
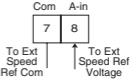
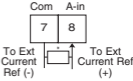
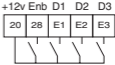


# SMD quick start manual

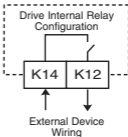
## Frequency Control Wiring – Default = '0', CO1 & C34

|  |   |
|--|---|
| <p><b>Internal Voltage Control</b></p> <p>CO1 = 0, 2, 4, 6, 8 or 10<br/>           C34 = 0</p> <p>Settings in <a href="#">Blue</a> available on all 400V models and 240V versions from 5.5-15kW</p>  |  |
| <p><b>External Voltage Frequency Control</b></p> <p>CO1 = 0, 2, 4, 6, 8 or 10<br/>           C34 = 0 for 0 - 10V range<br/>           1 for 0 - 5V Range</p> <p>Settings in <a href="#">Blue</a> available on all 400V models and 240V versions from 5.5-15kW</p>  |  |
| <p><b>Current Source Speed Control</b></p> <p>CO1 = 0, 2, 4, 6, 8 or 10<br/>           C34 = 2 for 0 - 20mA Range<br/>           3 for 4 - 20mA Range</p> <p>Settings in <a href="#">Blue</a> available on all 400v models and 230V versions from 5.5-15kW<br/>           *250 External Resistor: Not Required on 400V smd and 230V smd from 5.5-1.5KW</p> |  |

## Digital Input Control Wiring

|  |   |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
|--|---|-----------------|-----------------------|------------------|---|-------------|----------------------|---------------|---------------------------|--------------------|----------------|-----------------|--|
| <p>T28 = Drive Enable</p> <p>E1 Function Set by CE1 - Default = '1'<br/>           E2 Function Set by CE2 - Default = '4'<br/>           E3 Function Set by CE3 - Default = '3'</p>  |  |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| <p><b>Digital Input Functions</b></p> <table border="0"> <tbody> <tr> <td>1 = Jog Speed 1 (C37)</td> <td>6 = CW Rotation</td> </tr> <tr> <td>2 = Jog Speed 2 (C38)</td> <td>7 = CCW Rotation</td> </tr> <tr> <td>Jog Speed 3 (C39) both terminals = High</td> <td>8 = MPot Up</td> </tr> <tr> <td>3 = DC Braking (DCB)</td> <td>9 = MPot Down</td> </tr> <tr> <td>4 = Direction of Rotation</td> <td>10 = Activate Trip</td> </tr> <tr> <td>5 = Quick Stop</td> <td>11 = Reset Trip</td> </tr> </tbody> </table> | 1 = Jog Speed 1 (C37)   | 6 = CW Rotation | 2 = Jog Speed 2 (C38) | 7 = CCW Rotation | Jog Speed 3 (C39) both terminals = High | 8 = MPot Up | 3 = DC Braking (DCB) | 9 = MPot Down | 4 = Direction of Rotation | 10 = Activate Trip | 5 = Quick Stop | 11 = Reset Trip |  |
| 1 = Jog Speed 1 (C37)  | 6 = CW Rotation   |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| 2 = Jog Speed 2 (C38)  | 7 = CCW Rotation  |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| Jog Speed 3 (C39) both terminals = High  | 8 = MPot Up   |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| 3 = DC Braking (DCB)   | 9 = MPot Down   |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| 4 = Direction of Rotation  | 10 = Activate Trip  |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |
| 5 = Quick Stop   | 11 = Reset Trip   |                 |                       |                  |   |             |                      |               |                           |                    |                |                 |  |

## Terminal Relay Wiring - Default = '1'

|   |   |
|---|---|
| <p>Relay Energised If;</p> <p>CO8 = 0 - Drive Ready<br/>           CO8 = 1 - Drive in Fault Trip<br/>           CO8 = 2 - Motor Running<br/>           CO8 = 3 - Motor Running Clockwise<br/>           CO8 = 4 - Motor Running Counter-Clockwise<br/>           CO8 = 5 - Output Frequency = 0Hz<br/>           CO8 = 6 - Motor Reached Frequency Set-point<br/>           CO8 = 7 - Threshold Set in C17 Exceeded<br/>           CO8 = 8 - Drive Operating in Current Limit</p> |  |
|---|---|



# SMD quick start manual

## Parameter Settings:

### C01: Control Source - Default = '0'

C01 = '0' analog input (terminal 8) / Control = terminals. Programming = keypad  
Set to change source of analog input, control and programming (See manual)

### C10: Minimum Output Frequency - Default = '0Hz'

Set to Minimum Frequency for Application. Provides low limit for input of 0V

### C11: Maximum Output Frequency - Default = '50Hz'

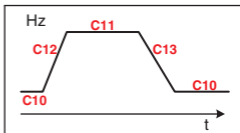
Set to Maximum Frequency for Application

### C12: Acceleration Time - Default = '5s'

Set to required Acceleration Time  
Time for Frequency Change of 0Hz to C11

### C13: Deceleration Time - Default = '5s'

Set to required Deceleration Time  
Time for Frequency Change of C11 to 0Hz



### C14: Operating Mode - Default = '2' (Linear V/F)

- 0 - Linear Characteristic with Auto-Boost – For Standard Applications
- 1 - Square Law Characteristic with Auto-Boost – For Fans & Pumps with Square Law Characteristics
- 2 - Linear Characteristic with constant Vmin boost – For Standard Applications (See Parameter C16)
- 3 - Square Law Characteristic with constant Vmin boost – For Fans & Pumps with Square Law Characteristics (See Parameter C16)

### C15: V/f Reference Point - Default = '50Hz'

Set to Motor Rated Frequency

### C22: Current Limit - Default = '150%'

Limits the maximum available current from the smd in order to protect the mechanics and/or to provide a better thermal protection for the motor.  
Set the value to the minimum required for the application.

### C90: Input Voltage Selection - Default = '2' (200 - 230V Drives) Default = '1' (400 - 480V Drives)

- 0 - Auto – Detected at first power up
- 1 - Low – For 200V or 400V input Voltage
- 2 - High – For 230V or 480V input Voltage

Always check this parameter at first power up to ensure correct setting.

### c20: I<sup>2</sup>t Switch Off (Thermal Motor Monitoring) – Default '100%'

Calculate for Motor Rated Current. 100% = full drive rated output current.  
e.g. Motor Full Load Current = 2.1A. Drive Nominal Output Current = 2.5A  
Setting =  $(2.1/2.5) \times 100 = 84\%$