



# Enriching Excelling Enhancing

Focusing on a culture of continuous improvement & consistent performance, we strive to be leading provider of energy efficient pumping solution, while expanding our influence in the world.

# 3 HP MONOBLOCK (1Ø)

#### **OVERVIEW**

Target centrifugal monoblock pump sets are powered by TEFC (Totally Enclosed Fan Cooled) AC induction motor having two poles. Motor stator and rotor stampings are made up of low loss laminated silicon electrical sheets assembled under pressure and stator winding is finally locked in the Motor Body(Frame). The windings are made up of high grade insulation copper wire having excellent electrical and thermal properties. Construction of motor frame and usage of standard quality material results in high performance and low temperature rise of product.

#### **SALIENT FEATURES**

- High operating efficiency resulting in lower power consumption.
- Windings are vacuum impregnated with synthetic varnish to resist moisture, internal vibrations and interturn faults.
- Specially designed for wide voltage variations.
- Dynamically balanced rotor and impeller ensures minimum vibration and maximum operating life.
- Insulation class 'F' materials are used to withstand high temperature rise.
- Double shielded ball bearings are used to avoid ingress of dust particles and to eliminate external lubrication.
- Good suction-lift characteristics.
- · Robust design for easy installation and servicing.





### **TECHNICAL SPECIFICATION**

OUTPUT POWER	2.2 KW / 3 HP				
VOLTAGE RANGE	220-240 V, 50HZ				
SPEED	2850 RPM				
FRAME SIZE INDUCTION MOTOR	90 L				
MAXIMUM TOTAL HEAD	20 m				
MAXIMUM DISCHARGE	1230 lpm				
DEGREE OF PROTECTION	IP 55				
ENCLOSURE	TEFC				
CLASS OF INSULATION	'F'				
MAXIMUM AMBIENT TEMPERATURE	40°C				
SEALING	Mechanical Seal				
TYPE OF DUTY	S1 (Continuous)				
METHOD OF STARTING	DOL(Single Phase)				
NOMINAL PUMPSET SIZE (SUCTION X DELIVERY)	80mm x 80mm				

#### **APPLICATIONS**

- Irrigation of fields /farms General water supply
- Horticulture irrigation
- Boosting showers
- Garden watering Dairy and Farm





# MATERIAL OF CONSTRUCTION

S.NO	PART NAME	MATERIAL				
1	Pump Casing	Cast Iron / SS 304				
2	Impeller	Cast Iron / SS 304				
3	Motor Body	Cast Iron				
4	End Shield	Cast Iron / SS 304				
5	Fan	PVC				
6	Fan Cover	S.S / M.S				
7	Terminal Box	Plastic / SS / ALU				
8	Stamping	M 45				
9	Mechanical Seal	Carbon & Ceramic				

# **HYDRAULIC CHARACTERISTICS**

	Type Power (KW)	Power (HP)	In(A)	Capacitor		U.S.g.p.m	0	79.25	118.9	184.9	258.9	303.8	324.9
			230v			m³/h	0	18	27	42	58.8	69	73.8
				μf		l/min	0	300	450	700	980	1150	1230
TMS 30	2.2	3	14	50	440	H (m)	20	16.5	16	15	12	9.5	8

## **PERFORMANCE CURVE**



