# **TECHNICAL INFORMATION**



## Standard operating procedure

#### LIGHT INSTALLATION AND COMMISSIONING

SLNO	DESCRIPTION	YES/NO	REMARKS
1	Check light capacity voltage and SMPS voltage		
2	Check SMPS or transformer condition (Input voltage and output voltage) and capacity of watts		
3	Ensure selected SMPS or TRANSFORMER capacity is 30% higher than the total light capacity. Eg:- 50 watts SMPS is suitable for 12 watts light ( $12 \times 3 \times 1.25 = 45$ )		
4	Check the distance from panel board to Pool/WB deckbox ( cable size selection depends on the distance between panel and Pool/WB deckbox )		
5	Check No. of lights and total watts of light		
6	Ensure the cable size is suitable for light		
7	Check the voltage near the light		
8	Check the cable joint is water proof/insulated		
9	Ensure all lights are connected to the ground earth		

#### FILTER INSTALLATION AND COMMISSIONING

SLNO	DESCRIPTION	YES/NO	REMARKS
1	Please check filter is mounted in proper floor level		
2	Check whether the MPV is fixed to filter properly		
3	Check if there is proper support for IN and OUT pipe line		
4	For side mount filter - check O-ring of MPV and top cover is placed correctly ( Not twisted in given location)		
5	For the top mount filter- clamp of top mount MPV is fixed properly (equally tight), and ensure the O-ring is placed correctly (not twisted)		
6	Before filling the filter media, ensure that filter is filled with water to half		
7	Before filling the filter media, cover the internal pipe with the cover given along with the filter		
8	Ensure required quantity of filter media is filled into the filter		
9	If filter media enters the MPV, you must check the condition of filter lateral		
10	Check all accessories are fitted to the MPV properly		
11	Check all pipes are fitted with MPV properly ( IN & OUT, Backwash pipe lines)		

# **TECHNICAL INFORMATION**



### Standard operating procedure

### PUMP INSTALLATION AND COMMISSIONING

SLNO	DESCRIPTION	YES/NO	REMARKS
1	Ensure the pump is mounted on pedestal with vibration pad		
2	Ensure suction & delivery pipe give appropriate support		
3	Ensure suitable cable is selected for the pump		
4	Ensure suitable contactor and OLR is selected for the pump		
5	Check the motor direction (3phase) before filling with water for a few seconds (4 to 5 seconds)		
6	Ensure all pipe lines are properly supported		
7	Ensure the terminal connections in motor are fully tightened with suitable lugs		
8	Ensure all pipe lines are laying under the Hydrosystem		
9	Check ampere levels under both loading and unloading conditions & record		
10	Check for any vibration in pump running condition		
11	If any vibrations occur in the pump immediately stop it. After rectifying the vibration, start the pump		
12	Ensure the motor body is connected to the ground earth		

# **TECHNICAL INFORMATION**



### Standard operating procedure

### HEAT PUMP INSTALLATION AND COMMISSIONING

SLNO	DESCRIPTION	YES/NO	REMARKS
1	Ensure the Heat pump is mounted on the pedestal with the given vibration pad		
2	Ensure the heat pump is installed according to the manufacturer's instructions, with a minimum 1.5-meter gap on all four sides. For models with a capacity of 35 kW and above, an open ceiling is required to allow free flow of air without any obstruction		
3	Ensure suitable MCCB is installed in panel for the heat pump		
4	Ensure suitable cable (size & material) is laid from power source to Heat pump		
5	Ensure supply voltage is stable in all three phase ( R,Y,B )		
6	Ensure the heat pump is connected to the ground earth		
7	Ensure suitable pipe line is connected to the heat pump, comes under the Hydrosystem		
8	Ensure all pipe lines are supported properly		
9	Ensure inlet/outlet valves installed		
10	Ensure bypass valve installed in delivery pipe, enable flow management		
11	Ensure pipe line is connected to the IN & OUT of the Heat pump properly		
12	Ensure the selected circulation pump is matching the heat pump		
13	Before switching on the heat pump ensure the circulation pump is in on condition ( Please interlock the heatpump & circulation pump )		
14	After switching on the power to the heat pump, if the display shows EE4 (Error Code), it indicates a wrong power supply. Please interchange the R and Y phases		
15	If the display shows EE3 (Error Code), check for proper water flow. Ensure the circulation pump is on. Please verify that the bypass valve condition. If open, please close / throttle it & ensure sufficient flow		
16	If the display shows any other Error code, please contact Aqvastar		
17	Ensure drain hose is fixed and connected to nearest drain		
18	Check ampere level in each phase during the running condition		
19	Check the gas pressure in the pressure gauge before and after switching on the heat pump & record		
20	If the Pressure gauge display showing high pressure, possibility of low flow. Please check bypass valve		

#### NOTE

Refer Heat pump catalogue details for suitable MCCB/cable size for respective models

Suitable Stabilizer is recommended in remote areas where power fluctuations are possible. Pls refer Heat pump catalogue for details.