Operating Manual

Dual Pump Controller DPC-10

Doc No : IM001.01.11



Terminal Layout





Auto/ Manual control mode

At mini terminal MT8, AM1 and AM2 offer the selection for running a single pump or dual pump. Close the terminal with output the 4 to 20mA to the inverter at terminal MT10, +mA1 and -mA2 refer to AM1, +mA2 and -mA2 refer to AM2.

Analogue Output

The PCB module offer 2 channels of analogue signal output from 4 to 20 mA which drive 2 units of AC frequency inverter to control the 3 phase pump motor.

Run / Start control

Close the RUN input to the common negative port will allow the system to start run, open the circuit which cease the system. This is the master start or stop control.

Pressure Transmitter

This PCB module can accept 10 or 7 bar pressure transmitter. By looping the 7B pin at terminal MTB 6 will selected 7 bar mode. Leave the terminal open will select the 10 bar mode. Wrong selection may offset the pressure level. Reset the system after looping the terminal.

Alarm

External alarm function can be connected to this PCB module, close this input to the common negative will stop the system, at the same time trigger relay K1 with output at NO1 with COM1. Utilize this output to any peripheral alarm devices. Auto restart when alarm is cleared.

Relay output

This output can be connected to the DCV or ACV direct to the load with maximum rate at 1000mA. It is encourage to use external contactor or relay for high ampere load output.

Low and High water level

The PCB will read the water level from the tank and decide whether to stop the system. When water at below low level sensor the system will stop and trigger relay K1. Auto start when water above the low level sensor after 5 minutes.

Signal Calibration

All precision signal level is pre calibrated by factory standard and should not vary and disturb as desire. Miss calibration should return the module back to the factory.

Analogue input output

These terminal is highly advice to keep the signal isolated from the noise and ESD attack.

Programming

Plug in the programming data cable and restart the system or press the reset tact switch Sw1 on board will automatically enter the programming environment.

Cautions

All alarm system that generated by this module is the secondary level which just indication of knowledge. Main alarm will fully depend on the primary system.

Low level water hysterisis

The system will stop when no water detected after 20 seconds, it will restart after 5 minutes when detected water.

Pump swap

Output of the analogue signal with respect to the program table and the auto manual selection. Pump 1 and 2 will alternately change over when both of the pump is sleep.

Super effect

When 2 pumps are running, 1 of the pump change to manual, the existing pump will become the master pump and output respect to the program table

Power Supply

The PCB should receive 24 Volts DC only .