MAB-QUICK GUIDE

- **ALL MAB BOOSTER SETS ARE FACTORY TESTED & PRE-SET WITH THE DUTY PARAMETERS AS PER YOUR QUOTATION. IF NO DUTY AVAILABLE ALL BOOSTER SETS WILL BE SET AT THEIR MOST EFFICIENT POINT ON THE PUMP CURVE.**

- **IF YOU HAVE TO ADJUST THE SET POINT TO SUIT THE INSTALLATION, WE ADVISE THAT YOU DO NOT INCREASE OR DECREASE THE SET POINT BY MORE THAN 0.5 BAR EACH WAY WITHOUT CONTACTING OUR TECHNICAL DEPARTMENT TO MAKE THE SURE THE PUMP WILL STILL BE OPERATING ON ITS CURVE. THIS COULD AFFECT THE MANUFACTURERS WARRANTY IF YOU EXCEED THE ABOVE PARAMETERS WITHOUT SPEAKING TO STUART TURNER.**

ADJUST SET POINT ON MAB CONTROL PANELS

- **PRESS DOWN ARROW. FULL LIST OF PARAMETERS WILL BE SHOWN ON THE SCREEN. HIGHTLIGHT "SET POINTS" & PRESS RESET BUTTON. ENTER CODE 174 USING UP & DOWN ARROWS TO ADJUST. ONCE 174 SHOWING ON THE SCREEN PRESS RESET. THIS WILL NOW SHOW SEVERAL SETTINGS. TO ADJUST THE SET POINT (TARGET PRESSURE) YOU MUST ALSO ADJUST THE TOP VALUE (SHOULD ALWAYS BE 1.0 BAR DIFFERENTIAL BETWEEN THE TWO SETTINGS). TO ADJUST TOP VALUE HIGHLIGHT AND ADJUST ACCORDINGLY THEN PRESS RESET BUTTON TO UNHIGHLIGHT AND MOVE DOWN TO SETPOINT AND REPEAT THE ABOVE TO CHANGE ACCORDINGLY. THEN UNHIGHLIGHT AND SCROLL DOWN TO THE BOTTOM OF THE SCREEN. HIGHLIGHT THE "N" AND CHANGE TO "Y" THEN PRESS RESET TO SAVE. IT WILL THEN AUTOMATICALLY GO BACK TO MAIN SCREEN.**

- **N.B. ONCE YOU HAVE ADJUSTED THE SET POINT YOU MUST CHARGE THE PRESSURE VESSEL ACCORDINGLY. THIS CAN ONLY BE DONE WHEN YOU HAVE NO PRESSURE IN THE SYSTEM. THE VESSEL PRESSURE CHARGE MUST ALWAYS BE 0.5 BAR BELOW THE SET POINT PRESSURE.**

TECHNICAL SUPPORT (INSERT CONTACT NUMBER REQUIRED)

COMMON FAULT CODES ON MAB CONTROLLER

Error messages pump controller with frequency inverter

The error "Er001" to "Er199" are error messages. The red LED lights. The alarm relay switches.

error Er002 : Motor overload (O.C.) Motor protection tripping. Reduce pump power. Adjust motor protection!
error Er003 : Over voltage DC link (O.E.) Mains over voltage; Check check valves. Call service!
error Er004 : Phase error mains input (P.F1) phase failure. Check fuses. Check mains voltage.
error Er005 : Overload converter (O.L1) Inverter Check power; Check pump performance. Set parameters!
error Er006 : Under voltage (L.U.) Mains voltage error. Check fuses, check mains voltage.
error Er007 : Over temperature converter (O.H.) Inverter too hot. Reduce carrier frequency. Cooling defective?
error Er008 : Overload inverter (O.L2) Inverter Check power; Check pump performance. Set parameters!
error Er009 : Under-load inverter (Err)? Engine load too low during operation. Check engine performance?
error Er011 : External error ESP. Enter wrong password on the frequency converter
error Er012 : wrong password Frequency converter (ERR1) Frequency converter defective. Call service!
error Er013 : Error motor parameter ERR2. Set inverter to factory setting! Call service!
error Er014 : Over current at standstill ERR3. Motor load at standstill too high. Pump is blocked! Call service!
error Er015 : Error current measurement ERR4. Frequency converter defective. Exchange the FU. Call service!
error Er016 : Motor overload (OC1) Motor protection tripping. Reduce pump power. Adjust motor protection!
error Er017 : Phase error motor (PF0) Motor phase interrupted. Check motor cable, check engine.
error Er018 : Wire break analog signal (AErr) Set inverter to factory setting! Call service!
error Er019 : Under load inverter (EP3). Engine load too low during operation. Check engine performance?
error Er020 : Under load inverter (EP). Engine load too low during operation. Check engine performance?
error Er021 : Under load inverter (EP2). Engine load too low during operation. Check engine performance?
error Er022 : Sleep mode nP. Set inverter to factory setting! Call service!
error Er023 : Inverter parameter incorrect (ERR5) Set inverter to factory setting! Call service!
error Er026 : Check ground fault in cable or motor or FU (GP) wiring, drive and drive! Call service!
error Er032 : Inverter parameter incorrect (PCE) Set inverter to factory setting! Call service!
error Er035 : Fault PTC thermistor tripping (O.H1). The PTC thermistor has tripped. Improve cooling.
error Er044 : Inverter parameter incorrect (ERR5) Set inverter to factory setting! Call service!
error Er045 : Communication error frequency converter (CE). Modbus address wrong; Check ModBus?
error Er046 : Master - Slave connection faulty (FL). F930 not set correctly. Check keypad setting!
error Er047 : EEPROM error in frequency converter (EEEP) Reset inverter! Call service!
error Er049 : Watchdog error (Em6) Check inverter settings! Call service!
error Er050 : Torque control error (?) Check inverter settings!
error Er053 : Communication error Check keypad (CE1) F930. Check setting on the FI operator part!
error Er067 : Motor overload (OC2) Motor protection tripping. Reduce pump power. Adjust motor protection!

Error messages pump controller

error Er101 : Communication error with the frequency converter Modbus address wrong; Modbus connection defective. Check connection or address
error Er102 : Sensor 1 open. The sensor connection is open. Check cable connection!
error Er103 : Error sensor 1. The sensor value is out of tolerance. .Sensor defect?
error Er104 : Sensor 2 open. The sensor connection is open. Check cable connection!
error Er105 : Error sensor 2. The sensor value is out of tolerance. .Sensor defect?
error Er106 : Error sensor Check deviation between S1 + S2 set tolerance (%). Sensor defect?
error Er107 : Error internal pressure deficiency protection has triggered. Check setting or water inlet!
error Er108 : Error dry running electronically. Dry running protection has triggered .. Check water supply!
error Er109 : Error of external drought protection has triggered. Check setting or water inlet!
error Er110 : Error dry run externally. The external dry run protection has tripped. Check water supply!
error Er111 : Error the set limit pressure has been exceeded. Check system. Set limit pressure!
error Er112 : Error emergency stop (SMS). The plant was set to emergency stop by SMS. Reset only on the system!
error Er113 : Error the set lower limit has fallen below. Check system. Set limit!
error Er114 : External an external error was triggered. Monitoring function for an external system.
error Er115 : Error over temperature control (inverter). The controller gets too hot. Cooling defective?
error Er116 : Enable inverter is missing (software). Dig. Inverter input missing, defective, or not parameterized.
error Er117 : Error modem. An error has occurred during the modem connection. Call service!
error Er118 : Error lack of flow. The flow has fallen below. Check system / flow limit!
error Er119 : Error switching. The switching frequency was exceeded; Clock operation. Check check valves!
error Er120 : Error reaches maximum runtime; Leakage. Run time adjustment, or check check valves.
error Er121 : Error U-pump monitor has tripped. Check water consumption / check valves.
error Er122 : Overheat Cabinet (Warning / Shutdown) .Ventilator Check. Adjust / improve cooling.
error Er123 : Temperature warning Sensor 2 has triggered. The message can be used for frost monitoring.
error Er124 : Fault PTC tripping (software). PTC has tripped. Check engine performance / cooling.
error Er125 : Error PT100 tripping (software). The PT100 has triggered. Check engine performance / cooling.
error Er126 : Error external motor protection. External motor protection tripping. Adjust motor protection!
error Er127 : Failed main fuse failed. External fuse failure. Check main fuse!
error Er128 : Error test run. The test run has not ended without error. Check system!
error Er129 : Battery operation. Battery mode is active. Check power supply!
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error Er131-179 : free
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error Er190-Er199 : SW-ERR (Call customer service!))