

XI. Frequently Asked Questions:

1. What causes the HQ_B to start?

The HQ_B has the built-in pressure switch and internal flow switch. Each of these can turn the pump on depending on water consumption. The pump will start when:

- The pressure is BELOW the pressure switch activation point. OR
- The flow rate is greater than 3.0-3.5 lpm.

The preset activation point for each model is provided in the pump specifications. The cut in pressure must be lower than the preset activation pump; otherwise the pump will not start.

2. What is the maximum pressure switch activation point?

Adjust the pressure only when the cut in pressure is higher than the preset activation point. Do not adjust the pressure to exceed the maximum pressure range as below because too high pressure may cause the pump not stop:

Model	50Hz	60Hz
HQ200B	1.6 Kg/cm ²	1.6 Kg/cm ²
HQ400B	2.0 Kg/cm ²	1.8 Kg/cm ²
HQ800B	2.0 Kg/cm ²	2.0 Kg/cm ²
HQ800HB	-	2.5 Kg/cm ²

3. What causes the HQ_B to stop?

- The flow switch is designed to automatically stop the pump when water flow drops below 3.0-3.5 L/min.
- Pump will shut off in a few seconds after flow stops (It is programmed to stop after 6 seconds). To avoid dry run without liquids, It will automatically stop after 1 minute. Pump will automatically rest for 10 minutes and restart again. If above cycling happened accumulate 3 times, the rest time will become 1 hour and restart again. If the water is enough for pump to restart during the 1 hour rest time, it will automatically start again after the rest time. For immediately start the pump, please turn the power off for at least 6 seconds and turn on again.
- Motor protection for HQ200B and HQ400B will activate when temperature is over 130 °C. Motor protection for HQ800B will activate when temperature is over 150°C. Pump will automatically stop.

4. What is the purpose of the built-in pressure tank?

The pressure tank comes from the factory pressurized at approximately 0.8-1.2 kg/cm² (with the pump pressure at zero). It is designed to minimize motor startup due to small flow demand or minor leak of the pipeline.

Model	50Hz	60Hz
HQ200B	0.8 Kg/cm ²	0.8 Kg/cm ²
HQ400B	1.0 Kg/cm ²	1.0 Kg/cm ²
HQ800B	1.0 Kg/cm ²	1.0 Kg/cm ²
HQ800HB	-	1.2 Kg/cm ²

XV. Troubleshooting



Before starting work on the pump, make sure that the electricity supply has been switched off and that it cannot be accidentally switched on.

Problem	Cause	Remedy
1. pump does not start	a. No power supply	Connect the electricity supply
	b. Too low/high voltage	Check if supply voltage is within $\pm 10\%$
	c. No water consumption	Open a tap
	d. Seized-up pump	Place a screwdriver against the shaft end of the motor to check if the rotor will spin freely, and contact your pump supplier.
2. Pump cuts out during operation	a. Seized-up pump	Same as above
	b. Overloaded motor	Turn off the power supply and restart or contact your pump supplier.
	c. Poor water supply	Check if pump suction inlet is blocked.
	d. The protection for pump dry run or cycling is activated.	Check the detailed information per XI (Frequently asked questions).
3. Pump starts when no water is consumed	a. Existing pipe is leaking	Fix the leakage.
	b. Defective check valve	Clean or replace a new one.
	c. Pipe suck in air.	Check the suction pipe and water supply.
4. Pump starts and stops too frequently	a. Leakage in suction pipe or air in the water.	Check the suction pipe and water supply.
	b. Discharge flow is too low.	Set your tap on a higher water flow.
5. Electric shock	a. Defective ground connection	Correct the ground connection.
6. Pump does not stop when water is not consumed	a. Poor water supply or air suck in.	1. Turn off the power supply and open the refilling plug to release the air. Then restart. 2. In case of long suction pipes, turn off the power and make sure if water supply is adequate.
	b. Defective check valve.	Clean or replace with a new valve.
7. Pump runs normal but with very low discharge flow	a. Poor water supply	Check if water supply is adequate and if the suction pipe is blocked.