World).

The study also includes an in-depth competitive analysis of the market's key players, their company profiles, key observations related to product and business offerings, recent developments, and key market strategies.

Key Benefits of Buying the Report:

The report will help the key market players operating in the automotive relay market with information on the closest approximations of the revenue numbers for the overall automotive relay market and the sub-segments. This report would also

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help stakeholders to understand fastest growing and largest market for automotive relay market at regional and global level for various sub-segments that are covered in the study. The report helps stakeholders to understand the competitive landscape, market share analysis and key growth opportunities, and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report also helps stakeholders understand the market's pulse and provides information on key market drivers, restraints, challenges, and opportunities.

Table of Contents:

1	INTRODUCTION	42
1.1	STUDY OBJECTIVES	42
1.2	MARKET DEFINITION	43
1.2.1	INCLUSIONS & EXCLUSIONS	43
1.3	MARKET SCOPE	44
FIGURE 1	AUTOMOTIVE RELAY MARKET SEGMENTATION	44
1.3.1	YEARS CONSIDERED	44
1.3.2	REGIONAL SCOPE	45
FIGURE 2	AUTOMOTIVE RELAY MARKET, BY REGION	45
1.4	CURRENCY CONSIDERED	45
TABLE 1	CURRENCY EXCHANGE RATES (WRT PER USD)	45
1.5	UNITS CONSIDERED	46
1.6	LIMITATIONS	46
1.7	STAKEHOLDERS	46
1.8	SUMMARY OF CHANGES	47
2	RESEARCH METHODOLOGY	48
2.1	RESEARCH DATA	48
FIGURE 3	RESEARCH DESIGN	48
FIGURE 4	RESEARCH METHODOLOGY MODEL	49
2.1.1	SECONDARY DATA	49
2.1.1.1	List of key secondary sources	50
2.1.1.2	Key data from secondary sources	51
2.1.2	PRIMARY DATA	51
FIGURE 5	BREAKDOWN OF PRIMARY INTERVIEWS	52
2.1.2.1	Sampling techniques and data collection methods	52
2.2	MARKET ESTIMATION METHODOLOGY	53
FIGURE 6	RESEARCH METHODOLOGY: HYPOTHESIS BUILDING	54
2.2.1	BOTTOM-UP APPROACH	55
FIGURE 7	BOTTOM-UP APPROACH: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE	55
2.2.2	TOP-DOWN APPROACH	56
FIGURE 8	TOP-DOWN APPROACH: AUTOMOTIVE RELAY MARKET, BY AMPERE AND RELAY TYPE	56
FIGURE 9	AUTOMOTIVE RELAY MARKET: REGIONAL ANALYSIS AND ESTIMATION FINDINGS	56
2.3	MARKET BREAKDOWN AND DATA TRIANGULATION	57
FIGURE 10	DATA TRIANGULATION	57
2.4	FACTOR ANALYSIS	58
2.4.1	FACTOR ANALYSIS FOR MARKET SIZING: DEMAND- AND SUPPLY-SIDE	58
2.5	ASSUMPTIONS	59
2.6	RESEARCH LIMITATIONS	61
3	EXECUTIVE SUMMARY	62
FIGURE 11	AUTOMOTIVE RELAY MARKET OUTLOOK	62

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FIGURE 12 AUTOMOTIVE RELAY MARKET, BY REGION, 2022 VS. 2027 (USD MILLION) 63

4 PREMIUM INSIGHTS 65

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN AUTOMOTIVE RELAY MARKET 65

FIGURE 13 INCREASED DEMAND FOR ADVANCED FEATURES IN VEHICLES PROPELS AUTOMOTIVE RELAY MARKET 65

4.2 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE 66

FIGURE 14 PCB RELAYS TO ACCOUNT FOR LARGER MARKET SHARE BY 2027 66

4.3 AUTOMOTIVE RELAY MARKET, BY AMPERE 66

FIGURE 15 >35A RELAYS TO DOMINATE MARKET, BY VALUE 66

4.4 AUTOMOTIVE RELAY MARKET, BY APPLICATION 67

FIGURE 16 COOLING FANS TO ACQUIRE LARGEST MARKET SHARE, BY VALUE 67

4.5 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE 68

FIGURE 17 MID-RANGE CARS TO COMMAND MARKET DURING FORECAST PERIOD 68

4.6 ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE 68

FIGURE 18 BEVS ESTIMATED TO ACCOUNT FOR LARGEST SHARE IN 2022 68

4.7 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE 69

FIGURE 19 MAIN RELAYS TO HOLD LARGEST MARKET SHARE BY 2027 69

4.8 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE 69

FIGURE 20 >35A TO ACQUIRE MAXIMUM MARKET SHARE DURING FORECAST PERIOD 69

4.9 AUTOMOTIVE RELAY MARKET, BY REGION 70

FIGURE 21 ASIA PACIFIC ESTIMATED TO DOMINATE AUTOMOTIVE RELAY MARKET IN 2022 70

5 MARKET OVERVIEW 71

5.1 INTRODUCTION 71

5.2 MARKET DYNAMICS 72

FIGURE 22 AUTOMOTIVE RELAY MARKET DYNAMICS 72

5.2.1 DRIVERS 72

5.2.1.1 Need for safer and more comfortable vehicles 72

FIGURE 23 VEHICLE ELECTRIFICATION MARKET, BY PRODUCT, 2017-2021 (MILLION UNITS) 73

5.2.1.2 Increased sales of electric and hybrid vehicles 74

FIGURE 24 ELECTRIC VEHICLE SALES, BY TYPE, 2021 VS. 2030 (THOUSAND UNITS) 74

5.2.2 RESTRAINTS 75

5.2.2.1 Lack of standardization in relay designs 75

5.2.3 OPPORTUNITIES 75

5.2.3.1 Demand for high switching capacity relays in electric, hybrid, and autonomous vehicles 75

5.2.3.2 Increased use of DC motors in automotive applications 76

FIGURE 25 AUTOMOTIVE DC MOTORS SHARE, BY APPLICATION, 2020 76

5.2.3.3 Relay failure prevention systems 77

5.2.4 CHALLENGES 77

5.2.4.1 Factors affecting reliability of relays 77

FIGURE 26 PERFORMANCE AND DESIGN TECHNOLOGICAL FACTORS OF AUTOMOTIVE RELAYS 77

5.2.4.2 Connected smart junction box and smart fuse box for autonomous cars 78

5.3 PORTER'S FIVE FORCES ANALYSIS 78

TABLE 2 PORTER'S FIVE FORCES ANALYSIS 78

FIGURE 27 PORTER'S FIVE FORCES FOR AUTOMOTIVE RELAY MARKET 79

5.3.1 THREAT OF SUBSTITUTES 79

5.3.2 THREAT OF NEW ENTRANTS 79

5.3.3 BARGAINING POWER OF BUYERS 80

5.3.4 BARGAINING POWER OF SUPPLIERS 80

5.3.5	INTENSITY OF COMPETITIVE RIVALRY	80
5.4	TRENDS AFFECTING AUTOMOTIVE RELAY MANUFACTURERS	80
FIGURE 28	TRENDS AFFECTING AUTOMOTIVE RELAY MANUFACTURERS	80
5.5	AUTOMOTIVE RELAY MARKET SCENARIOS (2018-2027)	81
FIGURE 29	AUTOMOTIVE RELAY MARKET SCENARIO, 2018-2027 (USD MILLION)	81
5.5.1	AUTOMOTIVE RELAY MARKET: REALISTIC SCENARIO	81
TABLE 3	AUTOMOTIVE RELAY MARKET (REALISTIC), BY REGION, 2018-2021 (USD MILLION)	82
TABLE 4	AUTOMOTIVE RELAY MARKET (REALISTIC), BY REGION, 2022-2027 (USD MILLION)	82
5.5.2	AUTOMOTIVE RELAY MARKET: OPTIMISTIC SCENARIO	82
TABLE 5	AUTOMOTIVE RELAY MARKET (OPTIMISTIC), BY REGION, 2018-2021 (USD MILLION)	82
TABLE 6	AUTOMOTIVE RELAY MARKET (OPTIMISTIC), BY REGION, 2022-2027 (USD MILLION)	83
5.5.3	AUTOMOTIVE RELAY MARKET: PESSIMISTIC SCENARIO	83
TABLE 7	AUTOMOTIVE RELAY MARKET (PESSIMISTIC), BY REGION, 2018-2021 (USD MILLION)	83
TABLE 8	AUTOMOTIVE RELAY MARKET (PESSIMISTIC), BY REGION, 2022-2027 (USD MILLION)	83
5.6	AVERAGE SELLING PRICING (ASP) ANALYSIS	84
5.6.1	BY REGION & AMPERE	84
TABLE 9	AUTOMOTIVE RELAY MARKET: AVERAGE SELLING PRICE, BY REGION & AMPERE, 2021-2022 (USD/UNIT)	84
5.6.2	KEY POINTS	84
5.7	TECHNOLOGY ANALYSIS	85
5.7.1	OVERVIEW	85
5.7.2	GROWTH OF ELECTRIC AND HYBRID VEHICLES	85
5.7.3	ADVANCED SAFETY TECHNOLOGIES IN MODERN AUTOMOBILES	85
5.7.4	AUTONOMOUS CONSTRUCTION EQUIPMENT	85
5.8	CASE STUDY	86
5.8.1	USE CASE 1: EMBITEL INCORPORATES RELAYS IN ITS ELECTRIC MOTORCYCLE DASHBOARD HARDWARE	86
5.8.2	USE CASE 2: TOMTOM ADVANCED DRIVER-ASSISTANCE SYSTEMS MAPS	86
5.9	AUTOMOTIVE RELAY MARKET ECOSYSTEM	87
FIGURE 30	AUTOMOTIVE RELAY MARKET: ECOSYSTEM	87
TABLE 10	ROLE OF COMPANIES IN AUTOMOTIVE RELAY MARKET ECOSYSTEM	87
5.10	SUPPLY CHAIN ANALYSIS	88
FIGURE 31	AUTOMOTIVE RELAY MARKET: SUPPLY CHAIN ANALYSIS	89
5.11	PATENT ANALYSIS	90
5.12	REGULATORY FRAMEWORK	93
5.12.1	REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	93
TABLE 11	NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	93
TABLE 12	EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	94
TABLE 13	ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS	94
5.12.2	REGULATORY ANALYSIS	95
5.12.2.1	Automotive relay market: Quality standards	95
TABLE 14	REGULATIONS/STANDARDS FOR AUTOMOTIVE RELAYS	95
5.13	KEY CONFERENCES AND EVENTS IN 2022-2023	96
5.14	KEY STAKEHOLDERS AND BUYING CRITERIA	97
5.14.1	KEY STAKEHOLDERS IN BUYING PROCESS	97
TABLE 15	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS (%)	97
FIGURE 32	INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS	97
5.14.2	BUYING CRITERIA	97
FIGURE 33	KEY BUYING CRITERIA FOR TOP AUTOMOTIVE RELAY APPLICATIONS	98

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TABLE 16 KEY BUYING CRITERIA FOR TOP AUTOMOTIVE RELAY APPLICATIONS 98

6 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE 99

6.1 INTRODUCTION 100

6.1.1 RESEARCH METHODOLOGY 100

6.1.2 ASSUMPTIONS 100

6.1.3 PRIMARY INSIGHTS 100

FIGURE 34 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE, 2022 VS. 2027 101

TABLE 17 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE, 2018-2021 (MILLION UNITS) 101

TABLE 18 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE, 2022-2027 (MILLION UNITS) 101

TABLE 19 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE, 2018-2021 (USD MILLION) 102

TABLE 20 AUTOMOTIVE RELAY MARKET, BY RELAY TYPE, 2022-2027 (USD MILLION) 102

6.2 PRINTED CIRCUIT BOARD (PCB) RELAYS 102

6.2.1 COMPACT SIZE, HIGHER RATING, AND SMALLER PACKAGE 102

TABLE 21 PCB RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 103

TABLE 22 PCB RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 103

TABLE 23 PCB RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 103

TABLE 24 PCB RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 103

6.3 PLUG-IN RELAYS 104

6.3.1 ABILITY TO WITHSTAND HARSH OPERATING CONDITIONS 104

TABLE 25 PLUG-IN RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 104

TABLE 26 PLUG-IN RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 104

TABLE 27 PLUG-IN RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 105

TABLE 28 PLUG-IN RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 105

6.4 HIGH VOLTAGE RELAYS 105

6.4.1 INCORPORATION IN ELECTRIC VEHICLES 105

TABLE 29 HIGH VOLTAGE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 106

TABLE 30 HIGH VOLTAGE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 106

TABLE 31 HIGH VOLTAGE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 106

TABLE 32 HIGH VOLTAGE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 107

6.5 PROTECTIVE RELAYS 107

6.5.1 ABILITY TO PROTECT CRITICAL COMPONENTS FROM HIGH VOLTAGE 107

TABLE 33 PROTECTIVE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 107

TABLE 34 PROTECTIVE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 108

TABLE 35 PROTECTIVE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 108

TABLE 36 PROTECTIVE RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 108

6.6 SIGNAL RELAYS 109

6.6.1 ABILITY TO SWITCH LOW-LEVEL CURRENTS EFFECTIVELY 109

TABLE 37 SIGNAL RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 109

TABLE 38 SIGNAL RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 109

TABLE 39 SIGNAL RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 109

TABLE 40 SIGNAL RELAYS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 110

6.7 TIME RELAYS 110

6.7.1 TIMED SWITCHING APPLICATIONS 110

TABLE 41 TIME RELAYS: AUTOMOTIVE RELAYS MARKET, BY REGION, 2018-2021 (MILLION UNITS) 110

TABLE 42 TIME RELAYS: AUTOMOTIVE RELAYS MARKET, BY REGION, 2022-2027 (MILLION UNITS) 111

TABLE 43 TIME RELAYS: AUTOMOTIVE RELAYS MARKET, BY REGION, 2018-2021 (USD MILLION) 111

TABLE 44 TIME RELAYS: AUTOMOTIVE RELAYS MARKET, BY REGION, 2022-2027 (USD MILLION) 111

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7 AUTOMOTIVE RELAY MARKET, BY APPLICATION 112

7.1 INTRODUCTION 113

7.1.1 RESEARCH METHODOLOGY 113

7.1.2 ASSUMPTIONS 113

7.1.3 PRIMARY INSIGHTS 114

FIGURE 35 AUTOMOTIVE RELAY MARKET, BY APPLICATION, 2022 VS. 2027 114

TABLE 45 AUTOMOTIVE RELAY MARKET, BY APPLICATION, 2018-2021 (MILLION UNITS) 115

TABLE 46 AUTOMOTIVE RELAY MARKET, BY APPLICATION, 2022-2027 (MILLION UNITS) 115

TABLE 47 AUTOMOTIVE RELAY MARKET, BY APPLICATION, 2018-2021 (USD MILLION) 116

TABLE 48 AUTOMOTIVE RELAY MARKET, BY APPLICATION, 2022-2027 (USD MILLION) 116

7.2 DOOR LOCKS 117

7.2.1 NEED FOR SAFETY FEATURES 117

TABLE 49 DOOR LOCKS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 117

TABLE 50 DOOR LOCKS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 117

TABLE 51 DOOR LOCKS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 118

TABLE 52 DOOR LOCKS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 118

7.3 POWER WINDOWS 118

7.3.1 INCORPORATION OF POWER WINDOWS IN ECONOMY AND COMMERCIAL VEHICLES 118

TABLE 53 POWER WINDOWS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 119

TABLE 54 POWER WINDOWS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 119

TABLE 55 POWER WINDOWS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 119

TABLE 56 POWER WINDOWS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 120

7.4 SUNROOFS 120

7.4.1 GROWING INSTALLATION OF SUNROOFS 120

TABLE 57 SUNROOFS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 120

TABLE 58 SUNROOFS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 121

TABLE 59 SUNROOFS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 121

TABLE 60 SUNROOFS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 121

7.5 POWER SEATS 122

7.5.1 HIGH DEMAND FROM MID-RANGE CARS SEGMENT 122

TABLE 61 POWER SEATS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 122

TABLE 62 POWER SEATS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 122

TABLE 63 POWER SEATS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 122

TABLE 64 POWER SEATS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 123

7.6 ELECTRONIC POWER STEERING 123

7.6.1 GROWING INSTALLATION IN PASSENGER AND LIGHT COMMERCIAL VEHICLES 123

TABLE 65 ELECTRONIC POWER STEERING: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 123

TABLE 66 ELECTRONIC POWER STEERING: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 124

TABLE 67 ELECTRONIC POWER STEERING: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 124

TABLE 68 ELECTRONIC POWER STEERING: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 124

7.7 LIGHTING 125

7.7.1 INCREASED APPLICATIONS OF AUTOMOTIVE LIGHTING 125

TABLE 69 LIGHTING: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 125

TABLE 70 LIGHTING: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 125

TABLE 71 LIGHTING: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 126

TABLE 72 LIGHTING: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 126

7.8 FUEL INJECTION 126

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7.8.1 NEED FOR INCREASED FUEL EFFICIENCY AND PERFORMANCE 126

TABLE 73 FUEL INJECTION: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 126

TABLE 74 FUEL INJECTION: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 127

TABLE 75 FUEL INJECTION: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 127

TABLE 76 FUEL INJECTION: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 127

7.9 AIR CONDITIONERS 128

7.9.1 RISING DEPLOYMENT OF AUTOMATIC CLIMATE CONTROL 128

TABLE 77 AIR CONDITIONERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 128

TABLE 78 AIR CONDITIONERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 128

TABLE 79 AIR CONDITIONERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 129

TABLE 80 AIR CONDITIONERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 129

7.10 STARTERS 129

7.10.1 INCREASED ADOPTION OF ENGINE PUSH BUTTON SYSTEMS 129

TABLE 81 STARTERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 130

TABLE 82 STARTERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 130

TABLE 83 STARTERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 130

TABLE 84 STARTERS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 130

7.11 ANTI-LOCK BRAKING SYSTEMS 131

7.11.1 STRINGENT REGULATIONS WORLDWIDE 131

TABLE 85 ANTI-LOCK BRAKING SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 131

TABLE 86 ANTI-LOCK BRAKING SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 131

TABLE 87 ANTI-LOCK BRAKING SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 132

TABLE 88 ANTI-LOCK BRAKING SYSTEM: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 132

7.12 TRACTION CONTROL SYSTEMS 132

7.12.1 BETTER TRACTION CONTROL AND LIMITED WHEEL SLIPPAGE 132

TABLE 89 TRACTION CONTROL SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 133

TABLE 90 TRACTION CONTROL SYSTEM: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 133

TABLE 91 TRACTION CONTROL SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 133

TABLE 92 TRACTION CONTROL SYSTEMS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 134

7.13 COOLING FANS 134

7.13.1 RISING ADOPTION OF AIR CONDITIONING SYSTEMS 134

TABLE 93 COOLING FANS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 134

TABLE 94 COOLING FANS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 135

TABLE 95 COOLING FANS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 135

TABLE 96 COOLING FANS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 135

7.14 ENGINE MANAGEMENT MODULE 136

7.14.1 INCREASE IN COMPACT AND POWERFUL ENGINES 136

TABLE 97 ENGINE MANAGEMENT MODULE: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 136

TABLE 98 ENGINE MANAGEMENT MODULE: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 136

TABLE 99 ENGINE MANAGEMENT MODULE: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 136

TABLE 100 ENGINE MANAGEMENT MODULE: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 137

7.15 ADAPTIVE CRUISE CONTROL 137

7.15.1 RAPIDLY DEVELOPING ROAD INFRASTRUCTURE IN DEVELOPING COUNTRIES 137

TABLE 101 ADAPTIVE CRUISE CONTROL: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 137

TABLE 102 ADAPTIVE CRUISE CONTROL: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 138

TABLE 103 ADAPTIVE CRUISE CONTROL: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 138

TABLE 104 ADAPTIVE CRUISE CONTROL: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 138

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7.16 INTELLIGENT PARK ASSIST 139

7.16.1 INCLUSION OF CONVENIENCE FEATURES IN LUXURY VEHICLES 139

TABLE 105 INTELLIGENT PARK ASSIST: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 139

TABLE 106 INTELLIGENT PARK ASSIST: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 139

TABLE 107 INTELLIGENT PARK ASSIST: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 140

TABLE 108 INTELLIGENT PARK ASSIST: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 140

8 AUTOMOTIVE RELAY MARKET, BY AMPERE 141

8.1 INTRODUCTION 142

8.1.1 RESEARCH METHODOLOGY 142

8.1.2 ASSUMPTIONS 142

8.1.3 PRIMARY INSIGHTS 143

FIGURE 36 AUTOMOTIVE RELAY MARKET, BY AMPERE, 2022 VS. 2027 143

TABLE 109 AUTOMOTIVE RELAY MARKET, BY AMPERE, 2018-2021 (MILLION UNITS) 143

TABLE 110 AUTOMOTIVE RELAY MARKET, BY AMPERE, 2022-2027 (MILLION UNITS) 144

TABLE 111 AUTOMOTIVE RELAY MARKET, BY AMPERE, 2018-2021 (USD MILLION) 144

TABLE 112 AUTOMOTIVE RELAY MARKET, BY AMPERE, 2022-2027 (USD MILLION) 144

8.2 5A-15A RELAY 144

8.2.1 USE IN LIGHTING APPLICATIONS 144

TABLE 113 5A-15A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 145

TABLE 114 5A-15A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 145

TABLE 115 5A-15A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 145

TABLE 116 5A-15A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 145

8.3 16A-35A RELAY 146

8.3.1 USE IN COMFORT FEATURES 146

TABLE 117 16A-35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 146

TABLE 118 16A-35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 146

TABLE 119 16A-35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 147

TABLE 120 16A-35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 147

8.4 >35A RELAY 147

8.4.1 INCORPORATION OF ADVANCED SAFETY SYSTEMS IN VEHICLES 147

TABLE 121 >35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 147

TABLE 122 >35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 148

TABLE 123 >35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 148

TABLE 124 >35A: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 148

9 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE 149

9.1 INTRODUCTION 150

9.1.1 RESEARCH METHODOLOGY 150

9.1.2 ASSUMPTIONS 150

9.1.3 PRIMARY INSIGHTS 150

FIGURE 37 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022 VS. 2027 151

TABLE 125 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 151

TABLE 126 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 151

TABLE 127 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 152

TABLE 128 AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 152

9.2 ECONOMY CARS 152

TABLE 129 ECONOMY CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 153

TABLE 130 ECONOMY CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 153

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TABLE 131 □ ECONOMY CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 153

TABLE 132 □ ECONOMY CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 153

9.3 □ MID-RANGE CARS □ 154

TABLE 133 □ MID-RANGE CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 154

TABLE 134 □ MID-RANGE CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 154

TABLE 135 □ MID-RANGE CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 155

TABLE 136 □ MID-RANGE CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 155

9.4 □ PREMIUM CARS □ 155

TABLE 137 □ PREMIUM CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 156

TABLE 138 □ PREMIUM CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 156

TABLE 139 □ PREMIUM CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 156

TABLE 140 □ PREMIUM CARS: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 156

9.5 □ LIGHT COMMERCIAL VEHICLES □ 157

TABLE 141 □ LIGHT COMMERCIAL VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 157

TABLE 142 □ LIGHT COMMERCIAL VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 157

TABLE 143 □ LIGHT COMMERCIAL VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 158

TABLE 144 □ LIGHT COMMERCIAL VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 158

9.6 □ HEAVY-DUTY VEHICLES □ 158

TABLE 145 □ HEAVY-DUTY VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 159

TABLE 146 □ HEAVY-DUTY VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 159

TABLE 147 □ HEAVY-DUTY VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 159

TABLE 148 □ HEAVY-DUTY VEHICLES: AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 160

10 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE □ 161

10.1 □ INTRODUCTION □ 162

10.1.1 □ RESEARCH METHODOLOGY □ 162

10.1.2 □ ASSUMPTIONS □ 162

10.1.3 □ PRIMARY INSIGHTS □ 162

FIGURE 38 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE, 2022 VS. 2027 □ 163

TABLE 149 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) □ 163

TABLE 150 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) □ 163

TABLE 151 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) □ 163

TABLE 152 □ ELECTRIC VEHICLE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) □ 164

10.2 □ BATTERY ELECTRIC VEHICLES (BEVS) □ 164

10.2.1 □ EMISSION-FREE AND NOISE-LESS OPERATION □ 164

TABLE 153 □ BEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 164

TABLE 154 □ BEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 165

TABLE 155 □ BEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 165

TABLE 156 □ BEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 165

10.3 □ PLUG-IN HYBRID ELECTRIC VEHICLES (PHEVS) □ 166

10.3.1 □ LOWER COST OF OWNERSHIP □ 166

TABLE 157 □ PHEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 166

TABLE 158 □ PHEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) □ 166

TABLE 159 □ PHEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) □ 166

TABLE 160 □ PHEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) □ 167

10.4 □ FUEL CELL ELECTRIC VEHICLES (FCEVS) □ 167

10.4.1 □ REDUCED CHARGING/REFUELING TIME □ 167

TABLE 161 □ FCEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) □ 167

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TABLE 162 FCEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 168

TABLE 163 FCEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 168

TABLE 164 FCEVS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 168

11 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE 169

11.1 INTRODUCTION 170

11.1.1 RESEARCH METHODOLOGY 170

11.1.2 ASSUMPTIONS 170

11.1.3 PRIMARY INSIGHTS 170

FIGURE 39 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE, 2022 VS. 2027 171

TABLE 165 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE, 2018-2021 (MILLION UNITS) 171

TABLE 166 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE, 2022-2027 (MILLION UNITS) 171

TABLE 167 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE, 2018-2021 (USD MILLION) 172

TABLE 168 ELECTRIC VEHICLE RELAY MARKET, BY RELAY TYPE, 2022-2027 (USD MILLION) 172

11.2 MAIN RELAYS 172

11.2.1 INCORPORATION IN BATTERY DISCHARGE UNITS 172

TABLE 169 MAIN RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 173

TABLE 170 MAIN RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 173

TABLE 171 MAIN RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 173

TABLE 172 MAIN RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 173

11.3 PRECHARGE RELAYS 174

11.3.1 INCREASE IN USE OF BATTERY ELECTRIC VEHICLES 174

TABLE 173 PRECHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 174

TABLE 174 PRECHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 174

TABLE 175 PRECHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 174

TABLE 176 PRECHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 175

11.4 QUICK CHARGE RELAYS 175

11.4.1 GROWING DEMAND FOR FAST-CHARGING CAPABILITIES IN ELECTRIC VEHICLES 175

TABLE 177 QUICK CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 175

TABLE 178 QUICK CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 176

TABLE 179 QUICK CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 176

TABLE 180 QUICK CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 176

11.5 NORMAL CHARGE RELAY 177

11.5.1 NEED FOR SAFETY IN ELECTRIC VEHICLE CHARGING SYSTEMS 177

TABLE 181 NORMAL CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 177

TABLE 182 NORMAL CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 177

TABLE 183 NORMAL CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 177

TABLE 184 NORMAL CHARGE RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 178

11.6 HIGH VOLTAGE ACCESSORIES RELAYS 178

11.6.1 INCREASED DEMAND FOR COMFORT, SAFETY, AND ENTERTAINMENT FEATURES 178

TABLE 185 HIGH VOLTAGE ACCESSORIES RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 178

TABLE 186 HIGH VOLTAGE ACCESSORIES RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 179

TABLE 187 HIGH VOLTAGE ACCESSORIES RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 179

TABLE 188 HIGH VOLTAGE ACCESSORIES RELAYS: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 179

12 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE 180

12.1 INTRODUCTION 181

12.1.1 RESEARCH METHODOLOGY 181

12.1.2 ASSUMPTIONS 181

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12.1.3 PRIMARY INSIGHTS 181

FIGURE 40 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE, 2022 VS. 2027 182

TABLE 189 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE, 2018-2021 (MILLION UNITS) 182

TABLE 190 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE, 2022-2027 (MILLION UNITS) 182

TABLE 191 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE, 2018-2021 (USD MILLION) 183

TABLE 192 ELECTRIC VEHICLE RELAY MARKET, BY AMPERE, 2022-2027 (USD MILLION) 183

12.2 5A-15A RELAY 183

12.2.1 DEMAND FOR RELAYS IN ANCILLARY SYSTEMS 183

TABLE 193 5A-15A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 183

TABLE 194 5A-15A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 184

TABLE 195 5A-15A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 184

TABLE 196 5A-15A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 184

12.3 16A-35A RELAY 184

12.3.1 DEPLOYMENT IN COMFORT FEATURES 184

TABLE 197 16A-35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 185

TABLE 198 16A-35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 185

TABLE 199 16A-35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 185

TABLE 200 16A-35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 185

12.4 >35A RELAY 186

12.4.1 DEMAND FROM POWERTRAIN AND BATTERY MANAGEMENT SYSTEMS 186

TABLE 201 >35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 186

TABLE 202 >35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 186

TABLE 203 >35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 186

TABLE 204 >35A: ELECTRIC VEHICLE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 187

13 AUTOMOTIVE RELAY MARKET, BY REGION 188

13.1 INTRODUCTION 189

13.1.1 RESEARCH METHODOLOGY 189

13.1.2 ASSUMPTIONS 189

13.1.3 INDUSTRY INSIGHTS 190

FIGURE 41 AUTOMOTIVE RELAY MARKET, BY REGION, 2022 VS. 2027 (USD MILLION) 190

13.1.4 AUTOMOTIVE RELAY MARKET, BY REGION 190

TABLE 205 AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (MILLION UNITS) 190

TABLE 206 AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (MILLION UNITS) 191

TABLE 207 AUTOMOTIVE RELAY MARKET, BY REGION, 2018-2021 (USD MILLION) 191

TABLE 208 AUTOMOTIVE RELAY MARKET, BY REGION, 2022-2027 (USD MILLION) 191

13.2 ASIA PACIFIC 192

FIGURE 42 ASIA PACIFIC: AUTOMOTIVE RELAY MARKET SNAPSHOT 192

TABLE 209 ASIA PACIFIC: AUTOMOTIVE RELAY MARKET, BY COUNTRY, 2018-2021 (MILLION UNITS) 193

TABLE 210 ASIA PACIFIC: AUTOMOTIVE RELAY MARKET, BY COUNTRY, 2022-2027 (MILLION UNITS) 193

TABLE 211 ASIA PACIFIC: AUTOMOTIVE RELAY MARKET, BY COUNTRY, 2018-2021 (USD MILLION) 193

TABLE 212 ASIA PACIFIC: AUTOMOTIVE RELAY MARKET, BY COUNTRY, 2022-2027 (USD MILLION) 194

13.2.1 CHINA 194

13.2.1.1 Stringent regulations shift focus toward safety features 194

TABLE 213 CHINA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 194

TABLE 214 CHINA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 195

TABLE 215 CHINA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 195

TABLE 216 CHINA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 195

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13.2.2 INDIA 196

13.2.2.1 Increased purchasing ability and growing population 196

TABLE 217 INDIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 196

TABLE 218 INDIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 196

TABLE 219 INDIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 196

TABLE 220 INDIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 197

13.2.3 JAPAN 197

13.2.3.1 Growing demand for advanced technology 197

TABLE 221 JAPAN: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 197

TABLE 222 JAPAN: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 198

TABLE 223 JAPAN: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 198

TABLE 224 JAPAN: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 198

13.2.4 SOUTH KOREA 199

13.2.4.1 Environmental regulations and growth in demand for electric vehicles 199

TABLE 225 SOUTH KOREA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 199

TABLE 226 SOUTH KOREA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 199

TABLE 227 SOUTH KOREA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 200

TABLE 228 SOUTH KOREA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 200

13.2.5 THAILAND 200

13.2.5.1 Stringent emission regulations and increased tourism 200

TABLE 229 THAILAND: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 201

TABLE 230 THAILAND: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 201

TABLE 231 THAILAND: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 201

TABLE 232 THAILAND: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 202

13.2.6 INDONESIA 202

13.2.6.1 Rapidly growing electric vehicles market 202

TABLE 233 INDONESIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (MILLION UNITS) 202

TABLE 234 INDONESIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (MILLION UNITS) 203

TABLE 235 INDONESIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2018-2021 (USD MILLION) 203

TABLE 236 INDONESIA: AUTOMOTIVE RELAY MARKET, BY VEHICLE TYPE, 2022-2027 (USD MILLION) 203

Automotive Relay Market by Relay Type, Application, Ampere, Vehicle Type, Electric Vehicle Relay Market by Ampere, Electric Vehicle Relay Market by Relay Type, Electric Vehicle Relay Market by Vehicle Type, Region - Global Forecast to 2027

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