Introduction of Products

NEW TYPE 125 W FUJI DENKI SUBMERSIBLE HOME PUMP

Four years ago, Fuji Denki started to manufacture pumps for the home, but in a short time they came to be known widly because of their unique features and their rich variety of models.

Among these models, specially famous is the submersible type home pump for deep well. This type of pump is a pioneer and its revolutionary construction is a mark of attention in this field. Recently a brand new submersible type pump was manufactured improving on the previous models.

In the following line, we wish to give an outline of this new type. Please make your living more comfortable by Fuji Home Pumps.

1. Specification

	Model	PS 1251 (for 50 c/s) PS 1261 (for 60 c/s)
Pump	Standard pumping-up quantity	750 *l*/h (at 16 m total head)
	Total head	20 m
	Suction head	15 m
	Discharge head	5 m
	Standard pipe calibre	3/4 B
	Pumping-up quantity indicated on the name plate	10 *l*/min (at 20 m total head)
Motor	Output	125 W 2 pole
	Type	Condenser motor
	Voltage	Single phase 100 V
Pressure switch	Close circuit pressure	0.6 kg/cm^2
	Open circuit pressure	1.0 kg/cm^2
Weight	Pump proper	13 kg
	Pressure tank	6 kg

2. Construction

1) Motors are specially designed with high efficiency according to the electric frequency that is, for 50 cycle and 60 cycle are respectively available.

2) Both the pump and the motor are constructed to be installed inside the well, whereas, the pressure tank is installed above the ground.

3) Pump and motor are housed in the cylindrical casing, as a single intergrated unit and when it is submerged straight in to the well, the pump part, that is, the lower part of the casing is immersed in the water but the motor part, that is, the upper part of the casing becomes an air chamber being the air consensed. So, the pump works in the water, whereas, the motor operates in the air.

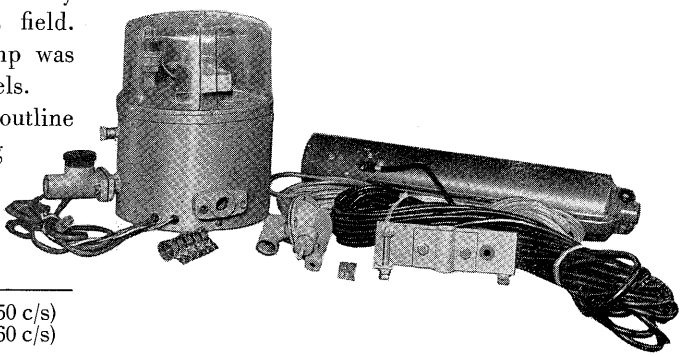

Fig. 1. New type home pump and accessories

4) During the operation of the pump, air is supplied automaticlly by a self-air-feeding system, to the motor air chamber and the pressure tank on the ground. Therefore, there is no danger of water coming into contact with the motor, and also, the motor being designed against 100% moisture, operation of the motor can be achieved without subject to external conditions and atmosphere.

5) Outside diameter of the pump is 124 mm, because of this small diameter, pump can be installed in the narrow well.

3. Features

1) Priming is not necessary

As the pump is immersed in the water, it is needless to say that priming is not necessary and there is no trouble that the suction capacity be reduced by air leakage in the suction piping.

2) Noiseless operation

Both motor and pump operate in the water, so noise of machines is not heard and the operation is very quiet.

3) Complete cold proof

As the pump is immersed in the well, there is no fear of damage of the motor caused by freezing of the impeller.

For frigid district use, pump is equipped with a check valve which at the same time works as a downcast valve. Therefore, if you switch off the pump with the faucet open and then open the valve, all the water in the pressure tank and in the piping go back to the well. So, you need not worry about freezing trouble of the pressure tank. And if you reverse the abovementioned order on the following morning, that is, if you close the downcast valve first and then switch in, water is delivered at once without priming.

4) Air supply is not necessary

Because of the unique self-air-feeding device, air is automaticlly supplied to both the motor air chamber and to the pressure tank during the operation of the pump and there is no need of supplying air.

5) Powerful motor is adopted

With the excellent technique as a maker of the reputed " Fuji Motor ", the pump motor is designed robustly so that there will be no effect from voltage drop, it can be safely operated.

6) Installation is easy

As the outside diameter of the pump is 124 mm, it can be installed in the well with a small diameter. Besides, pump and pressure tank are installed separately, you can install the pressure tank conveniently wherever you desire.

7) Complete anticorrosive

Pump casing and pressure tank are finished with the super-effective special corrosive proof. For parts of pump, bronze and for the shaft, stainless steel is respectively used, so it will be good for long usage in the water.

8) Convertible to portable pump

As far as electric source is obtained, wherever the well may be, pump can easily be carried and installed to the well and delivers the water. This is an outstanding feature that you can not expect from the ordinary pump.

(By H. Chikaraishi, Merchandise Dep't.)

Outline of Our Products

(I) Heavy Current Equipment

a) Generators :
Synchronous generators up to 150,000 kVA.
Direct current generators up to 10,000 kW.
Other all kinds of generators.

b) Synchronous condenser up to 75,000 kVA.

c) Motors :
3-phase synchronous motors up to 10,000 kW.
3-phase induction motors up to 10,000kW.
3-phase commutator motors up to 300 kW
Direct current motors up to 10,000 kW.
Other all kinds of motors.

d) Standard motors (for general use):
3-phase squirrel cage motor from 0.4 kW to 75 kW.
3-phase wound motor from 20 kW to 75 kW.
1-phase split phase start induction motor, 100 & 200 W.
1-phase repulsion start induction motor, 200 & 750 W.

e) Special motors :
Loom, card, mule, ring-motor and pot-motor for textile industries.
All other kinds of special use motors.

f) Transformers :
Power transformers up to 300 MVA, 400 kV.
Furnace transformers with on-load tap changer up to 60 MVA, 140 kV.
Measuring transformers up to 287 kV.
Other all kinds of transformers.

g) Standard transformers (for general use):
1-phase & 3-phase distribution transformers from 3 kVA to 1,000 kVA.

h) Induction voltage regulators up to 1,000 kVA.

i) Mercury arc rectifiers :
Single-anode or multi-anode type, water cool or air cool type without pump up to 6,000 A.

j) Contact converters up to 20,000 A.

k) Selenium rectifiers and silicon rectifiers.

l) Regulating apparatuses :
Motor starters, controllers, speed regulators, voltage regulators and other regulating apparatus for all kinds of service.

m) Circuit breakers :
Expansion circuit breakers up to 287 kV.
Oil circuit breakers up to 154 kV.
Air circuit breakers up to 3,000 V.
High speed air circuit breakers up to 3,000 V.

n) Switch equipment :
Disconnecting switches up to 400 kV.
Knife switches, magnetic switches and other all kinds of switch equipment.

o) Switchboards :
Sheet iron made switchboard for all kinds of service.

p) Relays :
All kinds of relays for power and industry use.

(II) Machines

a) Water turbines :
Francis type, Pelton type and Kaplan type turbines up to 150,000 kW.

b) Steam turbines up to 175,000 kW.

c) Gas turbines :
Closed circuit type up to 70,000 kW.

d) Ventilating fan for radial and axial type.

e) Mine winder set for vertical shaft and inclined shaft.

(III) Railway and Ship Equipment

a) Traction motors of all kinds.

b) Electric locomotives of all kinds.

c) Winches for cargo ship use.

d) Steering engines for ship use.

e) Schneider propeller for ship use.

(IV) Atomic Energy Applying Equipment

a) Power & experiment reactors.

b) Sub-critical assemblies.

c) Nucleus accelerators of all kinds.

(V) Weak Current Equipment

a) Integrating watt-meters (watt-hour meters):
1-phase W.H.M. for low tension circuit use.
3-phase W.H.M. for low tension and high tension circuit use.

b) Electric measuring instruments :
Switchboard meters, portable type meters, precision meters, recording meters, tele-metering equipment.

c) Industrial measuring instruments :
Electric thermometers, pyrometers, psychrometers, flow meters for water, steam, gas and air gas analysers, pressure gauges, vacuum meters, pH meters, level meters, electronic recorders, salinometers, etc.

d) Automatic controlling equipment :
Automatic combustion controlling equipment for steam boilers and various furnaces.
Pneumatic controllers, electro-pneumatic controllers, electrical indicating controllers for temperature, pressure, flow and liquid level, etc.

(VI) Domestic Equipment

a) Electric table and pedestal fans for all kinds.

b) Electric room heaters of all kinds.

c) Electric washers and spin dryers.

d) Electric refrigerators of all kinds.

e) Vacuum cleaner.

f) Dry batteries and flash lights of all kinds.

g) Juicer and toaster.

h) Electric iron of all kinds.

i) Electric bulbs and fluorescent lamps & illuminating apparatus of all kinds.

j) Television sets and transistor radios.

k) Air conditioners.

l) Tape-recorders.