

Compact drive system for heavy duty applications

CARGOPOWER SYSTEM

Most powerful drive of its kind

Customised
Solutions

Easy Handling

Freedom of Design

Recuperation

Open System



CARGOPOWER

WHEEL HUB DRIVE FOR HEAVY DUTY APPLICATIONS

In its Electric Drives division, HEINZMANN demonstrates innovative strength and development expertise in motor technologies of the future. The company has established itself as a reliable partner and system provider for electric drive systems.

HEINZMANN has developed a drive system for cargo bikes that leaves nothing to be desired. The powerful wheel hub motor combined with proven system components guarantees maximum drive power for professional and commercial applications of all kinds.

HEINZMANN's heavy duty motor CargoPower RN 111 is characterised by innovative technology, robust design and high reliability. It has been specially developed for heavy duty applications. Housing, torque support as well as the very high axle loads have been specifically designed for tough operating conditions.



FEATURES

Wheel hub motor with

- ▶ Planetary gear
- ▶ Oil filling (no derating)
- ▶ High torque at low speed
- ▶ Highest power density of all wheel hub motors
- ▶ Peak power of 1350 W / 113 Nm at 48 volts

Permanent system services

- ▶ 250 watt standard (DIN EN 15194)
- ▶ 125 watt in CargoTwinPower
- ▶ Configuration 500 / 600 Watt (country specific)

Axle loads

- ▶ Front wheel motor 150 kg
- ▶ Rear wheel motor 125 kg
- ▶ Single sided mounting up to 100 kg
- ▶ Heavy duty mounting up to 250 kg

Options

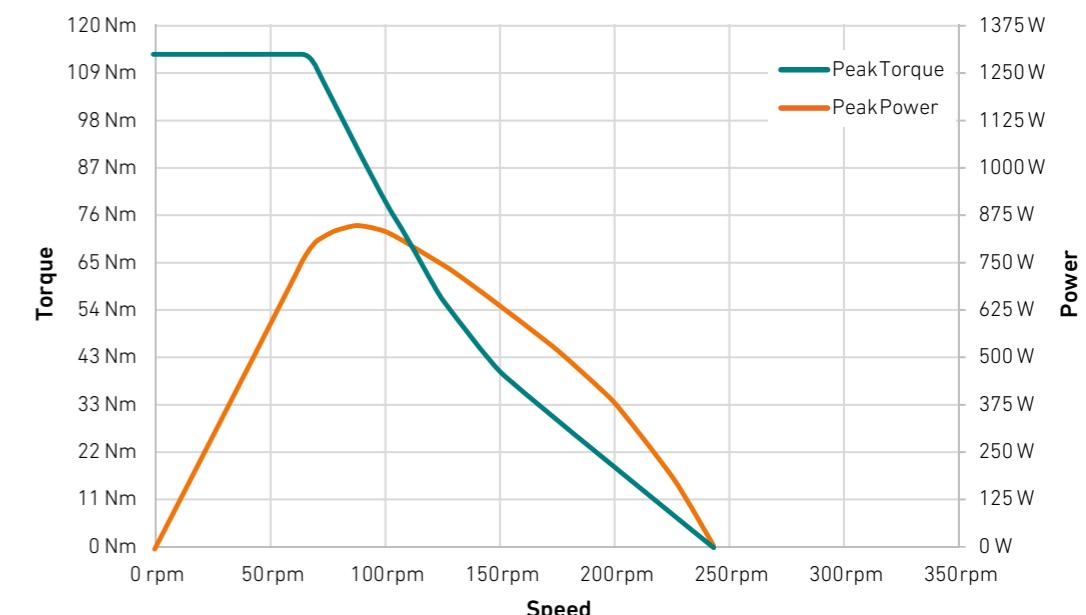
- ▶ Starting aid
- ▶ Reversing
- ▶ Regenerative braking
- ▶ Electronically realised differential gear with CargoTwinPower system
- ▶ Powerboost
- ▶ Integration of different batteries

- ▶ Suitable for any type of bicycle or vehicle
- ▶ Installation variants in the front wheel, rear wheel and as single-sided wheel mounting
- ▶ Controller separate from motor
- ▶ Controller complies with DIN EN 15194 (FuSi)

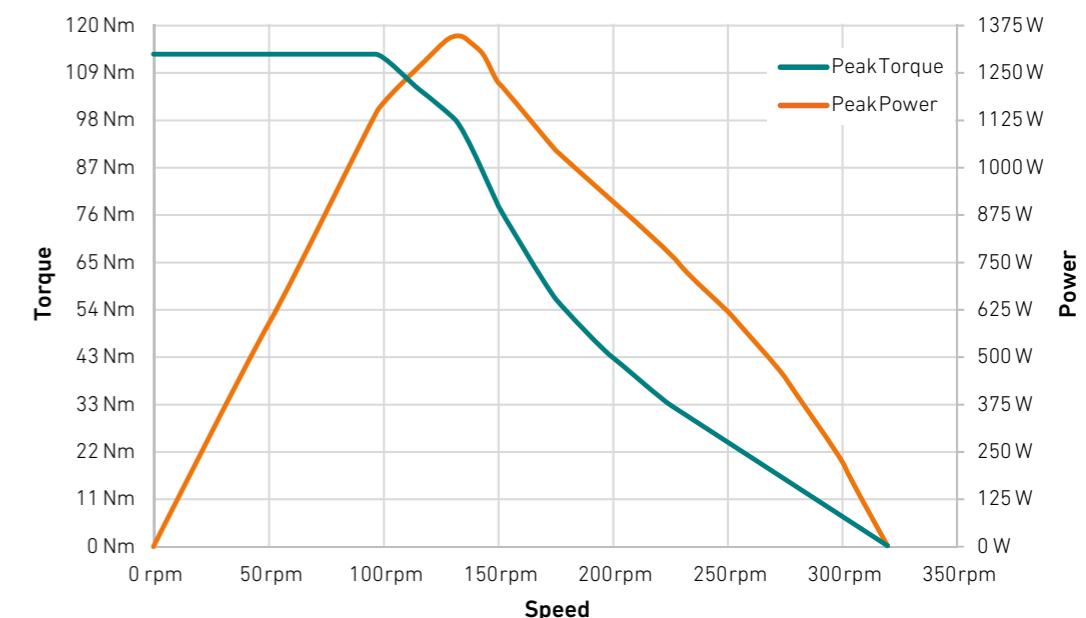
CARGOPOWER MOTOR RN 111

PERFORMANCE AT A GLANCE

RN 111 - 36 VDC



RN 111 - 48 VDC



TECHNICAL DATA

Performance class country-specific	125 W, 250 W, 500 W, 600 W
Voltage	36 / 48 VDC
Max. speed	240 rpm at 36 V, 310 rpm at 48 V
Max. torque	113 Nm
Peak power	1350 W
Degree of protection	IP65
Weight	5.1 kg
Axle load	Front wheel up to 150 kg, Rear wheel up to 125 kg, Single side mounting up to 100 kg
Heavy duty version	Front wheel, Rear wheel up to 250 kg, Single side mounting up to 100 kg

COMPLETE SYSTEM CARGOPOWER

The CargoPower or CargoTwinPower system is the only „open system“ on the market. This allows customised batteries to be integrated.

Whether cadence sensor or torque sensor, whether twist grip or thumb throttle, whether only HMI or optionally with display, the customer decides. Wiring harnesses are customised for optimal routing.

The competent sales team supports the customer in selecting the ideal components for his vehicle.

A team of bicycle technicians supports the customer in setting up a customised new bicycle, rehab vehicle or special vehicle for urban use in HEINZMANN's 300 m² E-Mobility Center.



E-Mobility Center

BENEFITS AT A GLANCE

- ▶ Customised solutions
- ▶ Most powerful motor on the market
- ▶ No derating
- ▶ Reversing possible
- ▶ Recuperation possible
- ▶ Powerboost possible
- ▶ Master / secondary operation configurable
- ▶ DIN EN 15194 complying (FuSi)



*Not included in scope of delivery

SYSTEM VARIANTS

INSTALLATION VARIANT SINGLE TRACK VEHICLE - CargoPower

- High payload up to 300 kg and up to 13.1% uphill increase
- Rated power 250 Watt with 1 motor according to DIN EN 15194
- Optionally front or rear wheel installation
- Vehicle specific parameterisation of the motors



INSTALLATION VARIANT MULTI TRACK VEHICLE - CargoTwinPower

- For vehicle weights up to 500 kg and up to 15.8 % increase on uphill side
- Rated power 2x 125 W / 2x 113 Nm torque of 2 motors according to DIN EN 15194
- Country specific power possible e.g. 2x 250 W Scandinavia / USA
- Single-sided wheel suspension for narrow vehicle designs



APPLICATION EXAMPLES



HEINZMANN GROUP – THINKING IN DRIVE AND CONTROL

HEINZMANN is a globally active family business founded in 1897 with its headquarters in Schönaу (Germany), in the Black Forest.

Today, in the field of engine management HEINZMANN is one of the leading suppliers of components and systems for industrial combustion engines, generators and turbines. As a specialist and development partner, HEINZMANN is committed to developing exactly the right solution for increasing efficiency and reducing emissions.

In the Electric Drives division, HEINZMANN also demonstrates innovative strength and development expertise in engine technologies of the future. The company has established itself as a reliable partner and system provider for electric drive systems.

Our collaborative interaction with more than 40 globally active subsidiaries and sales companies characterizes the spirit within the HEINZMANN group of companies and makes us a reliable partner.

HEINZMANN SUBSIDIARIES

Headquarters HEINZMANN Group	Germany	Korea	Austria
Germany	CPK Automotive GmbH & Co. KG Münster Phone +49 251 777 969-0 info@cpk-automotive.com www.cpk-automotive.com	Heinzmann / Regulateurs Europa Korea Pte. Ltd. Ulsan Phone +82 52 227 7673 heinzmann@korea.com	Heinzmann IFT GmbH Uderns Phone +43 5288 62258-0 office@heinzmann-ift.com www.heinzmann-ift.com
Heinzmann GmbH & Co. KG Schönaу Phone +49 7673 8208-0 info@heinzmann.de www.heinzmann.com	United Kingdom Heinzmann UK Ltd. Middlesbrough Phone +44 1 642 467 484 info@heinzmannuk.com www.heinzmann-turbine-controls.com	The Netherlands Regulateurs Europa B.V. Roden Phone +31 5050 19888 sales@regulateurs-europa.com www.regulateuseuropa.com	South Africa Heinzmann Südafrika Stellenbosch Phone +27 82 6898100 diemont@worldonline.co.za
Australia Heinzmann Australia Pty Ltd Geebung QLD Phone +61 7 3868 3333 info.au@heinzmann.com www.heinzmann.com.au	Regulateurs Europa Ltd. Colchester Phone +44 1206 799 556 sales@regulateuseuropa.com www.regulateuseuropa.com	Norway Heinzmann Automation AS Kleppestø Phone +47 55 26 56 86 post@heinzmann.no www.heinzmann.no	Ukraine Heinzmann / Regulateurs Europa Kiev Phone +38 44 331 96 75 hzm-kiev@hzm.com.ua
China Heinzmann Power Control (Jiaxing) Co. Ltd. Jiashan Phone +86 573 8466 1358 hzm-sh@heinzmann.com www.heinzmann.cn	Giro Engineering Ltd. Southampton, Hampshire Phone +44 1489 885 288 giro@giroeng.com www.giroeng.com	USA Heinzmann / Regulateurs Europa America Inc. Glendale Heights, IL Phone +1 970 484 1863 info.usa@heinzmann.com	ED_CPS_003_24_02_e_1_2024 Subject to alterations. ©Heinzmann GmbH & Co. KG, 2024