

Starter Motor
Type : 3SM114
24V - 3.2 Kw



APPLICATIONS

This is a pre-engaged starter to be used on diesel engines upto 6 litres per cylinder for 6 cylinders.

RATINGS

Electrical
System Voltage : 24V
Thermal
Operating temperature range : -5°C to + 93°C

CHARACTERISTICS

Performance : The typical power, Lock Torque and run Torque values are as stated below:
Power : 3.2 Kw.
Lock Torque : 39 Nm min at 10.5 volts 580 Amps (Max.)
Run Torque : 19.5 Nm at 18.5 volts 400 Amps (Max.) & 1200 R.P.M. min
Dimensions : Principal dimensions are given overleaf. Fully detailed drawings are available on request.
Weight : 12.5 Kgs. approximately

FEATURES

To be rigidly mounted in a spigot location adjacent to the flywheel.

Pinion
Standard pinion from 9 teeth. 8/10DP Module 20° pressure angle.
Alternative pinion forms to suit specific applications by arrangement. Rotation : Normally clockwise (viewed on drive end).

TERMINATIONS

Stud Terminations

Main : M10 x 1.5
Earth : M7 x 1
Solenoid : M6 x 1

Enclosure

Externally protected, except from bell housing against oil and water splash.

PINION DETAILS

No. of Teeth : 9 on 10
Diametral Pitch : 8 / 10
Pressure Angle : 20°
Pitch Circle Dia. : 28.575^{+0.08}
Root Dia. : 25.30^{+0.30}
Outside Dia. : 36.83⁺⁰
Amount of Correction : +1.588^{+0.13}
Span Over Two Teeth : 15.646^{+0.1}
Material : Steel
Hardness : 700Hv. Min

PERFORMANCE TEST VALUES

Electrical - Lock Values

Current (Amps) : 580 Max.
Voltage (Volts) : 10.5
Torque (N-m) : 39 Min

Electrical - Run Test Values

Current (Amps) : 400 Max.
Voltage (Volts) : 18.5
Torque (N-m) : 19.5 Min
Speed (RPM) : 1200 Min

Electrical - Light Test Values

Current (Amps) : 75 Max.
Voltage (Volts) : 23.5
Torque (N-m) : 6000 Min

