

DirectPower PRA 180-25

DATA SHEET



Description

DirectPower E-Bike Drives by HEINZMANN impress with their innovative technology and extreme flexibility.

Thanks to their independent control which is integrated in the battery box they can be used for a variety of systems. The power electronics is not built into the motor. The motor power rating is not affected by the heating of the electronics. Backwards travel is possible for special applications.

Optimised geometry of flanges allows to spoke rims from 20" up to 28" without crossing.

As front wheel or rear wheel drive – HEINZMANN e-bike drives adapt to your requirements. Customised design or colour of choice on request.

Features

Maintenance-free,
noiseless

Brushless and gearless

Front or rear wheel option

Regeneration in front and
rear wheel

Brake disc support

Built in cassette

Separate power electronics
not affected by motor
temperature ensuring
maximum performance

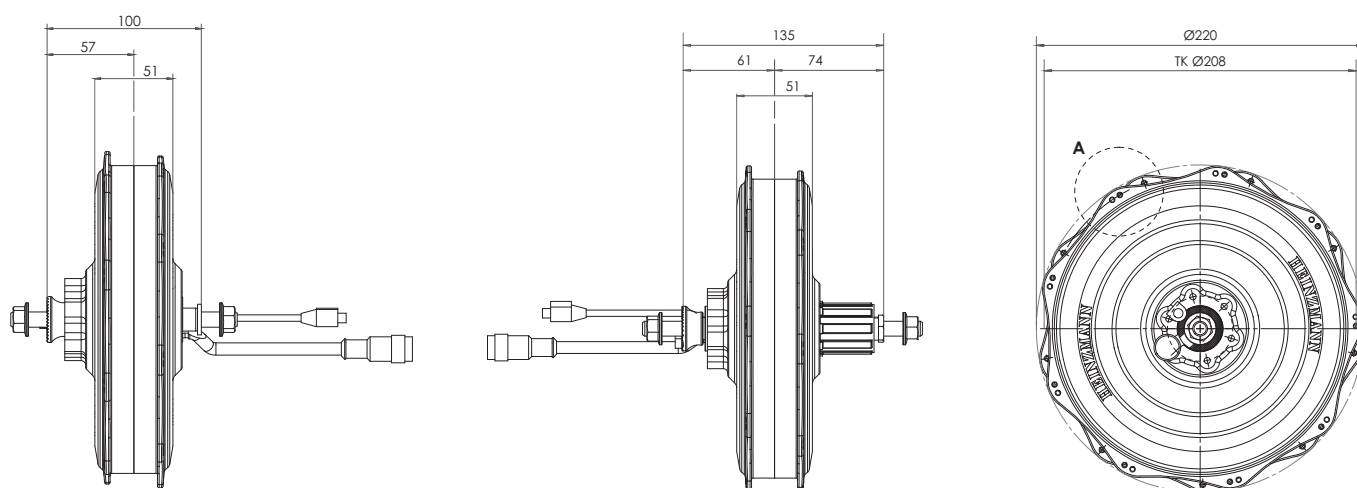
Optimised geometry
of flanges, no crossed
spoking, rim range 20"
up to 28"

Technical data

Motor									
Type	Pedelec			Pedelec 20"			Speed Pedelec ^{*)}		
DC supply voltage	36 VDC								
Rated power	250 W			250 W			500 W		
Nominal speed	210 1/min			275 1/min			380 1/min		
Typical speed limit according to rim size *) Comply with the relevant legal requirements when using	20"	25 km/h		38 km/h		38 km/h			
	24"	32 km/h		42 km/h		42 km/h			
	26"	34 km/h		46 km/h		46 km/h			
	28"	37 km/h		50 km/h		50 km/h			
Weight	4.5 kg front wheel; 4.7 kg rear wheel								
Cooling	Ext. ventilation > 5 m/s								
Operating points									
Operational mode	S1	S2 10 min	S2 4 min	S1	S2 10 min	S2 4 min	S1	S2 10 min	S2 4 min
Rated torque	11.4 Nm	30 Nm	40 Nm	8.7 Nm	30 Nm	40 Nm	12.6 Nm	30 Nm	40 Nm
Related AC current	9.3 A	25 A	33 A	11.6 A	40 A	55 A	17.5 A	40 A	55 A
Impulse torque	60 Nm								

Electrical data			
Type	Pedelec	Pedelec 20"	Speed Pedelec
DC supply voltage	36 VDC		
Motor voltage	22.8 VAC	17.44 VAC	24.25 VAC
EMF constant	84.5 $\frac{V}{1000 \text{ min}^{-1}}$	51.7 $\frac{V}{1000 \text{ min}^{-1}}$	51.7 $\frac{V}{1000 \text{ min}^{-1}}$
Torque constant	1.22 $\frac{\text{Nm}}{\text{A}}$	0.75 $\frac{\text{Nm}}{\text{A}}$	0.75 $\frac{\text{Nm}}{\text{A}}$
Resistance phase-phase	244 m Ω	88 m Ω	88 m Ω
Winding inductance phase-phase	1.4 mH	0.36 mH	0.36 mH
Moment of inertia	102 kg·cm ²		
Degree of protection	IP54		
Sensor system			
Motor feedback	Hall sensors		
Temperature sensor	KTY84-130		

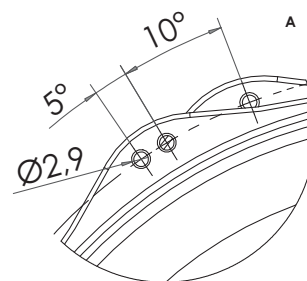
Dimensions



Front wheel

Rear wheel

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