

# 4.12 Connection diagrams

## Connection of three phases, single speed motors

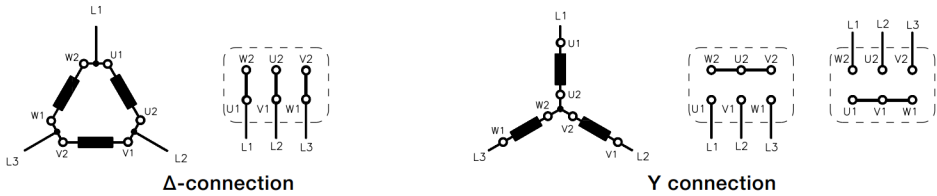


Figure 4.6 Connection of three-phase single-speed motors

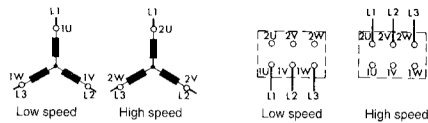
## Connection of two-speed motors

Two-speed motors are normally connected as illustrated below; direction of rotation is discussed in the Standards chapter. Motors of normal design have six terminals and one earth terminal in the terminal box. Motors with two separate windings are normally  $\Delta$ - $\Delta$  connected. They can also be Y/Y, Y/ $\Delta$  or  $\Delta$ /Y connected. Motors with one winding, Dahlander-connection, are connected  $\Delta$ /YY when designed for constant torque drives. For a fan drive, the connection is Y/YY.

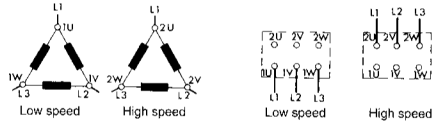
A connection diagram is supplied with every motor.

When starting a motor using Y  $\Delta$  connection, always refer to the connection diagram supplied by the starter manufacturer.

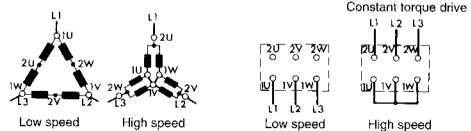
### 1. Two separate windings Y/Y



### 2. Two separate windings $\Delta$ / $\Delta$



### 3. Dahlander-connection $\Delta$ /YY



### 4. Dahlander-connection Y/YY

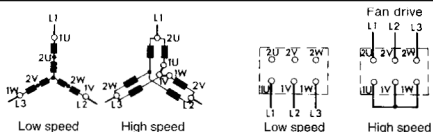


Figure 4.7 Connection options for two-speed motors