

# Global Automotive Air Conditioner Market Research Report 2017

<https://marketpublishers.com/r/GB5A56A9CC4EN.html>

Date: January 2017

Pages: 122

Price: US\$ 2,900.00 (Single User License)

ID: GB5A56A9CC4EN

## Abstracts

### Notes:

Production, means the output of Automotive Air Conditioner

Revenue, means the sales value of Automotive Air Conditioner

This report studies Automotive Air Conditioner in Global market, especially in North America, Europe, China, Japan, Korea and Taiwan, focuses on top manufacturers in global market, with capacity, production, price, revenue and market share for each manufacturer, covering

Valeo

Mahle

Visteon

Envicool

Highly

SONGZ

Aotecar

Market Segment by Regions, this report splits Global into several key Regions, with production, consumption, revenue, market share and growth rate of Automotive Air Conditioner in these regions, from 2011 to 2021 (forecast), like

North America

Europe

China

Japan

Korea

Taiwan

Split by product type, with production, revenue, price, market share and growth rate of each type, can be divided into

Single Functional Type

Integration of Changes in Temperature Type

Split by application, this report focuses on consumption, market share and growth rate of Automotive Air Conditioner in each application, can be divided into

Passenger Car

Commerical Car

## Contents

### Global Automotive Air Conditioner Market Research Report 2017

## **1 AUTOMOTIVE AIR CONDITIONER MARKET OVERVIEW**

- 1.1 Product Overview and Scope of Automotive Air Conditioner
- 1.2 Automotive Air Conditioner Segment by Type
  - 1.2.1 Global Production Market Share of Automotive Air Conditioner by Type in 2015
  - 1.2.2 Single Functional Type
  - 1.2.3 Integration of Changes in Temperature Type
- 1.3 Automotive Air Conditioner Segment by Application
  - 1.3.1 Automotive Air Conditioner Consumption Market Share by Application in 2015
  - 1.3.2 Passenger Car
  - 1.3.3 Commercial Car
  - 1.3.4 Application
- 1.4 Automotive Air Conditioner Market by Region
  - 1.4.1 North America Status and Prospect (2012-2022)
  - 1.4.2 Europe Status and Prospect (2012-2022)
  - 1.4.3 China Status and Prospect (2012-2022)
  - 1.4.4 Japan Status and Prospect (2012-2022)
  - 1.4.5 Korea Status and Prospect (2012-2022)
  - 1.4.6 Taiwan Status and Prospect (2012-2022)
- 1.5 Global Market Size (Value) of Automotive Air Conditioner (2012-2022)

## **2 GLOBAL AUTOMOTIVE AIR CONDITIONER MARKET COMPETITION BY MANUFACTURERS**

- 2.1 Global Automotive Air Conditioner Production and Share by Manufacturers (2015 and 2016)
- 2.2 Global Automotive Air Conditioner Revenue and Share by Manufacturers (2015 and 2016)
- 2.3 Global Automotive Air Conditioner Average Price by Manufacturers (2015 and 2016)
- 2.4 Manufacturers Automotive Air Conditioner Manufacturing Base Distribution, Sales Area and Product Type
- 2.5 Automotive Air Conditioner Market Competitive Situation and Trends
  - 2.5.1 Automotive Air Conditioner Market Concentration Rate
  - 2.5.2 Automotive Air Conditioner Market Share of Top 3 and Top 5 Manufacturers
  - 2.5.3 Mergers & Acquisitions, Expansion

### **3 GLOBAL AUTOMOTIVE AIR CONDITIONER PRODUCTION, REVENUE (VALUE) BY REGION (2012-2017)**

- 3.1 Global Automotive Air Conditioner Production by Region (2012-2017)
- 3.2 Global Automotive Air Conditioner Production Market Share by Region (2012-2017)
- 3.3 Global Automotive Air Conditioner Revenue (Value) and Market Share by Region (2012-2017)
- 3.4 Global Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.5 North America Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.6 Europe Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.7 China Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.8 Japan Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.9 Korea Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)
- 3.10 Taiwan Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

### **4 GLOBAL AUTOMOTIVE AIR CONDITIONER SUPPLY (PRODUCTION), CONSUMPTION, EXPORT, IMPORT BY REGIONS (2012-2017)**

- 4.1 Global Automotive Air Conditioner Consumption by Regions (2012-2017)
- 4.2 North America Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)
- 4.3 Europe Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)
- 4.4 China Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)
- 4.5 Japan Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)
- 4.6 Korea Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)
- 4.7 Taiwan Automotive Air Conditioner Production, Consumption, Export, Import (2012-2017)

## **5 GLOBAL AUTOMOTIVE AIR CONDITIONER PRODUCTION, REVENUE (VALUE), PRICE TREND BY TYPE**

- 5.1 Global Automotive Air Conditioner Production and Market Share by Type (2012-2017)
- 5.2 Global Automotive Air Conditioner Revenue and Market Share by Type (2012-2017)
- 5.3 Global Automotive Air Conditioner Price by Type (2012-2017)
- 5.4 Global Automotive Air Conditioner Production Growth by Type (2012-2017)

## **6 GLOBAL AUTOMOTIVE AIR CONDITIONER MARKET ANALYSIS BY APPLICATION**

- 6.1 Global Automotive Air Conditioner Consumption and Market Share by Application (2012-2017)
- 6.2 Global Automotive Air Conditioner Consumption Growth Rate by Application (2012-2017)
- 6.3 Market Drivers and Opportunities
  - 6.3.1 Potential Applications
  - 6.3.2 Emerging Markets/Countries

## **7 GLOBAL AUTOMOTIVE AIR CONDITIONER MANUFACTURERS PROFILES/ANALYSIS**

- 7.1 Valeo
  - 7.1.1 Company Basic Information, Manufacturing Base and Its Competitors
  - 7.1.2 Automotive Air Conditioner Product Type, Application and Specification
    - 7.1.2.1 Single Functional Type
    - 7.1.2.2 Integration of Changes in Temperature Type
  - 7.1.3 Valeo Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)
  - 7.1.4 Main Business/Business Overview
- 7.2 Mahle
  - 7.2.1 Company Basic Information, Manufacturing Base and Its Competitors
  - 7.2.2 Automotive Air Conditioner Product Type, Application and Specification
    - 7.2.2.1 Single Functional Type
    - 7.2.2.2 Integration of Changes in Temperature Type
  - 7.2.3 Mahle Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

#### 7.2.4 Main Business/Business Overview

### 7.3 Visteon

#### 7.3.1 Company Basic Information, Manufacturing Base and Its Competitors

#### 7.3.2 Automotive Air Conditioner Product Type, Application and Specification

##### 7.3.2.1 Single Functional Type

##### 7.3.2.2 Integration of Changes in Temperature Type

#### 7.3.3 Visteon Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

#### 7.3.4 Main Business/Business Overview

### 7.4 Envicool

#### 7.4.1 Company Basic Information, Manufacturing Base and Its Competitors

#### 7.4.2 Automotive Air Conditioner Product Type, Application and Specification

##### 7.4.2.1 Single Functional Type

##### 7.4.2.2 Integration of Changes in Temperature Type

#### 7.4.3 Envicool Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

#### 7.4.4 Main Business/Business Overview

### 7.5 Highly

#### 7.5.1 Company Basic Information, Manufacturing Base and Its Competitors

#### 7.5.2 Automotive Air Conditioner Product Type, Application and Specification

##### 7.5.2.1 Single Functional Type

##### 7.5.2.2 Integration of Changes in Temperature Type

#### 7.5.3 Highly Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

#### 7.5.4 Main Business/Business Overview

### 7.6 SONGZ

#### 7.6.1 Company Basic Information, Manufacturing Base and Its Competitors

#### 7.6.2 Automotive Air Conditioner Product Type, Application and Specification

##### 7.6.2.1 Single Functional Type

##### 7.6.2.2 Integration of Changes in Temperature Type

#### 7.6.3 SONGZ Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

#### 7.6.4 Main Business/Business Overview

### 7.7 Aotecar

#### 7.7.1 Company Basic Information, Manufacturing Base and Its Competitors

#### 7.7.2 Automotive Air Conditioner Product Type, Application and Specification

##### 7.7.2.1 Single Functional Type

##### 7.7.2.2 Integration of Changes in Temperature Type

#### 7.7.3 Aotecar Automotive Air Conditioner Production, Revenue, Price and Gross

Margin (2015 and 2016)

7.7.4 Main Business/Business Overview

## **8 AUTOMOTIVE AIR CONDITIONER MANUFACTURING COST ANALYSIS**

8.1 Automotive Air Conditioner Key Raw Materials Analysis

8.1.1 Key Raw Materials

8.1.2 Price Trend of Key Raw Materials

8.1.3 Key Suppliers of Raw Materials

8.1.4 Market Concentration Rate of Raw Materials

8.2 Proportion of Manufacturing Cost Structure

8.2.1 Raw Materials

8.2.2 Labor Cost

8.2.3 Manufacturing Expenses

8.3 Manufacturing Process Analysis of Automotive Air Conditioner

## **9 INDUSTRIAL CHAIN, SOURCING STRATEGY AND DOWNSTREAM BUYERS**

9.1 Automotive Air Conditioner Industrial Chain Analysis

9.2 Upstream Raw Materials Sourcing

9.3 Raw Materials Sources of Automotive Air Conditioner Major Manufacturers in 2015

9.4 Downstream Buyers

## **10 MARKETING STRATEGY ANALYSIS, DISTRIBUTORS/TRADERS**

10.1 Marketing Channel

10.1.1 Direct Marketing

10.1.2 Indirect Marketing

10.1.3 Marketing Channel Development Trend

10.2 Market Positioning

10.2.1 Pricing Strategy

10.2.2 Brand Strategy

10.2.3 Target Client

10.3 Distributors/Traders List

## **11 MARKET EFFECT FACTORS ANALYSIS**

11.1 Technology Progress/Risk

11.1.1 Substitutes Threat

- 11.1.2 Technology Progress in Related Industry
- 11.2 Consumer Needs/Customer Preference Change
- 11.3 Economic/Political Environmental Change

## **12 GLOBAL AUTOMOTIVE AIR CONDITIONER MARKET FORECAST (2017-2022)**

12.1 Global Automotive Air Conditioner Production, Revenue and Price Forecast (2017-2022)

12.1.1 Global Automotive Air Conditioner Production and Growth Rate Forecast (2017-2022)

12.1.2 Global Automotive Air Conditioner Revenue and Growth Rate Forecast (2017-2022)

12.1.3 Global Automotive Air Conditioner Price and Trend Forecast (2017-2022)

12.2 Global Automotive Air Conditioner Production, Consumption, Import and Export Forecast by Regions (2017-2022)

12.2.1 North America Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.2.2 Europe Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.2.3 China Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.2.4 Japan Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.2.5 Korea Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.2.6 Taiwan Automotive Air Conditioner Production, Revenue, Consumption, Export and Import Forecast (2017-2022)

12.3 Global Automotive Air Conditioner Production, Revenue and Price Forecast by Type (2017-2022)

12.4 Global Automotive Air Conditioner Consumption Forecast by Application (2017-2022)

## **13 RESEARCH FINDINGS AND CONCLUSION**

## **14 APPENDIX**

Methodology

Analyst Introduction

Data Source



The report requires updating with new data and is sent in 2-3 business days after order is placed.

## List Of Tables

### LIST OF TABLES AND FIGURES

Figure Picture of Automotive Air Conditioner

Figure Global Production Market Share of Automotive Air Conditioner by Type in 2015

Figure Product Picture of Single Functional Type

Table Major Manufacturers of Single Functional Type

Figure Product Picture of Integration of Changes in Temperature Type

Table Major Manufacturers of Integration of Changes in Temperature Type

Table Automotive Air Conditioner Consumption Market Share by Application in 2015

Figure Passenger Car Examples

Figure Commercial Car Examples

Figure North America Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure Europe Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure China Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure Japan Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure Korea Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure Taiwan Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Figure Global Automotive Air Conditioner Revenue (Million USD) and Growth Rate (2012-2022)

Table Global Automotive Air Conditioner Capacity of Key Manufacturers (2015 and 2016)

Table Global Automotive Air Conditioner Capacity Market Share by Manufacturers (2015 and 2016)

Figure Global Automotive Air Conditioner Capacity of Key Manufacturers in 2015

Figure Global Automotive Air Conditioner Capacity of Key Manufacturers in 2016

Table Global Automotive Air Conditioner Production of Key Manufacturers (2015 and 2016)

Table Global Automotive Air Conditioner Production Share by Manufacturers (2015 and 2016)

Figure 2015 Automotive Air Conditioner Production Share by Manufacturers

Figure 2016 Automotive Air Conditioner Production Share by Manufacturers

Table Global Automotive Air Conditioner Revenue (Million USD) by Manufacturers (2015 and 2016)

Table Global Automotive Air Conditioner Revenue Share by Manufacturers (2015 and 2016)

Table 2015 Global Automotive Air Conditioner Revenue Share by Manufacturers

Table 2016 Global Automotive Air Conditioner Revenue Share by Manufacturers

Table Global Market Automotive Air Conditioner Average Price of Key Manufacturers (2015 and 2016)

Figure Global Market Automotive Air Conditioner Average Price of Key Manufacturers in 2015

Table Manufacturers Automotive Air Conditioner Manufacturing Base Distribution and Sales Area

Table Manufacturers Automotive Air Conditioner Product Type

Figure Automotive Air Conditioner Market Share of Top 3 Manufacturers

Figure Automotive Air Conditioner Market Share of Top 5 Manufacturers

Table Global Automotive Air Conditioner Capacity by Regions (2012-2017)

Figure Global Automotive Air Conditioner Capacity Market Share by Regions (2012-2017)

Figure Global Automotive Air Conditioner Capacity Market Share by Regions (2012-2017)

Figure 2015 Global Automotive Air Conditioner Capacity Market Share by Regions

Table Global Automotive Air Conditioner Production by Regions (2012-2017)

Figure Global Automotive Air Conditioner Production and Market Share by Regions (2012-2017)

Figure Global Automotive Air Conditioner Production Market Share by Regions (2012-2017)

Figure 2015 Global Automotive Air Conditioner Production Market Share by Regions

Table Global Automotive Air Conditioner Revenue by Regions (2012-2017)

Table Global Automotive Air Conditioner Revenue Market Share by Regions (2012-2017)

Table 2015 Global Automotive Air Conditioner Revenue Market Share by Regions

Table Global Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table North America Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table Europe Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table China Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table Japan Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table Korea Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table Taiwan Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2012-2017)

Table Global Automotive Air Conditioner Consumption Market by Regions (2012-2017)

Table Global Automotive Air Conditioner Consumption Market Share by Regions (2012-2017)

Figure Global Automotive Air Conditioner Consumption Market Share by Regions (2012-2017)

Figure 2015 Global Automotive Air Conditioner Consumption Market Share by Regions

Table North America Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table Europe Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table China Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table Japan Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table Korea Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table Taiwan Automotive Air Conditioner Production, Consumption, Import & Export (2012-2017)

Table Global Automotive Air Conditioner Production by Type (2012-2017)

Table Global Automotive Air Conditioner Production Share by Type (2012-2017)

Figure Production Market Share of Automotive Air Conditioner by Type (2012-2017)

Figure 2015 Production Market Share of Automotive Air Conditioner by Type

Table Global Automotive Air Conditioner Revenue by Type (2012-2017)

Table Global Automotive Air Conditioner Revenue Share by Type (2012-2017)

Figure Production Revenue Share of Automotive Air Conditioner by Type (2012-2017)

Figure 2015 Revenue Market Share of Automotive Air Conditioner by Type

Table Global Automotive Air Conditioner Price by Type (2012-2017)

Figure Global Automotive Air Conditioner Production Growth by Type (2012-2017)

Table Global Automotive Air Conditioner Consumption by Application (2012-2017)

Table Global Automotive Air Conditioner Consumption Market Share by Application (2012-2017)

Figure Global Automotive Air Conditioner Consumption Market Share by Application in 2015

Table Global Automotive Air Conditioner Consumption Growth Rate by Application (2012-2017)

Figure Global Automotive Air Conditioner Consumption Growth Rate by Application (2012-2017)

Table Valeo Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Valeo Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Valeo Automotive Air Conditioner Market Share (2015 and 2016)

Table Mahle Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Mahle Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Mahle Automotive Air Conditioner Market Share (2015 and 2016)

Table Visteon Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Visteon Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Visteon Automotive Air Conditioner Market Share (2015 and 2016)

Table Envicool Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Envicool Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Envicool Automotive Air Conditioner Market Share (2015 and 2016)

Table Highly Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Highly Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Highly Automotive Air Conditioner Market Share (2015 and 2016)

Table SONGZ Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table SONGZ Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure SONGZ Automotive Air Conditioner Market Share (2015 and 2016)

Table Aotecar Basic Information, Manufacturing Base, Sales Area and Its Competitors

Table Aotecar Automotive Air Conditioner Production, Revenue, Price and Gross Margin (2015 and 2016)

Figure Aotecar Automotive Air Conditioner Market Share (2015 and 2016)

Table Production Base and Market Concentration Rate of Raw Material

Figure Price Trend of Key Raw Materials

Table Key Suppliers of Raw Materials

Figure Manufacturing Cost Structure of Automotive Air Conditioner

Figure Manufacturing Process Analysis of Automotive Air Conditioner

Figure Automotive Air Conditioner Industrial Chain Analysis

Table Raw Materials Sources of Automotive Air Conditioner Major Manufacturers in

2015

Table Major Buyers of Automotive Air Conditioner

Table Distributors/Traders List

Figure Global Automotive Air Conditioner Production and Growth Rate Forecast (2017-2022)

Figure Global Automotive Air Conditioner Revenue and Growth Rate Forecast (2017-2022)

Figure Global Automotive Air Conditioner Price and Trend Forecast (2017-2022)

Table Global Automotive Air Conditioner Production Forecast by Regions (2017-2022)

Table Global Automotive Air Conditioner Consumption Forecast by Regions (2017-2022)

Figure North America Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table North America Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Figure Europe Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table Europe Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Figure China Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table China Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Figure Japan Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table Japan Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Figure Korea Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table Korea Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Figure Taiwan Automotive Air Conditioner Production, Revenue and Growth Rate Forecast (2017-2022)

Table Taiwan Automotive Air Conditioner Production, Consumption, Export and Import Forecast (2017-2022)

Table Global Automotive Air Conditioner Production Forecast by Type (2017-2022)

Table Global Automotive Air Conditioner Revenue Forecast by Type (2017-2022)

Table Global Automotive Air Conditioner Price Forecast by Type (2017-2022)

Table Global Automotive Air Conditioner Consumption Forecast by Application

(2017-2022)

## I would like to order

Product name: Global Automotive Air Conditioner Market Research Report 2017

Product link: <https://marketpublishers.com/r/GB5A56A9CC4EN.html>

Price: US\$ 2,900.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GB5A56A9CC4EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970