## S100 suggested LED KEYPAD basic settings for Normal Duty applications (FANS, PUMPS, etc)

|                    | Parameter                                   | Description                                | Unit    | Default set | *Suggested setting | Notes  |  |  |  |  |
|--------------------|---|--|---------|-------------|--------------------|--|--|--|--|--|
|                    | Acc   | Accelerating time                          | seconds | *20.0       | 5 to 60            | Increase if overcurrent 'OCt' trip occurs on accelerating. If PID control, set = 0.1   |  |  |  |  |
| Operation<br>Group |   | Decelerating time                          | seconds | **30.0      | 20 to 60           | Increase if overvolt 'Oui' trip occurs on stopping or decelerating. If PID control, set = 0.1  |  |  |  |  |
|                    | Drv   | Command source                             | _       | 1           | 1                  | Connect 'RUN FORWARD' contact between terminals 'P1' and 'CM' or '24' . Close to RUN, open to STOP.  |  |  |  |  |
|                    | Frq   | Frequency Ref source                       | _       | 0           | 2 or 5             | Set 2 if using 0-10V input on terminal 'V1'. Set 5 if using mA signal on terminal 'I2'   |  |  |  |  |
| 0                  |   |  |         |             |                    |  |  |  |  |  |
| , in the second    | No more essential parameters in this group  |  |         |             |                    |  |  |  |  |  |
|                    | d= 00                                       | Osman Maria                                |         | 0           |                    | 0 - V/F  |  |  |  |  |
|                    |   | Control Mode                               | -<br>KW | 0<br>*      | 0                  | 0 = V/F control for light duty applications  |  |  |  |  |
|                    | dr.14<br>dr.18                              | Motor power (Capacity) Base Frequency      | Hz      | 60.00       | 50.00              | Factory set 1:1 to inverter size. Change if lower or higher power motor is connected especially when using dual rating.  Set to frequency shown on motor rating plate (normally 50Hz in UK/Europe) |  |  |  |  |
| ive<br>ur          |   | Max. Output Frequency                      | Hz      | 60.00       | 50.00              | Sets maximum allowable frequency (motor speed) - reduce to 50.00 for UK/European motors.   |  |  |  |  |
| Drive<br>Group     | ur.20                                       | Max. Output Frequency                      | ПZ      |             |                    |  |  |  |  |  |
| 7 0                | No more essential parameters in this group  |  |         |             |                    |  |  |  |  |  |
|                    | dr.93                                       | Parameter Initialize                       | -       | -           | 0                  | Set to 1 to set ALL groups back to factory set values. Other options available see User Manual for details.  |  |  |  |  |
|                    | -   |  |         |             |                    |  |  |  |  |  |
|                    | bA.10                                       | Input Power Frequency                      | Hz      | 0           | 1                  | 0' = 60Hz, 1 = 50Hz. Set to '1' (50Hz) if using in UK/Europe etc   |  |  |  |  |
|                    | bA.11                                       | Pole number                                | -       | 4           | As required        | Check motor rating plate rpm data. ie, 1500 (-1 to -10%) = 4, 1000 (-1 to -10%) = 6, 3000 (-1 to -10%) = 2, etc  |  |  |  |  |
| Basic<br>Group     | bA.13                                       | Motor rated current                        | Α       | -           | As required        | Set to motor rating plate current. (Be careful to use the correct value if star/delta or 50/60Hz values are given)   |  |  |  |  |
| as                 | bA.15                                       | Motor rated voltage                        | V       | -           | As required        | Set to motor rating plate value or leave at '0'. Note: '0' means inverter output voltage = inverter input voltage  |  |  |  |  |
| G B                | bA.19                                       | AC Input voltage                           | V       | 380         | 400                | Set to 400V or whatever the input line to line voltage is.   |  |  |  |  |
|                    | No more essential parameters in this group  |  |         |             |                    |  |  |  |  |  |
|                    | No more essential parameters in this group  |  |         |             |                    |  |  |  |  |  |
|                    | Ad.08                                       | Stop Mode                                  |         | 0           | As required        | 0 = decelerate (ramp) to stop. 2 = coast (freewheel) to stop.  |  |  |  |  |
|                    | Ad.24                                       | Frequency limits select                    |         | 0           | As required        | Set to 1 to allow changes to upper and lower frequency (speed) limits  |  |  |  |  |
| Q                  |   | Low Limit                                  | Hz      | 0.50        | 0.50 (or higher)   | Set to 1 to allow changes to upper and lower frequency (speed) limits  |  |  |  |  |
| dı<br>1b           |   | High Limit                                 | Hz      | 60.00       | 50.00 (or lower)   |  |  |  |  |  |
| dvance<br>Group    |   | Cooling Fan operation                      | -       | 0           |                    | 0 = Fan operates when inverter output is ON; 2 = Fan operates on internal thermostat (Only when required)  |  |  |  |  |
| Advanced<br>Group  | 710101                                      | Cooming I am operation                     |         | ű           | _                  | Tail operated when inverted earparts on, 2 — Fail operated on internal aleitheorax (only when required)  |  |  |  |  |
| ٩                  | No more essential parameters in this group  |  |         |             |                    |  |  |  |  |  |
|                    | ito more coscilida parametero in tino group |  |         |             |                    |  |  |  |  |  |
|                    |   |  |         | _           |                    |  |  |  |  |  |
| <b>-</b> .         | Cn.04                                       | Carrier Frequency                          | kHz     | 3           | As required        | Inrease if low audible motor noise is required. Keep value low if enclosure is small or motor cable is long  |  |  |  |  |
| Control<br>Group   |   |  |         |             |                    |  |  |  |  |  |
| on<br>Sro          |   | No more essential parameters in this group |         |             |                    |  |  |  |  |  |
| 0 0                | The more described parameters in and group  |  |         |             |                    |  |  |  |  |  |
|                    |   |  |         |             |                    |  |  |  |  |  |
|                    | In.01                                       | O/P Hz at max signal V1 or I2              | Hz      | dr.20       | As required        |  |  |  |  |  |
|                    | In.08                                       | Terminal 'V1' min. volts                   | V       | 0.00        | Ö                  | Sets terminal 'V1' minimum voltage for external potentiometer operation.   |  |  |  |  |
| 7 0                | In.09                                       | Output frequency at In.08                  | %       | 0.00        | As required        | Fixes the motor / output frequency when terminal 'V1' is at voltage set in parameter In.08   |  |  |  |  |
| Input<br>Group     | In.10                                       | Terminal 'V1/I2                            | V       | 10          | 10                 | Sets terminal 'V1' maximum voltage for external potentiometer operation.   |  |  |  |  |
| 1 G                |   | Output frequency at In.10                  | %       | 100.00      | As required        | Fixes the motor / output frequency when terminal 'V1' is at voltage set in parameter In.10   |  |  |  |  |
|                    | In.53                                       | Terminal 'I2' min. current                 | mA      | 4.00        | 0.00 or 4.00       | Sets terminal 'I2' minimum current when an external milli Amp loop is used to give the speed reference   |  |  |  |  |
|                    |   | Output frequency at In.53                  | Hz      | 0           | As required        | Fixes the motor / output frequency when terminal 'I2' is at mA level set in parameter In.53  |  |  |  |  |
|                    | -   |  |         |             | 11 11              |  |  |  |  |  |

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| ut             | ln.55                                      | Terminal 'I2' max. current | mA | 20.00  | 20.00       | Sets terminal 'I2' maximum current when an external milli Amp loop is used to give the speed reference                       |  |  |
|----------------|--|----------------------------|----|--------|-------------|--|--|--|
| Input<br>Group | In.56                                      | Output frequency at In.55  | %  | 100.00 | As required | Fixes the motor / output frequency when terminal 'l' is at mA level set in parameter In.55                                   |  |  |
|                |  | -                          |    |        |             |  |  |  |
|                | Pr.04                                      | Load Duty                  | -  | 1      | 0           | Set to '0' for normal duty applications or if motor is one size bigger (KW) than inverter rating (KW) (IP20 models only)     |  |  |
| stion<br>up    | Pr.05                                      | Phase-loss protection      | -  | Binary | As required | Set to '01' for output (motor) phase loss protection, '10' for input phase loss protection, and '11' for both                |  |  |
|                | Pr.21                                      | Overload Trip level        | %  | 180    | 110 - 120   | Sets fault detection level for overload. The set level will be maintained for 60s or for Pr.22 setting then drive will trip. |  |  |
| Protec<br>Grou | No more essential parameters in this group |                            |    |        |             |  |  |  |

<sup>\*\*\*3.0</sup>kHz up to 22KW

Denotes MUST check / set parameters for best operation

All others are relative to the design requirements of the equipment and/or application or environment.

\*Suggested Setting - values shown are application typical only. Other setting values may be more appropriate.

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