

# REVIVAL SERIES CENTRIFUGAL PUMP

# **Instruction Manual**

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Thank you very much for choosing our products. Please read the instruction manual carefully and keep it properly before installation and use



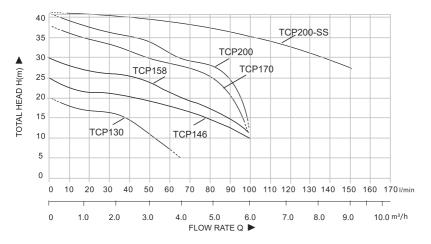
- 1.Before installation, please read this manual carefully, pay attention to the safety warning signs and instructions in the manual.
- 2.The factory does not bear any responsibility or compensation for any personal injury, water pump damage and other property losses caused by failing to observe the safety warning.

## 1.Application

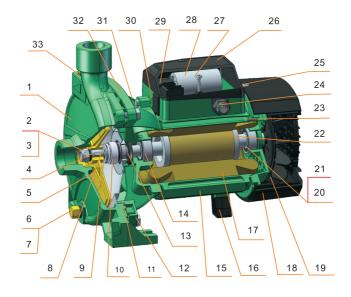
- 1.1 The product is mainly used for domestic living water supply, pipeline pressurization, garden irrigation, vegetable greenhouse watering, aquaculture, industrial and mining, enterprises and engineering construction water supply and drainage;
- 1.2 Pump clean water, low-viscosity or non-erosive liquids. Do not pump flammable, explosive, vaporizable, or contain no solid particles or fibers liquids. PH value must be between 6.5-8.5.

## 2. Main technical parameters and performance curves

#### TCP series

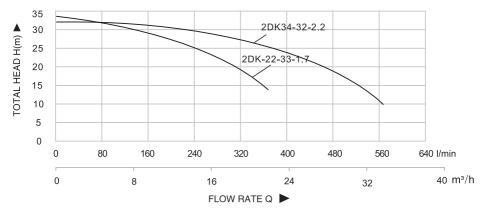


Madal	Power		Inlet/Outlet	Q(m³/h)	0	1	2	3	4	5	6	7	8	9.5
Model	kW	HP	(ln)	Q(I/min)	0	17	33	50	67	83	100	117	133	158
TCP130	0.37	0.5	1"x1"	11(22)	20	17.5	16	11	5					
TCP146	0.55	0.75	1"x1"		25	23	21	19	17	14	10			
TCP158	0.75	1.0	1"x1"		30	27	26	24	21	17	13			
TCP170	1.1	1.5	1"x1"	H(m)	38	35	33	31	28	25	10			
TCP200	1.5	2.0	1"x1"		41	38	36	34	31	27	10			
TCP200-SS	1.5	2.0	1.25"x1"		41	40.7	40.5	39.5	38.5	37	35	32.5	30	25.5

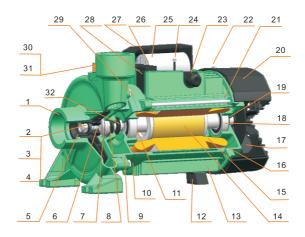


No.	Components	No.	Components	No.	Components
1	Pump body	12	Bolt	23	Motor end cover
2	Bolt	13	Washer	24	Cable sheath
3	Spring washer		Bearing	25	Bolt
4	Impeller key	15	Motor body	26	Terminal box
5	Impeller	16	Motor foot	27	Bolt
6	Bolt	17	Stator	28	Capacitor
7	O-ring	18	Fan cover	29	Terminal block
8	External circlips	19	Fan	30	Cable plug
9	Falt washer	20	Bearing	31	Bolt
10	Mechanical seal	21	Spring washer	32	Joint
11	O-ring	22	Rotor	33	Bolt

# **DK** series

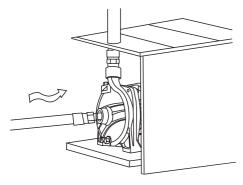


Madal	Po	wer	Inlet/Outlet	Max.Sut	Max.Flow	$Q(m^3/h)$	0	4	8	12	16	20	22	24	28	32	34
Model	kW	HP	(ln)	(m)	(l/min)	Q(I/min)	0	67	133	200	267	333	367	400	467	533	567
2DK-22-33-1.7	1.7	2.3	2"x2"	8	367	H(m)	33	32	30	27.2	23.3	17.7	13.7				
2DK-34-32-2.2	2.2	3.0	2"x2"	8	567	п(Ш)	32	31.7	31.4	30.4	28.8	26.7	25.3	23.7	19.7	13.9	9.8

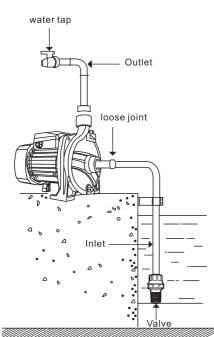


No.	Components	No.	Components	No.	Components
1	Pump body	12	Motor foot	23	Cable sheath
2	Flat	13	Motor body	24	Bolt
3	Spring washer	14	Rotor	25	Capacitor
4	Bolt	15	Stator	26	Connecting terminal
5	Impeller	16	Motor end cover	27	Terminal Block
6	Impeller key	17	Fan	28	Cable plug
7	Falt washer	18	Bearing	29	Motor front cover
8	Mechanical seal	19	Spring washer	30	Bolt
9	O-ring	20	Fan cover	31	O-ring
10	Bolt	21	Bolt	32	Washer
11	Bearing	22	Bolt		

#### 3.Installation instructions



- 1. The installation of the pump should make the water inlet pipeline as short as possible and the number of turns as few as possible. The pump should be placed in a ventilated and dry environment.
- 2. The pump can be installed outdoors, but there must be a suitable cover to protect against wind and rain. When used on pipelines, valves should be installed in the inlet and outlet



#### Precautions for installation of water inlet pipe

- 1. When installing the electric pump, it is forbidden to use too soft rubber hoses in the water inlet pipe to avoid flat suction
- 2.The bottom valve is vertical and installed 30cm from the bottom of the water to avoid inhalation of sediment
- 3.Each connection of the inlet pipeline must be sealed to minimize elbows, otherwise it will not absorb water
- 4. The diameter of the water inlet pipe should be at least the same as the diameter of the water inlet to prevent too much hydraulic loss and affect the water outlet performance
- 5.When using, pay attention to the drop of water level, the bottom valve should not be exposed 6.When the length of the inlet pipe is greater than 10 meters or the lifting height of the inlet pipe is greater than 4 meters, the diameter of the inlet pipe must be greater than the diameter of the inlet of the electric pump
- 7.When installing pipelines, ensure that the electric pump is not exposed to pipeline pressure 8.In order to prevent solid particles from entering the electric pump, a filter must be installed in the inlet pipe

# Precautions for installation of water outlet pipeline

The diameter of the outlet pipe should be at least the same as the diameter of the outlet, so that its pressure drop, high flow rate and noise are minimized

#### 4. Electrical connection



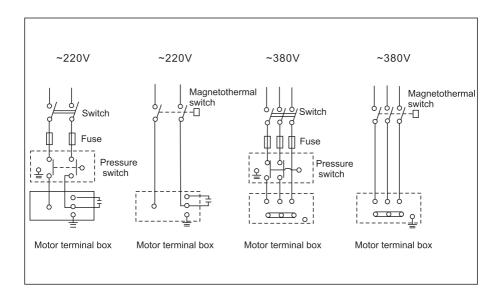
Do not wiring before turning the power off

The electric pump should be grounded to prevent electric leakage, and equipped with a electric leakage protection switch.

- 4.1 Electrical connection and protection should meet with local regulations. And strictly follow the specification of working voltage that is marked on the nameplate.
- 4.2 If the pump is far away from the power supply, please properly use larger size cable to ensure the pump works normally
- 4.3 If the electric pump is used outdoors, the extension cable must use outdoor rubber cable.
- 4.4 Check motor rotation (three-phase motor)

By observing the rotation of fan to check if the motor works normally .

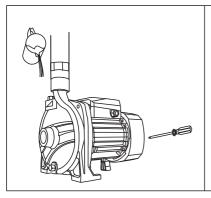
If it rotates clockwise, the pump runs in the correct direction. If the rotation is incorrect, disconnect the power supply and exchange the two power leads.



#### 5.Start up and maintenance



Do not start the pump until the pump body is filled with water. Do not touch pump unless it is cut off for more than 5 minutes.



Before starting, turn the fan to check whether the pump rotates flexibly. Unscrew the water injection plug and fill the pump body with water. After emptying air, tighten the water injection plug. The valve should be closed when the pump starts. After the pump runs normally, adjust the valve to the required flow(Flow rate and head range as shown on the nameplate).

#### Notice:

- 5.1 If there is no water after pump running for more than 5 minutes, please stop the pump, refill the water, and check whether the water inlet pipe is leakage.
- 5.2 If there is any risk of frost or freezing damage, open the drain plug to drain the water from the pump cavity. When the water pump is started again, refill the pump body with water and tighten the water injection plug before use.
- 5.3 If the pump is not used for a long time, drain the accumulated water in the pump, clean the pump body, impeller, and bracket, coat it with anti-rust oil, and put it in a dry and ventilated place.
- 5.4 Restart after long time shutdown, follow the above picture.
- 5.5 In summer or when the ambient temperature is high, please pay attention to ventilation to prevent dew from the electrical parts and cause electrical failure.
- 5.6 If you find that the motor is hot or abnormal, please cut off the power immediately and check the fault according to the table below.

### 6. Troubles Shouting Guide

Failures	Possible Causes	Corrective Action
Motor cannot start	Single-phase power supply (three-phase motor) a.Poor contact of power switch b.Fuse blown c.The power cord is loose d.Cable phase break	a.Repair switch contact or replace switch b.Replace the fuse c.Check and tighten the power connector d.Repair or replace cable
	Capacitor burned	Replace the same type of capacitor (send to maintenance point for repair)

Failures	Possible Causes	Possible Causes				
	The shaft and bearing are stuck	Replace bearing (send to after service center)				
Motor cannot start	Impeller is stuck	Use a screwdriver to turn the shaft of the fan to make it rotate flexibly or remove the pump body to clear debris				
	Stator winding burned out	Replace winding coil (send to after service center)				
	Pump rotation is wrong	Check the rotation of the motor and correct it if it is not correct				
	Pump is not full of water	Refill the pump with water				
	Impeller is broken	Replace the impeller (send to after service center)				
Motor is running but no water	The suction pipe is leaking	Check the seal of each joint of the suction water pipe				
	Water level is too low	Adjust the installation height of the pump				
	Water accumulation in piping or pump cavity causes icing	Turn on after the ice has melted				
	Pump selection is incorrect	Use an appropriate water pump				
Insufficient pressure	Water inlet pipe is too long, too many turns, or the diameter of the water inlet pipe is inappropriate	Use the specified pipe diameter, or make the inlet pipe design shorter				
	Foreign objects block the inlet pipe, filter or pump cavity	Clean pipes, bottom valves or pump cavity to remove debris				
Motor works intermittently or the stator winding burns	Impeller stuck, or overloaded for a long time	Remove impurities in the pump body and make the pump work at the rated flow rate as much as possible				
out	The grounding is wrong, the cable is damaged, or the pump is struck by lightning	Check the problem,replace winding coil				
Mechanical seal leakage	Impurities have worn the mechanical seal	Clean or replace mechanical seal				