

# ACインダクションモータ

## 特徴

- ・12/24/36/48/72/96VDCバッテ リ用のACインダクションモータ です。
- ・ご要望に応じた高いパフォーマン スと品質を提供します。
- ・ゴルフカートや油圧ポンプの電動 化など幅広いアプリケーションに 使用実績があります。
- ・高いカスタマイズ性があります。



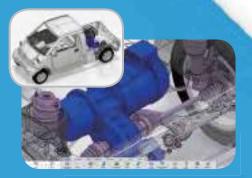
建機向けの一例

・表は一例であり、その他製品もご用意があります。

		ドライブモータ	ポンプモータ
バッテリー電圧	V	24/36/48/72/80	24/36/48/72/80
定格出力	kW	0.7~20	1.5~28
定格回転数	rpm	1500~5000	1500~4500
冷却		空冷または水冷	空冷または水冷
センサー		スピードセンサと 温度センサ	スピードセンサと 温度センサ

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We make quality, We make future

## "We make quality, We make future"

The future is an era of eco-friendly vehicles! We are at the center of it. Based on the best quality, technology and customer satisfaction service, we supply drive motors to manufacturers of industrial electric vehicles, both in Korea and abroad. Furthermore, based on accumulated experience, we are preparing for the second leap through development of driving systems for e-Mobility and expansion of its supply.

We are flexible in responding to market changes and strive to maintain customer confidence. And we create values desired by our customers with on-going research and analysis. This is a natural obligation and reward for customers who trust us.

We will ensure our customer's trust through high-quality process and on-going innovation in the future. In addition, we will create successful future of our customers together with the best service that exceeds expectation.







Electric Forklift [IM]

Pallet Mover [IM]





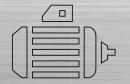
Electric Car [IM]





Golf Car [IM]





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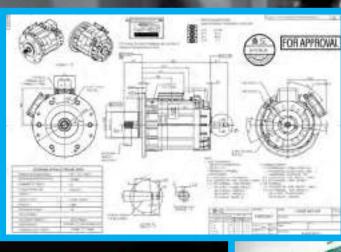


## Our R & D is oriented towards customers. We create the future.

### "We make future!"

We focus on enhancing customer value, from R & D on motors and controllers of industrial electric vehicles to quality assurance processes. Since establishment of the Research Institute in 1998, we have developed and produced the first AC induction motor for electric forklift in Korea and contributed to the localization of driving parts for industrial vehicles. Also, based on this success, we are developing driving systems that can be applied to various industrial vehicles. Currently, we are concentrating our efforts in securing future technology by conducting R & D projects in the field of driving systems for small electric vehicles.







R&D Center



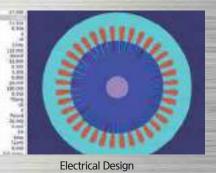
Mechanical Design



Electrical Design



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Components Inspection



Performance Analysis



Performance Test

Electrical Design

## **CounterBalance** Truck

Electric forklift of counter balance type, which is used both indoor and outdoor, requires not only convenience of the customers but also high output and high efficiency. Our company designs and supplies products that satisfy this kind of demand from the customers. The electric forklift is composed of a powerful single type drive motor, a powerful and compact dual type drive motor, and a Pump motor that is optimized for vehicles. This electric forklift is applicable to all electric forklift in the world from 1 ton to 5.5 ton, and can provide a wide range of options including high IP grade, ElectroMagnetic Brake, and external DC FAN.





#### **DRIVE MOTOR**

- AC Induction Motor
- Battery voltage : 24V / 36V / 48V / 72V / 80V
- Rated output : 2.5 ~ 20kW
- Rated speed : 1500 ~ 5000 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- ElectroMagnetic Brake (Option)



Single Type Drive Motor

Dual Type Drive Motor

#### **PUMP MOTOR**

- AC Induction Motor
- Battery voltage : 24V / 36V / 48V / 72V / 80V
- Rated output : 7 ~ 28kW
- Rated speed : 1500 ~ 4500 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- Mounting Bk't (Option)



## WareHouse Truck

Electric in-door warehouse forklift requires higher productivity. To respond to customers' demand, our company provides enhanced performance and excellent durability using AC technology-applied Drive and Pump Motors. It can be applied to all types of Reach Battery Forklift from 1 ton to 3.5 ton with a wide range of options.





#### **DRIVE MOTOR**

- AC Induction Motor
- Battery voltage : 24V / 36V / 48V
- Rated output : 2.5 ~ 8.3kW
- Rated speed : 1500 ~ 5000 rpm
- Air-cooled
- Speed sensor and temperature sensor
- ElectroMagnetic Brake (Option)



Drive Motor

#### **PUMP MOTOR**

- AC Induction Motor
- Battery voltage : 24V / 36V / 48V
- Rated output : 7 ~ 16kW
- Rated speed : 1500 ~ 4500 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- Mounting Bk't (Option)



Pump Motor

## Agricultural Machinery and Industrial Vehicle

Industrial electric vehicles are increasing steadily in number and replacing the internal combustion-type vehicles fast. As the range of its use and importance is expanding, these vehicles are being used not only in-door but out-door as well, at airports, for agriculture, and for various carriers.

Based on accumulated design and manufacturing know-how, Prestolite Asia is leading the market by responding to changing needs of the customers fast and by supplying products that incorporate new technologies.





#### **DRIVE MOTOR**

#### AC Induction Motor

- Battery voltage : 24V / 36V / 48V / 72V / 80V
- Rated output : 0.7 ~ 20kW
- Rated speed : 1500 ~ 5000 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- ElectroMagnetic Brake (Option)

Single Type Drive Motor

Dual Type Drive Motor

#### **PUMP MOTOR**

- AC Induction Motor
- Battery voltage :
- 24V / 36V / 48V / 72V / 80V ■ Rated output : 1.5 ~ 28kW
- Rated output: 1.5 \* 286W
  Rated speed : 1500 ~ 4500 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- Mounting Bk't (Option)



## **Electric Vehicles** and E-Mobility

Due to global environmental regulation, the automobile market is rapidly changing into an electric vehicle market. Especially, low-speed electric vehicles and e-Mobility are attracting much attention as a means of short distance transportation. Although these vehicles do not have strong acceleration, they require excellent performance and high efficiency to ensure sufficient speed and compact design motors. We have employed a high IP grade, so that they can be applied to any external environment.





#### **DRIVE MOTOR**

- AC Induction Motor
- Battery voltage : 48V ~ 330V
- Rated output : 1.5 ~ 110kW
- Rated speed : 1500 ~ 6000 rpm
  Air-cooled or forced cooling
- (including water-cooled) ■ Speed sensor and
- temperature sensor
- ElectroMagnetic Brake (Option)



Drive Motor



Drive Motor

## Utility

Powerful off-road electric UTVs are used worldwide for mountaineering, hunting and agriculture, and the demand is increasing steadily. Prestolite Asia has realized strong power, excellent heat dissipation effect, high IP grade, and durability required by these vehicles. In addition, these vehicles are highly praised by domestic and foreign customers not only for their driving system but also for the hydraulic system that is provided as option through proper product development.





#### **DRIVE MOTOR**

- AC Induction Motor and PM Motor
- Battery voltage: 48V / 72V / 80V
- Rated output : 7 ~ 12kW
- Rated speed : 1500 ~ 6000 rpm
- Air-cooled or forced cooling
- Speed sensor and temperature sensor
- ElectroMagnetic Brake (Option)



Drive Motor



Drive Motor



Drive Motor

# The path we have followed tells about our future.

## "Company History"

Prestolite Asia, which began in 1998 and is now celebrating its 20th anniversary, has been recognized for its outstanding technology while supplying quality products to leading corporations worldwide. We are making every effort to provide best services with accumulated know-how and topnotch technology through successful implementation of diverse tasks.

Based on this strength, we are pioneering into the vast markets of India, China, and Europe, not satisfied with our domestic standing that is rarely challenged. The path we have followed is the way to our customers. In the future, we will always be with our customers as we did in the past.



#### 2014 Developed IPMSM (48V, 5KW) for electric vehicles

- Developed AC controller (72V, 400A)
- 2013 Developed AC controller (48V, 450A)
  - Exported AC motor to Kanto Machinery Transportation Vehicle (Japan)
- 2012 Developed BLAC (SPM) motor

2009~2014

- 2011 Developed high-voltage AC motor for electric bus (110KW)
- 2009 Mass produced AC motors for electric car (LSV) Certified as a venture company and Innobiz company
- 1999 Supplied DC motor to Clark Material Handling Asia
- 1998 Established Prestolite Asia Ltd. Supplied DC motor to Daewoo Heavy Industries

2006 Developed AC motor for electric vehicles

2004 Clean Business Site Certification

Supplied AC motor to Doosan Infracore

2002 Entire items of DC motor UL certified (AU3596)

2001 Supplied DC motor to Hyundai Heavy Industries

1998~2006

#### 2015~2017

2017 Change of the largest shareholder (Hyundai M Partners)2016 Exported AC motor to Vantage Electric Car (U. S.)2015 Single PPM quality innovation company (Doosan Industrial Vehicle)