

5. TROUBLE SHOOTING GUIDE

Fault Message	Possible Cause	Solutions
flashing of UNDER V	the real running voltage is lower than the calibrated voltage, pump is in under voltage protection state	report low line voltage to the power supply company Control will attempt to restart the pump every 5minutes until line voltage is restored to normal
flashing of OVER V	the real running voltage is higher than the calibrated voltage, pump is in over voltage protection state	report high line voltage to the power supply company Control will attempt to restart the pump every 5minutes until line voltage is restored to normal
flashing of OVER LOAD	the real running ampere is higher than the calibrated running ampere, pump is in over load protection state	Control will attempt to restart the pump every 30minutes until running ampere is restored to normal
	pump damaged	inspect pump
flashing of PUMP NO CALIBRATION	parameter calibration not completed	refer to parameter calibration setting
flashing of DRY RUN	liquid level in the well / sump is below the pump intake, pump stops running	Control will attempt to restart the pump every 30 minutes until liquid level above the pump intake
flashing of PUMP STALLED	pump running amps exceeded normal run amps by more than 200%	cut off power supply and repair or replace pump
flashing of REPEATED START	pump starts more than 5 times per minute	Check pressure tank precharge Check pressure tank bladder Check pressure switch settings Check pressure switch for defects

Intelligent Motor Protector

Installation & Operation Manual

DYA-T07

Ver.1.1



Conventions used in this manual

In the manual the following symbols will be used:



Generic danger Failure to comply with the safety regulations that follow can irreparably damage the controller or equipment.



Electric shock risk Failure to comply with the safety regulations that follow can cause death or serious personal injury.

WARNINGS

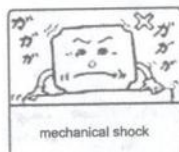
Read this manual carefully before any operation.
Please keep this manual for future use.

WARNING!!

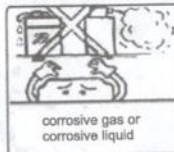
- Before carrying out any installation or maintenance operation, protector must be disconnected from the power supply;
- Don't open the cover during running the protector;
- Don't put wire ,metal bar filaments etc into the protector;
- Don't splash water or other liquid over the protector;

CAUTION

- The electrical and hydraulic connections must be carried out by competent, skilled,qualified personnel;
- Never connect AC power to output C/M/A terminals;
- Ensure the motor, protector and power specifications matching;
- Don't install the protector in the following condition;



mechanical shock



corrosive gas or
corrosive liquid



Extreme heat and cold,
acceptable temperature
range: -25℃ ~ +55℃



Salt mist corrosion

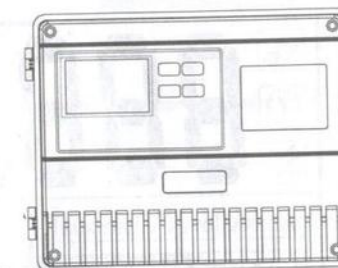


flammable material:
solvent

1.Introduction



(W × D × H)
295 × 240 × 125 (mm)



1.1 Applications

Intelligent Motor controller DYA-T07 are widely used for control and protection of three phase deep well pump / submersible pump / sewage pump / pipeline pump / multi-stage pump / centrifugal pump etc.

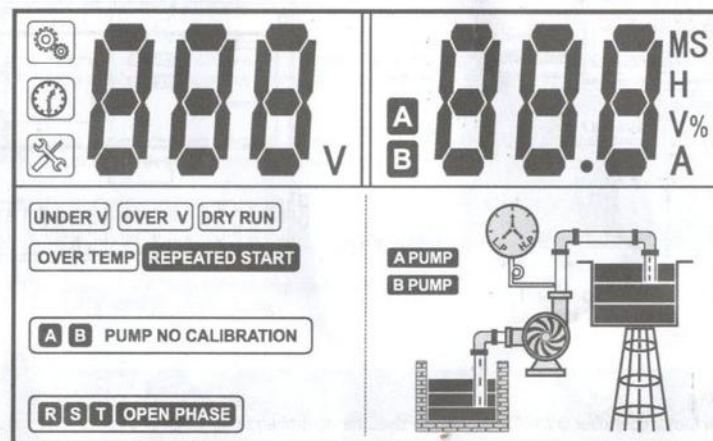
1.2 Main features :

Intelligent Motor controller DYA-T07 can protect pump against pump stalled、over current、dry run、under voltage、over voltage faults .

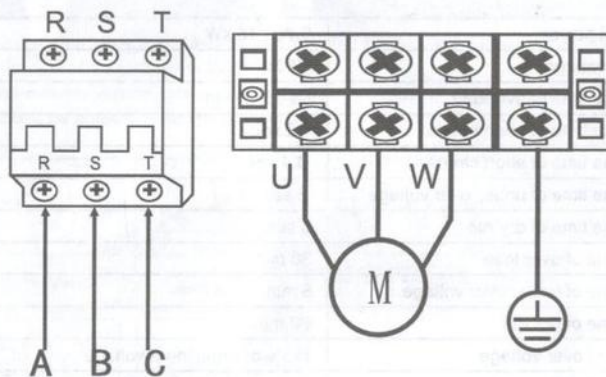
1.3 Main specifications:

Rated output power	0.75 - 15 kW
Rated input voltage	380V
Trip response time of overload	5 sec - 5 min
Trip response time of open phase	< 2 sec
Trip response time of short circuit	0.1 sec
Trip response time of under/over voltage	5 sec
Trip response time of dry run	6 sec
Recovery time of over load	30 min
Recovery time of under/over voltage	5 min
Recovery time of dry run	30 min
Trip voltage of over voltage	115% of rated input voltage
Trip voltage of under voltage	80% of rated input voltage
Protection functions	Dry run
Degree of protection	IP54
IP54	Optional

LCD



2. Electrical connections to the power supply line and electrical pump



3. Operation

3.1 BEFORE YOU START - Parameter calibration and erasing.

To achieve best level of protection of the pump, it is essential that parameter calibration be done immediately after successful pump installation or pump maintenance.

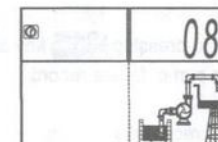
Setting the parameter calibration.

Pump/s must be able to pump water to enable correct calibration. If pumps are calibrated without water, overload and pump stalled errors may occur later.

- Press the **START** key to run pump, confirm the pump and all pipe network in normal working state (including voltage, running ampere et); LCD screen displaying:



- Press the **STORE** key; The control makes a "Di" sound and starts countdown, LCD screen displaying:



- Pump stops running and parameter calibration completed, LCD screen displaying: control is ready for running.

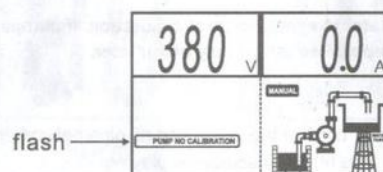


Erasing former parameter calibration

When pump is reinstalled after maintenance or new pump is installed, user must erase the former parameter calibration and a new calibration must be done.

Erasing the parameter calibration

- When the pump in stop status. Press the **STOP** key and release till control makes a "Di" sound, control recover the default factory setting and LCD screen displaying:

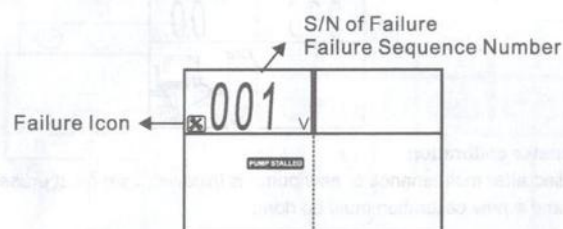


4. Last five failure record

The control panel can memorize the last five failures of pump, so it is very convenient for the users to analyse the pump running conditions.

Erasing the parameter calibration

- When the pump in stop status. Hold pressing **STOP** key and press **MODE** key, the control makes a "Di" sound, the control displays pump failure record;
- Press **STOP** key to quit the failure record displaying;

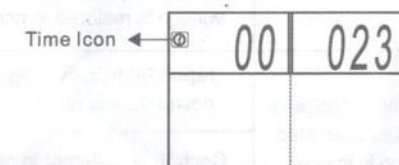


THE LATEST FAILURE IS PUMP STALLED

4.5 Pump accumulative running time displaying

The control can memorize how many hours of pump running, so it is very convenient for the pump users to analyse the pump running conditions and do maintenance

- When the pump in stop status. Hold pressing **STORE** key and press **STOP** key, the control makes a "beep" sound and displays the accumulative run time;



THE PUMP HAS RUN FOR 23 HOURS

- Press **STOP** key to quit the accumulative running time displaying;