

Operating instruction and specifications

Series 70xx

1. Because of the high packing density of the motors the depth for the mounting screws is **max. 10 mm** .
2. The motor controller wires should be soldered directly to 6 mm high current plugs of the motor.
3. The turning direction can be reversed by swapping any two of the three wires at the motor, or by reprogramming the controller.
4. Rpm values of the motors are proportional to the DC voltage at the controller.
The mechanical rpm limits for 70xx series motors is **max. 18000 rpm**.
5. The power increase is proportional to the rpm. Make sure there is good cooling.
Max power of the series 70xx motors:

7025 18000 rpm ca. 15 kW (at η / P_{\max})

7040 18000 rpm ca. 20 kW (at η / P_{\max})

7050 18000 rpm ca. 24 kW (at η / P_{\max})

Our rpm / power data have been determined by using 25° timing.

6. All efficiency figures (η) contain losses of motor and controller. Total efficiency of 91% contains a controller loss of ca. 1 - 2% which corresponds to a pure motor efficiency of ca. 92 - 93%.
7. Series 70xx motors are optimized for partial load through finely segmented rotors.
8. The temperature of the motor must not exceed 100°C because of the risk of thermal destruction.