

Figure 3: Mechanical specification of the 86HS38

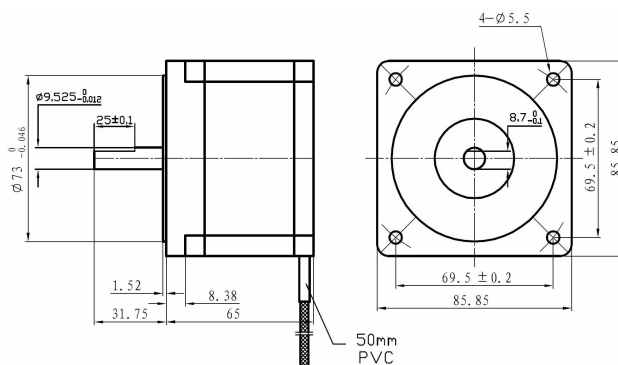


Figure 4: Mechanical specification of the 86HS35

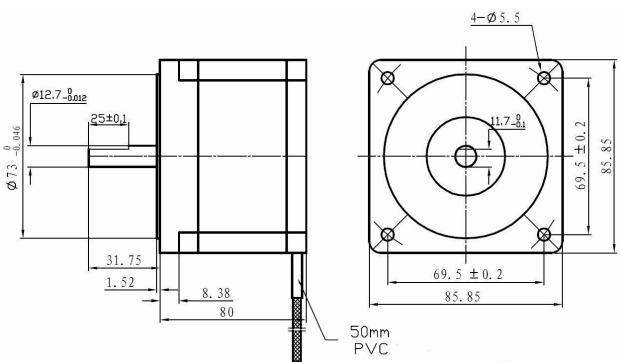


Figure 5: Mechanical specification of the 86HS45

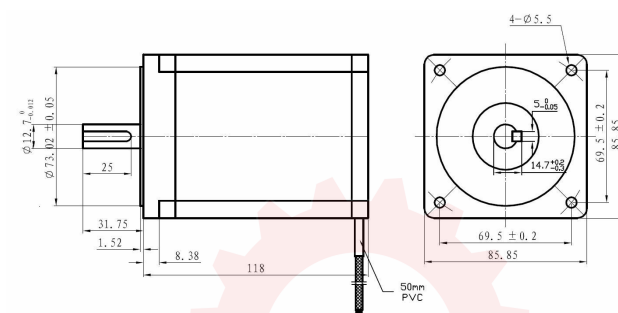
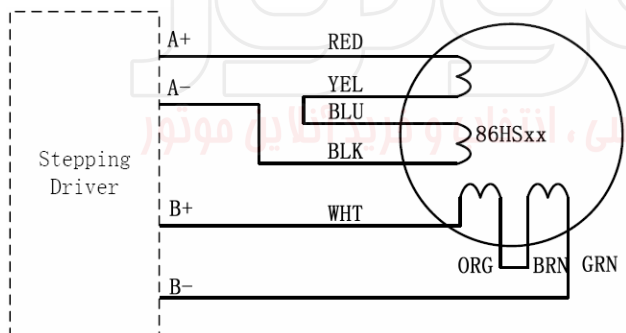
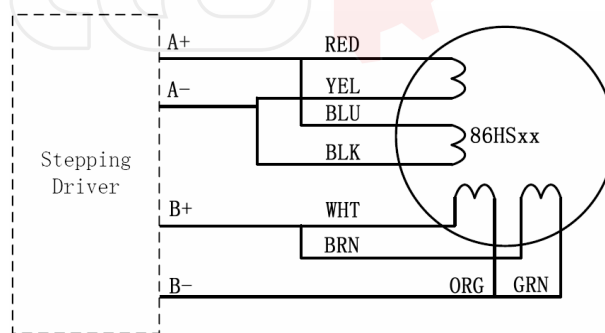


Figure 6: Mechanical specification of the 86HS85

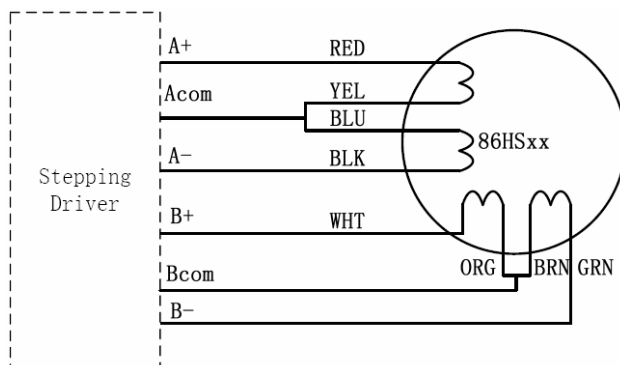
Wiring Diagrams



(a) 86HSxx series connection (8 leads)



(b) 86HSxx parallel connection (8 leads)



(c) 86HSxx unipolar connection (8 leads)

Figure 7: Wiring diagrams



Speed-Torque Characteristics

Unipolar and bipolar half coil, because we're using less turns, doesn't give us great low speed torque, but because of the low inductance, holds the torque out to high speeds. Bipolar series uses the full coil so it gives very good low speed torque. But because of the high inductance, the torque drops off rapidly. Bipolar parallel also uses the full coil so it gives good low speed performance. And its low inductance allows the torque to be held out to high speeds. But remember, we must increase current by 40% to get those advantages. Speed-torque curves show the maximum torques that can be output at a given speed. When selecting a motor, make sure the required torque falls within the particular curve.

• 86HS24

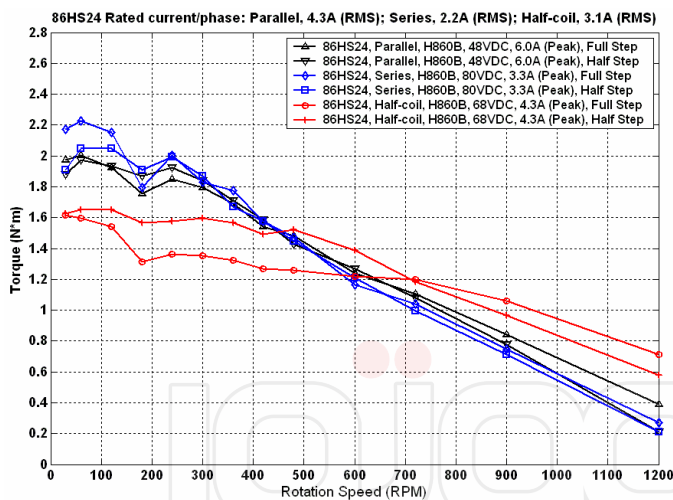


Figure 7: Speed-torque curves of the 86HS24

• 86HS26

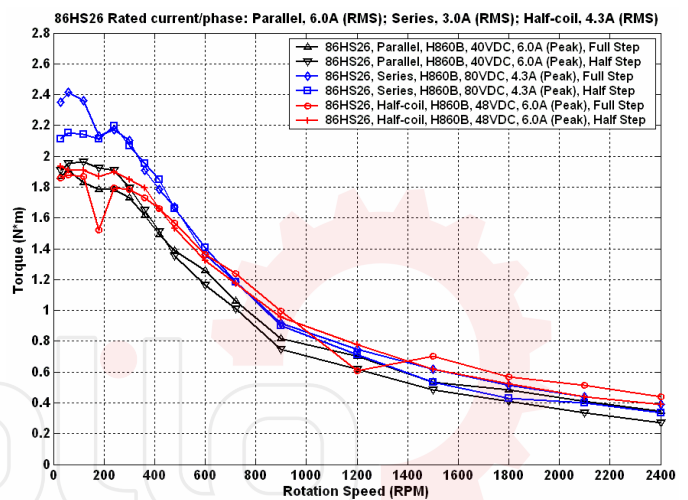


Figure 8: Speed-torque curves of the 86HS26

• 86HS38

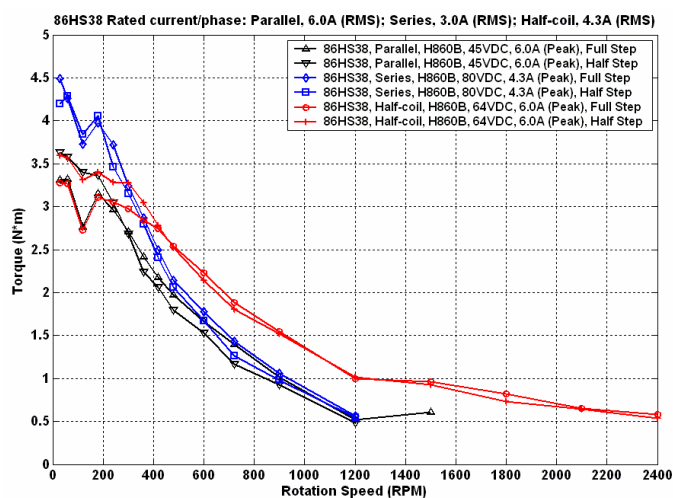


Figure 9: Speed-torque curves of the 86HS38

• 86HS35

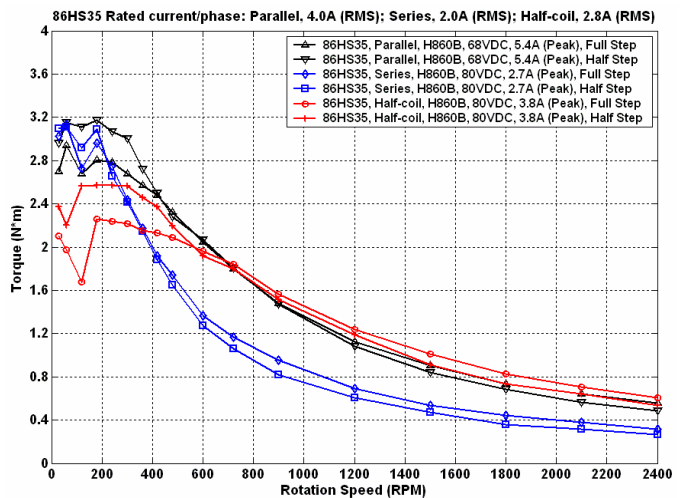


Figure 10: Speed-torque curves of the 86HS35



• 86HS45

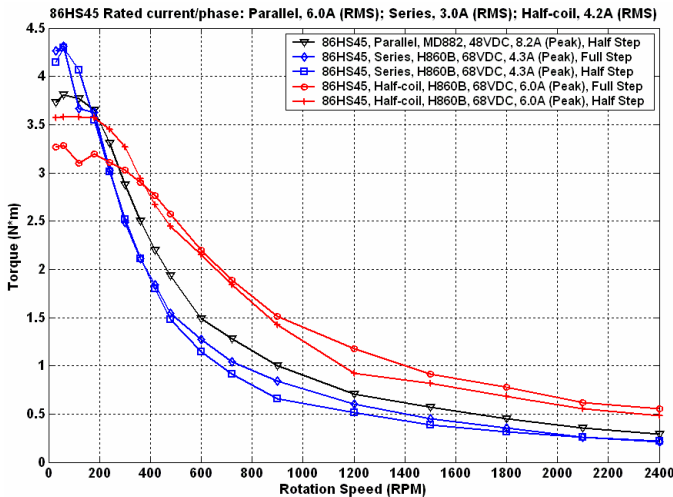


Figure 11: Speed-torque curves of the 86HS45

• 86HS85

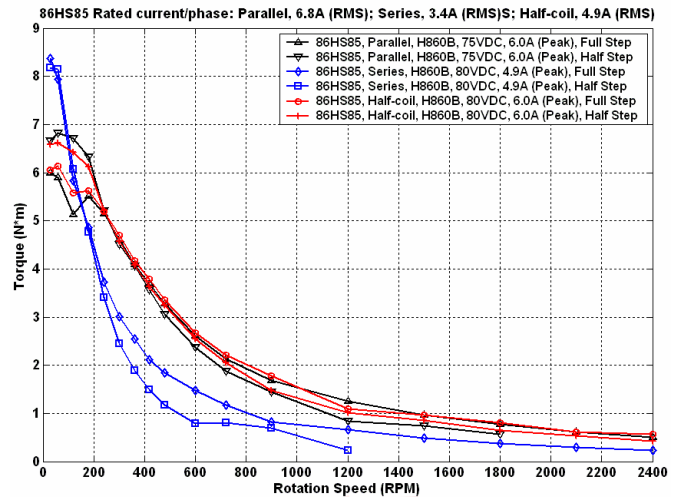


Figure 12: Speed-torque curves of the 86HS85

Remarks:

1. Title "86HS24 Rated current/phase: Parallel, 4.3A (RMS); Series, 2.2A (RMS); Half-coil, 3.1A (RMS)" means "When the 86HS24 used in parallel mode, its current/phase is 4.3A (RMS); When the 86HS24 used in series mode, its current/phase is 2.2A (RMS); When the 86HS24 used in half-coil or unipolar mode, its current/phase is 3.1A (RMS)".
2. Legend "86HS24, Parallel, H860B, 48VDC, 6.0A (Peak), Half Step" means "This speed-torque curve of the 86HS24 (connected in parallel mode) was done with the H860B driver. The settings of the H860B are 6.0A (Peak), Half Step and use 48VDC power supply".
3. The actual characteristics will vary depending on the driver used. Please use these curves only for reference purposes when selecting a motor. You must also conduct a thorough evaluation with the actual driver to be used. Please consult "Leadshine Motor and Driver Packages" for more information about this issue.