



FM40432

International Lift Equipment Ltd.

SIEI AGY QUICK GUIDE

To access the inverter parameters press the **Prg** button.

Each time the button is pressed a different menu is displayed so all the menus can be stepped through.

The available menus are:-

Menu d – DISPLAY (Menu of read-only parameters displaying values of current / speed etc)

Menu S – STARTUP (Menu of all the basic site parameters)

Menu I – INTERFACE (Menu of input / output settings)

Menu F – FREQ & RAMP (Menu of multi frequencies and ramp settings)

Menu P – PARAMETER (Full menu of all inverter parameters)

Menu A – APLICATION (Menu of all PID function settings)

Menu C – COMMAND (Menu of control type parameters)

Menu H – HIDDEN (N/A)

The main parameters which need to be adjusted on site are highlighted below

The **Prg** button should be pressed until group **S STARTUP** is displayed and all the parameters should be checked within this group.

S000 – Mains voltage (420 v)

S001 – Mains frequency (50 Hz)

S100 – Base voltage (As motor data plate)

S101 – Base frequency (As motor data plate)

S150 – Motor rated current (As motor data plate)

S151 – Motor pole pairs (2 pairs for 1500 RPM 3 pairs for 1000 RPM)

S152 – Motor power factor (As motor data plate)

S153 – Motor stator resistance (As autotune measurement)

S170 – Measure stator resistance (Autotune) Set to yes and confirm then give a test direction within 2 seconds until done is displayed (parameter S153 should now display stator resistance)

S180 – Car max speed (Speed in m/s $V=0.05236 \times \text{RPM} \times \text{SHEAVE}(\text{in } M) \times \text{GEAR RATIO} \times \text{ROPING}(1=1:1 \ 0.5=2:1)$)

S200 – Frequency ref 0 = 4 Hz (levelling speed)

S201 – Frequency ref 1 = 15 Hz (test speed)

S204 – Frequency ref 4 = 47 Hz (rated speed)

S230 – Jerk acc ini 1 = 0.5 m/s³ (jerk at start of acceleration in m/s³)

S231 – Acceleration 1 = 0.6 m/s² (Linear acceleration rate in m/s²)

S232 – Jerk acc end 1 = 1.0 m/s³ (jerk at end of acceleration in m/s³)

S233 – Jerk dec ini 1 = 1.0 m/s³ (jerk at start of deceleration in m/s³)

S234 – Deceleration 1 = 0.6 m/s² (Linear deceleration in m/s²)

S235 – Jerk dec end 1 = 0.75 m/s³ (Jerk at end of deceleration in m/s³)

S250 – Cont close delay = 0.2 secs (Delay time for energising of MC & MC1)

S251 – Magnet time = 0.5 secs (Duration of the D.C. injection at start)

S252 – Brake open delay = 0.3 secs (Delay time of the brake opening)

S254 – DC brake stop time = 0.5 secs (Duration of the D.C. injection after zero speed at stop)

S255 – Brake close delay = 0.3 secs (Delay time for closing the brake)

S256 – Cont open delay = 0.4 secs (Delay time for de-energising MC & MC1)

S260 – Lift stop mode = 1 normal stop (Mode for stopping D.C. injection or normal stop)

S300 – Manual boost = 3.0 % (Voltage boost at low speed to maintain machine flux)

S301 – Auto boost enable = 1 enabled (Automatic boost function as above)

S310 – Slip comp motoring = 50 (adjust for accurate levels under varying loads open loop)

S311 – Slip comp regen = 50 (adjust for accurate levels under varying loads open loop)

S400 – Control mode = (As lift system open / closed loop controls)

S401 – Encoder resolution (as encoder ppr e.g. 1024, 2048 e.t.c.)

S901 – Save parameters = yes (MOST IMPORTANT parameters must be stored after adjustment or they will be lost when power is removed)