

S T A R T E R M O T O R S

T Y P E	AZD	AZE	AZF	AZG	AZJ
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Iskra

Iskra Avtoelektrika d.d.



MAIN TECHNICAL DATA

Type	AZE65...- nose / AZE66...- noseless	
Nominal voltage (V)	12	24
Rated power (kW)	2.6	3.0
Length-nose	< 205	< 205
Length-noseless (mm)	< 243	< 243
Weight-nose	5.2	5.2
Weight-noseless (kg)	5.5	5.5
Yoke diameter (mm)	90	
Stator	4-pole windings	
Drive assembly	6 rollers	
Solenoid 12 V	pull-in current < 55 A hold-in current < 15 A	
24 V	pull-in current < 30 A hold-in current < 7,5 A	
Terminals	30 - M8, M10 31 - M8 50 - M4, M5, M6, 6.4 x 0.8	
Basic protection	IP56 protection against ingress of dust, solid foreign objects and splashing water	
Ambient temperature	- 40°C to + 110°C	

STARTER MOTORS WITH REDUCTION GEAR AND ELECTRICAL EXCITATION

These are **starter motors** for starting diesel engines in light commercial vehicles, small tractors and agricultural machinery, ships, stationary generator sets, and other applications.

APPLICATIONS

For diesel engines from 2 to 3.5 litre of capacity.

FEATURES

- High specific power output and efficiency.
- Excellent cold crank capability.
- Reduced weight and dimensions in comparison to direct drive starter motors.
- Nose or nose-less versions for specific applications.
- Different pinions, flanges, and electrical connections adjusted to the specific engines.
- Special versions are available on request for harsh ambient condition

DESIGN

Pre-engaged system of starter motor.

Electrical excitation of the motor part.

Epicyclical reduction gear with sintered ring gear and shock absorbers.

Drive assembly with six rollers clutch.

Pinion shift mechanism with solenoid and fork lever.

Solenoid switch with pull-in and hold-in winding.

High quality thermal resistant materials.
Drive end brackets of die cast aluminum.

O-rings for protection against water ingress and special drain holes.

End-of-life Directive 2000/53/EC respected and also free of asbestos, beryllium and ammonia.

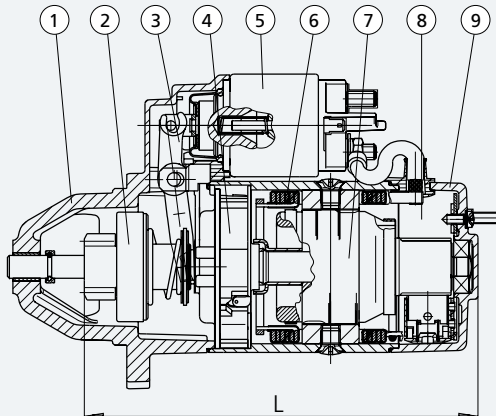
OPTIONS

Dust protection with lip seal on the pinion.

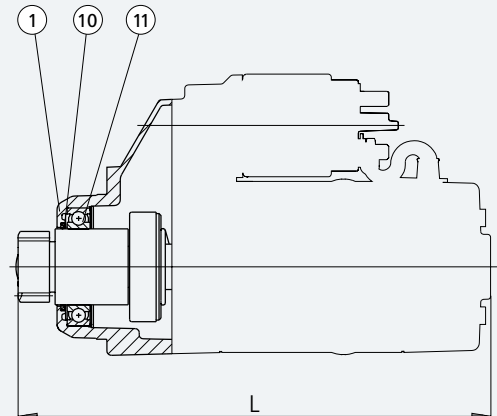
Oil-proof in nose-less version for wet clutch applications.

Insulated ground return version.

CROSS SECTION



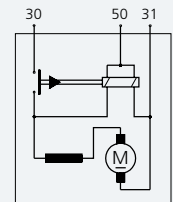
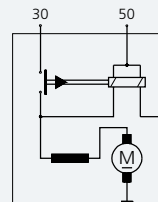
WITH NOSE



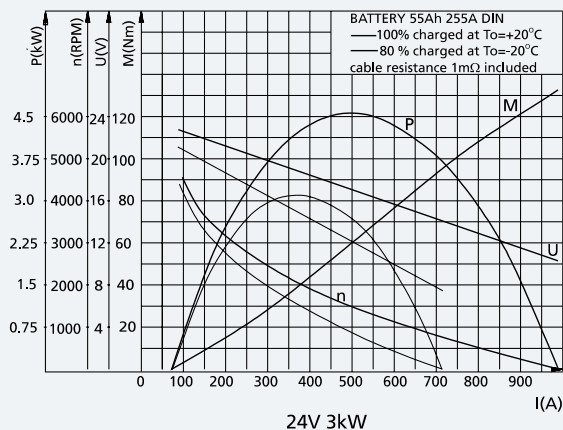
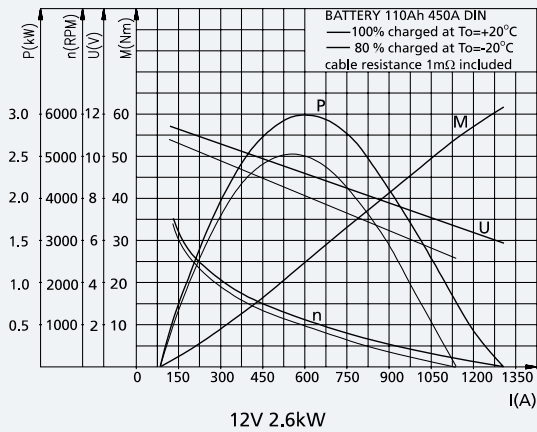
NOSELESS

1. Drive end bracket • 2. Drive assembly • 3. Engaging lever • 4. Reduction gear • 5. Starter switch • 6. Stator
7. Armature • 8. Brush holder • 9. Commutator end bracket • 10. Gasket • 11. Bearing

CONNECTION DIAGRAMS



CHARACTERISTICS



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