DRP Operation

If the pump runs dry the DRP will stop the motor from running, this happens when the continuity from DRP sensor to the pump casing is broken as it can no longer use the water as the connection.

The DRP attempts to re-start the motor automatically after a period of 30 seconds. If the pump runs dry again within a 30 second period the DRP is programmed with successive attempts of 300s, 600s, 1200s (approx 20 minutes), 2400 seconds and 4800 seconds. If in any of these timed cycles the pump runs for 30 seconds or more, the DRP will reset itself back to the first cycle.

If the pump does not run continuously for 30s within the last cycle of 4800s, the DRP will put the pump to "sleep" and it can only be reset by disconnecting the power supply, i.e. pulling the motor cable from its socket. If this occurs frequently, it simply means that the delivery of the borehole is lower than the delivery of the pump installed and the pump should be replaced with one of lower delivery. Alternatively, you can "throttle back" the delivery by using a valve.

Overload protection

Overload Protection (Version 2.0 – Blue)
There is no overload protection built into this DRP

Overload Protection
(Version 3.0 – Blue & Red)1.5kW-4kW?

If the current remains 110-125% of the max allowed current for the motor, the DRP will only allow the motor to work for 3000seconds (50 min). After this period of time, the DRP will stop the motor for 15min to protect it from being damaged. If the anomaly continues it will repeat this procedure 20 times before the DRP eventually will put the pump to "sleep". It can only be reset by disconnecting the power-supply, i.e. pulling the motor cable from its socket for a minimum of 10 seconds. If the current exceeds 125% of the max allowed current for the motor, the DRP will only allow the motor to work for 1 second. The DRP will stop the motor for 60min to protect it from being damaged. If the anomaly continues it will repeat this procedure 10 times before the DRP eventually will put the pump to "sleep". It can only be reset by disconnecting the power-supply, i.e. pulling the motor cable from its socket for a minimum of 10 seconds. If the number of attempts does not reach the "sleep" mode the DRP will automatically be reset after the motor has worked continuously for 5 seconds with a current less than $\leq$ 110% of max. current of the motor.

Recharge level after 300 seconds

300 seconds

Recharge level after 30 seconds

30 seconds

Run dry level

sensor

DRP

continuity between the DRP and pump casing