

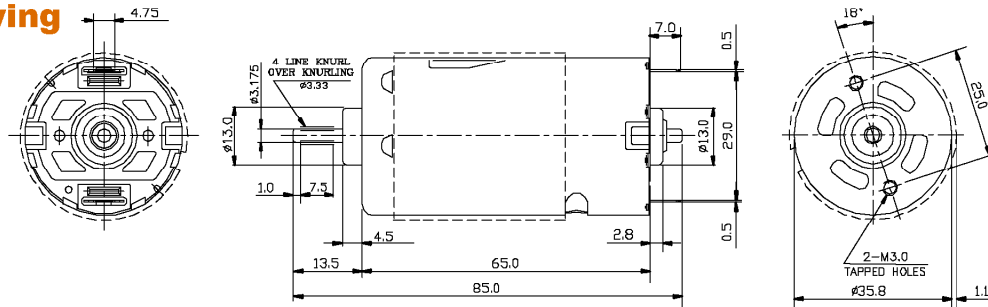
### DC Drill



### Description HC683XLLG

Johnson offers a variety of motors that meet the high voltage demands of cordless drills. Our 36, 42 and 48 mm diameter series of motor satisfy applications from a voltage range of 7.2 to 18V. The motor shown here is the 36 mm diameter motor in 14.4V configuration.

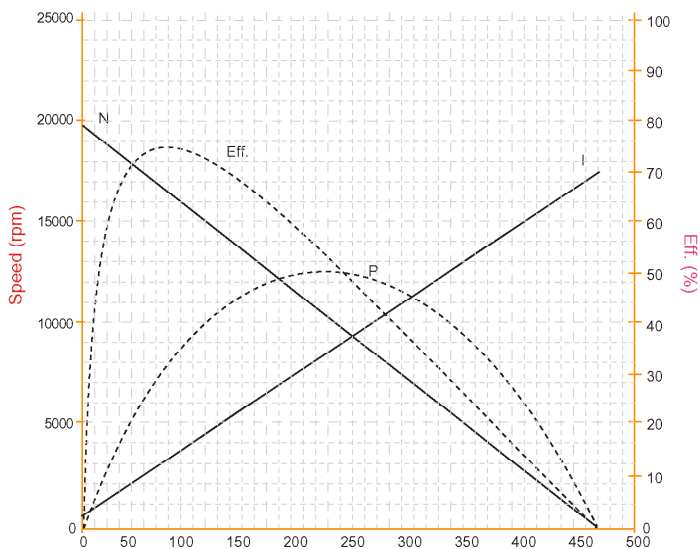
### Drawing



64335 Unit in Millimetres

### Performance data

Model : HC683XLLG - C07/5  
Full Scale : 100 Amp 500 Watts



### Test Conditions

Motor tested rapidly to prevent significant temperature rise.

|                           |         |          |
|---------------------------|---------|----------|
| At a constant voltage of  | 14.40   | Volts    |
| With a circuit resistance | 0.000   | Ohm      |
| Ambient temperature       | 25~30   | deg C    |
| <hr/>                     |         |          |
| At No Load                |         |          |
| Speed                     | 19800   | Rpm      |
| Current                   | 1.573   | Amp      |
| At stall (Extrapolated)   |         |          |
| Torque                    | 475.78  | m-Nm     |
| Current                   | 69.49   | Amp      |
| At maximum efficiency     |         |          |
| Efficiency                | 74.43   | %        |
| Torque                    | 61.85   | m-Nm     |
| Speed                     | 17226   | Rpm      |
| Current                   | 10.40   | Amp      |
| Output                    | 111.50  | Watts    |
| At maximum power          |         |          |
| Torque                    | 237.89  | m-Nm     |
| Speed                     | 9900    | Rpm      |
| Current                   | 35.53   | Amp      |
| Output                    | 246.47  | Watts    |
| <hr/>                     |         |          |
| Characteristics           |         |          |
| Torque Constant :         | 7.0050  | m-Nm/Amp |
| Dy. Resistance :          | 0.2070  | Ohms     |
| Motor Regulation:         | 41.6160 | Rpm/m-Nm |