

SPECIFICATIONS	Model	50TM2.4S							
		TM-series 0.4kW, 1-phase							
<p>Type of Pump Submersible semi-vortex pump made of titanium and resin suitable for pumping seawater</p> <p>Type of Fluid Seawater</p> <p>Temperature: 0 to 40°C</p> <p>Discharge Bore 50mm</p> <p>Motor Output 0.4kW</p> <p>Power Supply Single-phase</p> <p>Starting Method Capacitor Run</p> <p>Motor Continuous-duty rated, dry-type induction motor</p> <p>Insulation Class: E Degree of Protection: IP68</p> <p>No. of Poles & Speed (Synchronous Speed) 2-pole, 3000/3600min⁻¹ (50/60Hz)</p> <p>Power Supply Voltages & Rated Currents</p> <table border="0"> <tr> <td>50Hz</td> <td>60Hz</td> </tr> <tr> <td>220V – 3.2A</td> <td>110V – 5.7A</td> </tr> <tr> <td>230V – 3.1A</td> <td>220V – 2.9A</td> </tr> <tr> <td>240V – 3.0A</td> <td></td> </tr> </table> <p>Power Cable Sheath: PVC Standard Length: 5m 100 to 240V supply: 1 × 3 × 1.25mm², O.D. 10.1mm</p> <p>Dry Weight (excluding cable) Standard Model: 6.7kg Automatic Model: 7.2kg</p>	50Hz	60Hz	220V – 3.2A	110V – 5.7A	230V – 3.1A	220V – 2.9A	240V – 3.0A		<p>Impeller Vortex impeller designed for “high-gap structure”, made of glass-fiber reinforced PPO</p> <p>Solids Passage 50Hz – φ10mm 60Hz – φ10mm</p> <p>Cable Entry with Anti-Wicking Block Watertight cable entry with strain-relief device. The anti-wicking block prevents water incursion due to capillary action should the power cable be damaged or the end submerged.</p> <p>Bearings Permanently lubricated, deep-groove, double-shielded C3 ball bearings</p> <p>Shaft Titanium</p> <p>Shaft Seal (Mechanical Seal) Furnished with a double-face mechanical seal located in oil chamber. Both upper and lower seal faces always run in a clean environment.</p> <p>Upper Seal Faces: Ceramic + Carbon Lower Seal Faces: SiC + Ceramic</p> <p>OIL LIFTER (Patented) Equipped in oil chamber. It forcibly supplies lubricating oil to the mechanical seal and continues to supply the oil to the upper seal faces even if lubricant falls below the rated volume.</p> <p>Type of Lubricating Oil & Volume Liquid Paraffin (ISO VG32), 240ml</p> <p>Motor Protection Device A miniature thermal protector is embedded in each winding of the motor. Should excessive heat builds up, the bimetal strip opens to cause the control panel to shut the power supply.</p>
50Hz	60Hz								
220V – 3.2A	110V – 5.7A								
230V – 3.1A	220V – 2.9A								
240V – 3.0A									

NO.

A-10193-2

PUMP PERFORMANCE CURVES

TYPE Sea Water Submersible
 Titanium Seawater Pump

MODEL 50TM2.4S -52
 50TMA2.4S -52

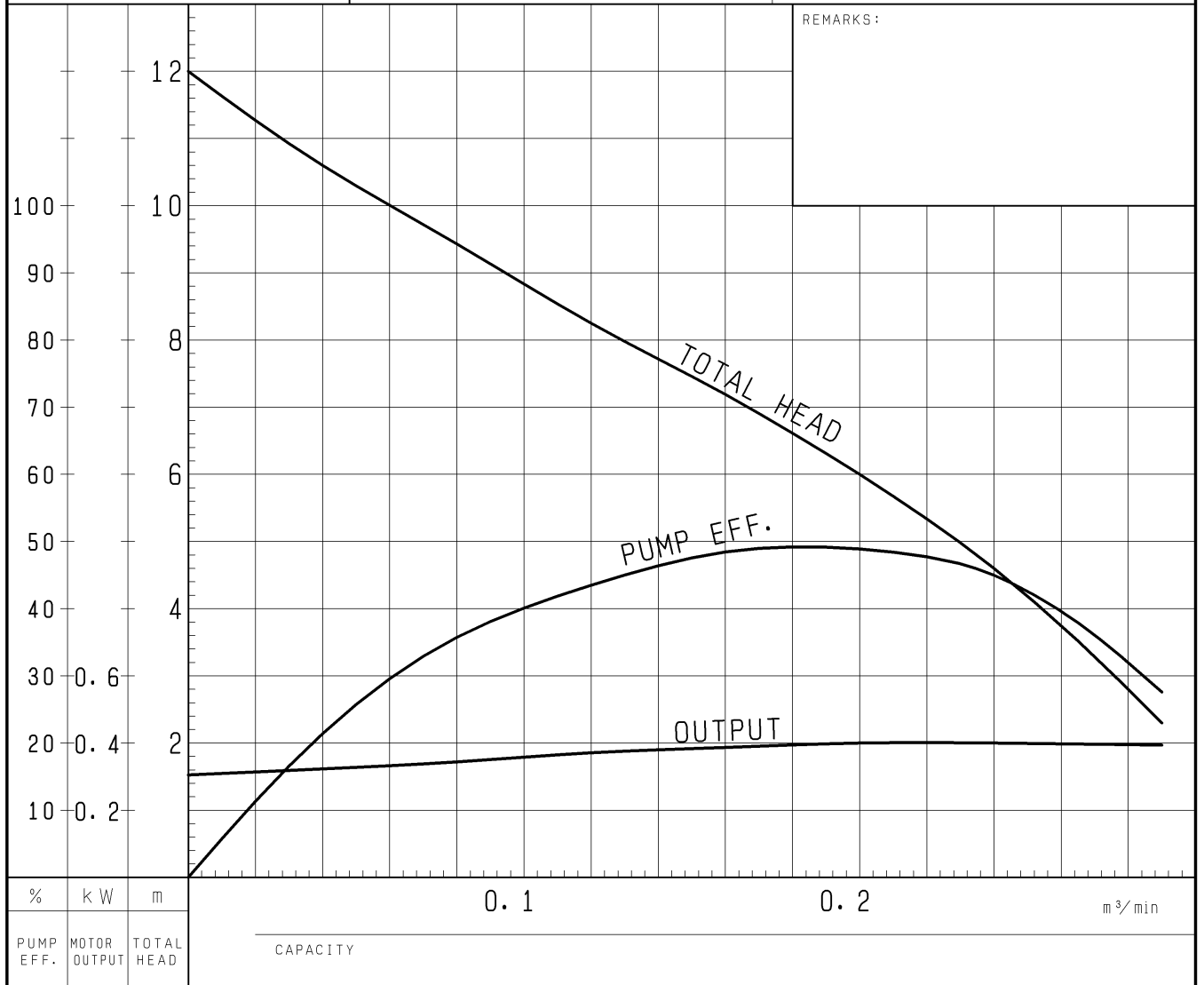
FREQUENCY
 50 Hz

CUSTOMER'S NAME

EQUIPMENT TITLE

NO.

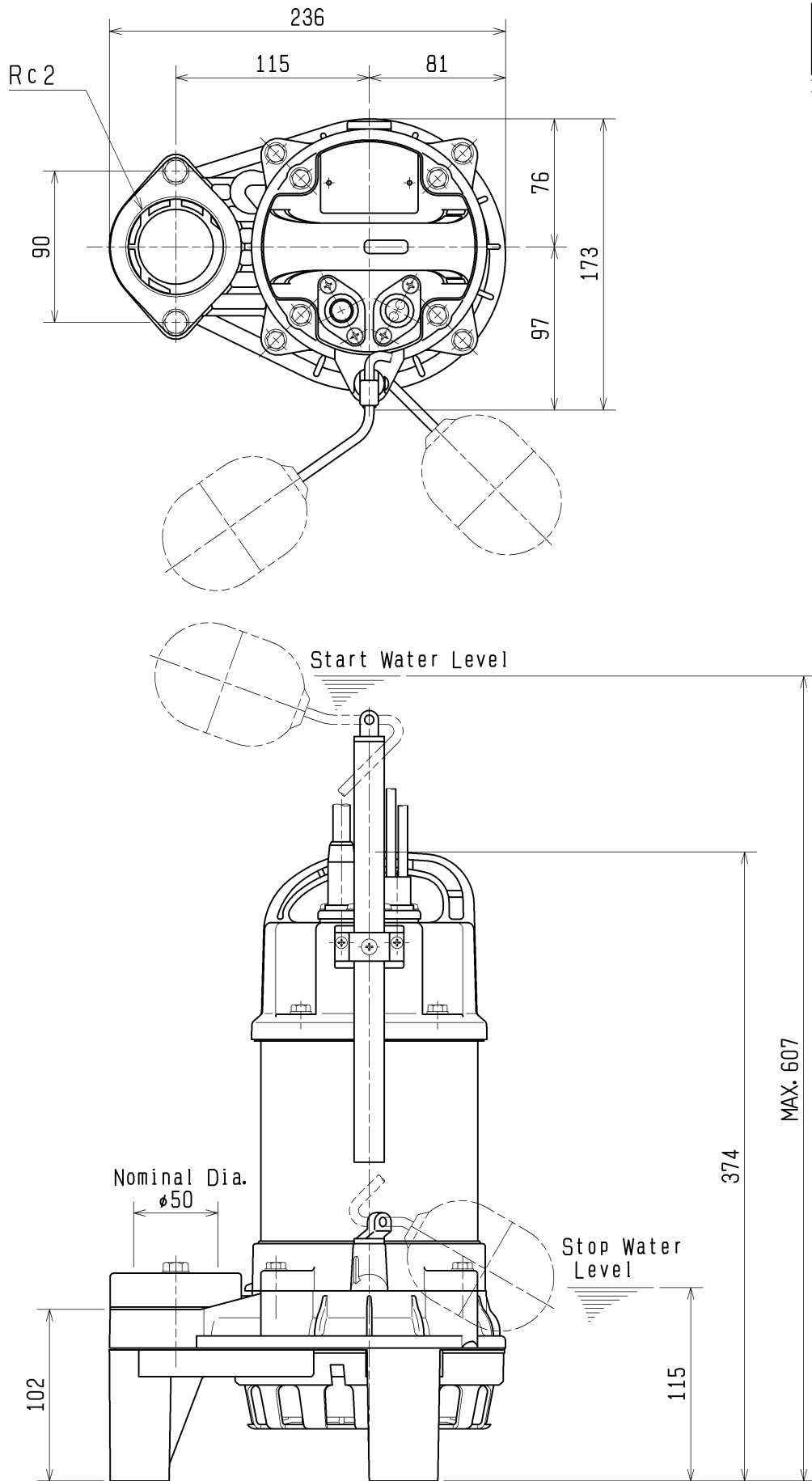
	STANDARD SPECIFICATIONS	REQUIRED SPECIFICATIONS
DISCHARGE BORE	50 mm	mm
TOTAL HEAD	9.3 m	m
CAPACITY	0.08 m ³ /min	m ³ /min
MOTOR OUTPUT	0.4 kW	kW
PHASE × VOLTAGE	1 φ × V	φ × V
CURRENT	A	A
POLES / REVOLUTION	2 P / s. s. 3000 min ⁻¹	P / min ⁻¹
STARTING METHOD	CAPACITOR MOTOR	
INSULATION CLASS	E	



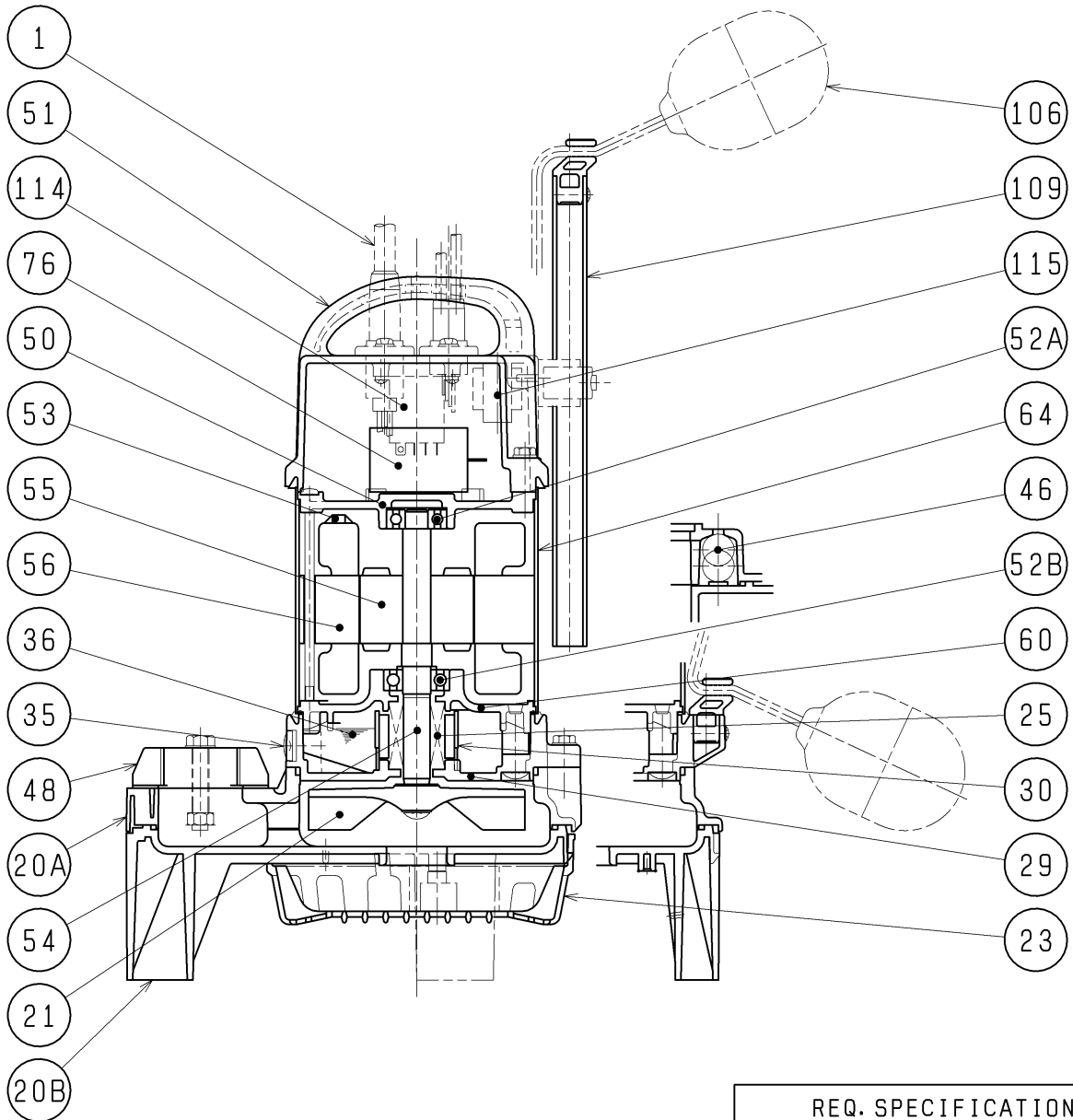
TSURUMI MFG. CO., LTD.

DIMENSION DRAWING		No.	No. A-10207-2
TYPE	Sea Water Submersible Titanium Seawater Pump (Automatic)	MODEL	50TMA2.4S -52/62

Approximate Weight (※)
7.2kg
※excluding cable



SECTIONAL DRAWING		No.	No. A-10215-4
TYPE Sea Water Submersible Titanium Seawater Pump (Automatic)	MODEL	40TMA2.25S -52/62	50TMA2.4S -52/62



* All metal parts (including cable gland, bolts, nuts, washers, etc.) contacting with liquid are made of TITANIUM.

* Upper and lower blocks form a one-piece casing.

REQ. SPECIFICATION	

No.	DESCRIPTION	QTY	MATERIAL / NOTE	No.	DESCRIPTION	QTY	MATERIAL / NOTE
1	Cable	1	PVC Sheath	52B	Lower Bearing	1	6302ZC3
20A	Upper Pump Casing	※ 1	Plastic W/GF	53	Motor Protector	1	
20B	Lower Pump Casing		Plastic	54	Shaft	1	Titanium
21	Impeller	1	Plastic W/GF	55	Rotor	1	
23	Strainer	1	Plastic	56	Stator	1	
25	Mechanical Seal	1	W-14HC	60	Bearing Housing	1	Aluminium Die Casting
29	Oil Casing	1	Plastic W/GF	64	Motor Frame	1	Titanium
30	Oil Lifter	1	Plastic	76	Capacitor	1	
35	Oil Plug	1	Titanium	106	Float	2	Plastic
36	Lubricant		Liquid Paraffin (ISO VG32)	109	Float Support Pipe	1	Plastic
46	Air Release Valve	1	Glass Ball	114	Power Relay	1	
48	Screwed Flange	1	Plastic W/GF	115	Transformer	1	
50	Motor Bracket	1	Aluminium Die Casting				
51	Head Cover	1	Plastic W/GF				
52A	Upper Bearing	1	6201ZC3				