



TALL TUBULAR BATTERY

PRODUCT DESCRIPTION

Tandhan Power Royal has 3 models of Tall Tubular batteries, namely TPR200TT, TPR220TT, TPR230TT. These next-generation tubular batteries are designed to deliver satisfactory performance every time, with long and durable battery life.

PRODUCT FEATURES

- Lower Maintenance as Plates are Designed to Prevent Overheating
- Low Antimonial Alloy Battery Operates Consistently Even at High Temperature
- Resistance to Corrosion Improves Battery Life
- Clear Electrolyte Level Indicator

PRODUCT SPECIFICATIONS

BATTERY TYPE	NOMINAL VOLT	RATED CAP. Ah @ 27°C C20@1.75VPC	DIMENSIONS (IN MM) HXLXW ±5			GROSS WEIGHT (kg) ±5%	CONSTANT POTENTIAL LIMITING CURRENT AMP	TRICKLE CHARGE (CURRENT IN MA)	
			Height	Length	Width			Min	Max
TPR200TT	12	200Ah	408	503	185	63	31	100	400
TPR220TT		220Ah	402	502	188	65	43	130	520
TPR230TT		230Ah				67	48	180	720



TECHNICAL **DATA SHEET**

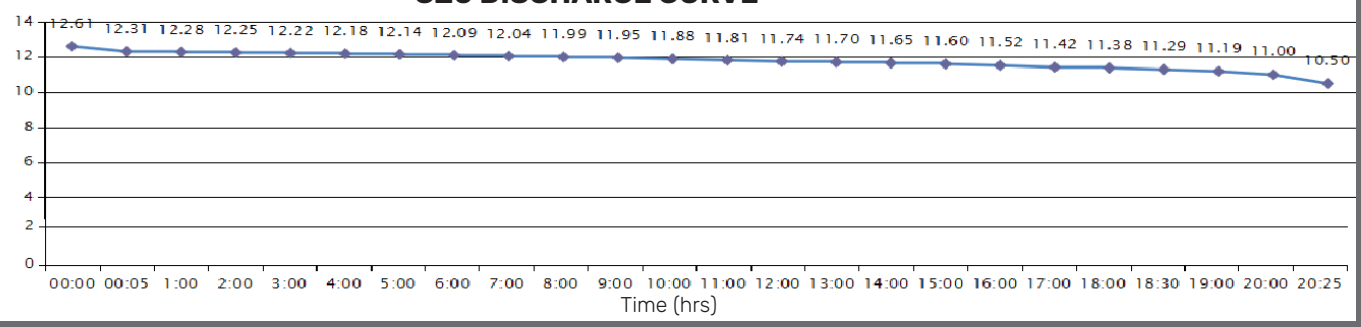
DESCRIPTION	FLOODED TYPE OF BATTERY		
Model	TPR200TT	TPR220TT	TPR230TT
Rated Capacity	200Ah	220Ah	230Ah
Nominal Voltage per Unit	12Volt		
Declared C20 Capacity at 27 up to 1.75ECV	200	220	230
Manufacturer's Name	Tandhan Power		
Standard to which battery is manufactured	12V Flooded ranges meets IS13369		
Loss in capacity in 28 days due to self discahrge	<1% per month (As per IS13369)		
Ampere hour Efficiency	>90%		
Watt hours Efficiency	>75%		
INITIAL CHARGING INSTRUCTIONS			
a) Filling in Specific Gravity	1.220±0.005 at 27°C		
b) Rest period	12Hrs		
c) Specific Gravity at fully charged condition	1.220±0.005 at 27°C		
d) Normal charging instructions	Recharging through inverter at constant potential mode of 14.4 with limited current as specified. After battery potential reaches 14.4V the battery should continue in trickle charge mode at constant potential of 13.5V		
e) Self Discharge	Lead Storage batteries can be stored for 3 months at 27°C, Self-discharge ratio less then 5% per month at 27°C. Please charge battery before use.		
TYPE OF PLATE			
Positive Plates	Royal tubular plates consisting of a lead antimony alloy, optimized for high corrosion resistance. Alloy: lead_Antimony(PbSb)		
Negative Plates	Grid plate construction cosisting of lead antimony alloy, Alloy, lead-Antimony (PbSb)		
Type of Electrolyte	Dilute H ₂ SO ₄		
Separators	Microporous & robust PE envelop, for electrical Separation of the positive & negative plates & optimized for low internal resistance		
Type of vent and filling Plugs	Microporous - Ceramic		
Material of Container & Cover	Polypropylene Copolymer (PPCP)		
Sealing Method	Heat Selaed		
Recommended Storage life of Battery (Dry Shelf Life)	6 Months		
Operation temp. Range	Discharge 5° C to +50°C		
	Charge 5° C to +50°C		
	Storge 5° C to +50°C		
Normal Operation temp. Range	27±2°C		
Equilozation and Cycle Service	14.6 to 14.8 VDC/unit Average at 27°C		
Recommended Maximum Charging Current	10% of Battery Rated Capacity		

Note: Specifications and models subject to change without prior notice

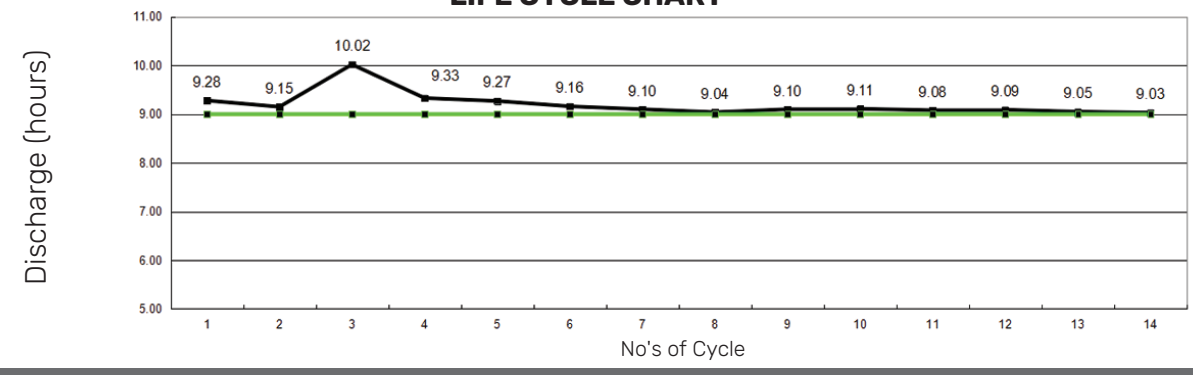
NO. OF CHARGE-DISCHARGE CYCLE BATTERY CAN GIVE DURING ITS ENTIRE LIFE

@20% DOD	2500 Cycles
@50% DOD	1800 Cycles
@80% DOD	1500 Cycles

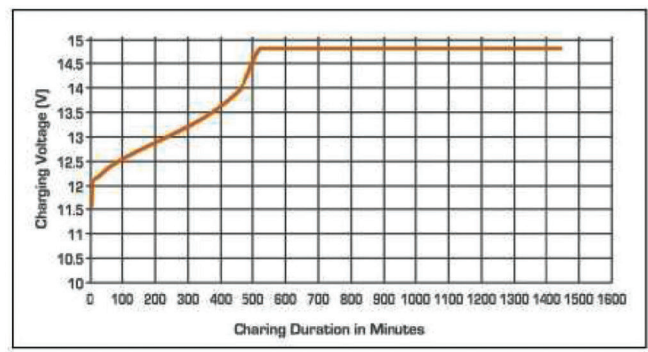
C20 DISCHARGE CURVE



LIFE CYCLE CHART



CHARGING PROFILE



SELF DISCHARGE CHARACTERISTICS @ DIFFERENT TEMPERATURE

