



MAIN TECHNICAL DATA				
Туре	AZJ			
Nominal voltage (V)	12		24	
Rated power (kW)	2.7	3.0	3.2	4.0
Length	< 239.5	< 281	< 239.5	< 281
(mm)				
Weight	12.5	13.9	12.5	13.9
(kg)				
Yoke diameter (mm)	115			
Stator	4-pole windings			
Drive assembly	6 rollers			
Solenoid 12V	pull-in current < 62 A			
	hold-in current < 14 A			
24V	pull-in current < 30 A			
	hold-in current < 6 A			
Terminals	30 - M8, M10			
	31 - M8, M10			
	50 - M4, M6, M5, 6.3 x 0.8			
Basic protection	Protected against ingress of dust,			
	solid foreign objects and splashing			
	water (IP 56)			
Ambient temperature	- 40°C to + 110°C			

DIRECT DRIVE STARTER MOTORS

APPLICATIONS

Diesel engines with 3 to 9 litre displacement.

FEATURES

- High specific power output and efficiency.
- High cold crank capability.
- Highly efficient drive assembly for idle run of the pinion.

DESIGN

Nose versions for specific applications on the engine.

Direct drive.

Pinion shift mechanism with solenoid, fork lever and helix.

Solenoid switch with pull-in and hold-in winding and double return spring for effective breaking of the main contacts.

Six-roller clutch and drive assembly is designed to transmit power from the starter motor to the engine.

High quality thermal resistant materials.

Support brackets of grey cast iron, nodular cast iron or die cast aluminium.

Free of asbestos, cadmium, beryllium and ammonia.

Additional dust protection with a lip seal on the pinion.

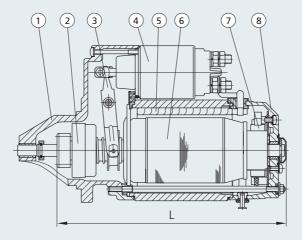
Water protection is achieved with drain holes, O-rings and rubber boot.

Oil-proof versions for wet clutch applications.

Insulated return versions are available.

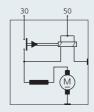


CROSS SECTION



- 1. Drive end bracket 2. Drive assembly 3. Engaging lever 4. Starter switch 5. Stator 6. Armature
- 7. Brush holder 8. Commutator end bracket

CONNECTION DIAGRAMS



3.0 6000 12

2.5 5000 10

2.0 4000 8

1.5 3000 6

1.0 2000 4 20

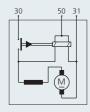
0.5 1000 2 10

60

50

40

30



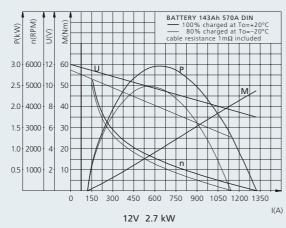
BATTERY 176Ah 790A DIN

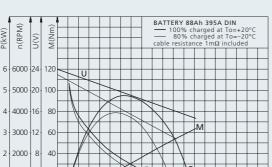
— 100% charged at To=+20°C
— 80% charged at To=-20°C

CHARACTERISTICS

1000 4

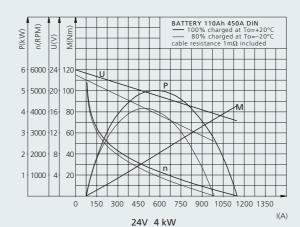
20





24V 3.2 kW

150 300 450 600 750 900 1050 1200 1350



12V 3 kW

150 300 450 600 750 900 1050 1200 1350