
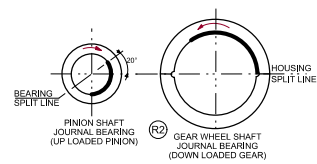
































| 2 | | 1 | | | |
|--|---|--|--|---|-----------|
| REV | NO | ZONE | REVISIONS | DATE | SIGN |
| 01 | | | BARRING GEAR MOTOR DETAILS ADDED & DIMENSION 530 WAS 510 & MOP CAPACITY CHANGED TO 540 LPM | 24-06-2013 | PRASHANTH |
| 02 | | | DIMENSION 530 WAS 510 & MOP CAPACITY CHANGED TO 540 LPM | 25-06-2013 | PRASHANTH |
| 03 | | | CUSTOMER COMMENTS INCORPORATED | 02-07-2013 | JAYA |
| 04 | | | DIMENSION 192.2 WAS 19.2 | 10-07-2013 | JAYA |
| 05 | | | MAIN OIL PUMP ORIENTATION CHANGED AS PER CUSTOMER REQUIREMENT | 18-10-2013 | PRASAD |
| | | | | | |
| 5 | | GEAR SHAFT | 42/50C/Mo4-EN10083.3 | | |
| 4 | | GEAR WHEEL | 17C/NiMo6 DIN-17210 / 18C/NiMo7-6-EN10084 | | |
| 3 | | PINION SHAFT | 17C/NiMo6 DIN-17210 / 18C/NiMo7-6-EN10084 | | |
| 2 | | BEARING | CLASS 1A IS: 2004 & BS:3332 Gr./A Gr.84 IS:25 | | |
| 1 | | CASING | CI FG300 IS:210 | | |
| SL.No | DESCRIPTION | MATERIAL | | | |
| 4 | SPEED PROBES | | | | 2 |
| 3 | KEY PHASOR PROBES | | | | 2 |
| 2 | VIBRATION PROBES (RADIAL) | | | | 8 |
| 1 | COUPLING GUARD (AT INPUT) | | | | 1 |
| SL.No | PROVISION MADE FOR | QTY | | | |
| 10 | LEVELLING PADS | | | | 4 |
| 9 | JUNCTION BOX 36 TERMINALS (WEATHER PROOF) | | | | 1 |
| 8 | RTD'S (PT-100 DUPLEX STEM TYPE) | | | | 4 |
| 7 | SPEED PROBE ADAPTORS | | | | 2 |
| 6 | LEVELLING SCREWS | | | | 4 |
| 5 | VIBRATION & KEY PHASOR PROBE HOLDERS | | | | 10 |
| 4 | BARRING GEAR ARRANGEMENT WITH AUTO ENGAGEMENT & AUTO DISENGAGEMENT CLUTCH, 11KW MOTOR, WORM REDUCER 10R, HAND WHEEL | | | | 1SET |
| 3 | AIR BREATHER 2" BSP | | | | 2 |
| 2 | MOP 540 LPM @ 1500RPM, 6BAR DISCHARGE PRESSURE (RADICOM MAKE) NP5HR 5.48mm | | | | 1 |
| 1 | KEY (OUTPUT) | | | | 1 |
| SL. NO. | ACCESSORIES IN SCOPE OF SUPPLY | QTY | | | |
| FOUNDATION LOAD/BOLT | STATIC CONDITIONS | PINION SIDE | 979 kgf | DOWNWARDS | |
| | | GEAR SIDE | 971 kgf | DOWNWARDS | |
| | DYNAMIC CONDITIONS | PINION SIDE | 1139 kgf | UPWARDS | |
| | | GEAR SIDE | 3089 kgf | DOWNWARDS | |
| OIL TEMPERATURES | | MAX OIL OUTLET | 75°C | | |
| | | MAX OIL INLET | 45°C | | |
| | | MIN OIL INLET | 21°C | | |
| | | ALARM | 100°C | | |
| TEMPERATURE SET LIMITS FOR STEM RTD'S | | TRIP | 107°C | | |
| | | LOW SPEED SHAFT | ALARM SHUTDOWN | 90 MICRONS | |
| | | HIGH SPEED SHAFT | ALARM SHUTDOWN | 65 MICRONS | |
| | | | SHUTDOWN | 125 MICRONS | |
| VIBRATION EQUIPMENT SET POINT (DISPLACEMENT) | | ALARM | 8mm/Sec | | |
| | | SHUTDOWN | 13mm/Sec | | |
| VIBRATION LIMIT (VELOCITY) | | CASING | | | |
| | | | | | |
| BARRING RPM (HIGH SPEED SHAFT) | | ~150 RPM | | | |
| EFFECTENCY OF GEAR BOX AT 100 % LOAD | | 98.50 | | | |
| BARRING GEAR MOTOR | | 11 kW, 415V,50Hz | | | |
| LUBE OIL RECOMMENDED | | ISO-VG-46 | | | |
| QUANTITY OF OIL REQUIRED (GEAR BOX) | | 120 LPM AT 1.5-2.0 Kg/cm ² | | | |
| EXPECTED NOISE LEVEL | | 85 dBA AT 1 METER | | | |
| DRIVEN EQUIPMENT | | ALTERNATOR | | | |
| DRIVING EQUIPMENT | | STEAM TURBINE | | | |
| SERVICE FACTOR | | 1.7 MIN | | | |
| DESIGN STANDARD | | AGMA 6011 H03 | | | |
| OUTPUT SPEED | | 1500 RPM | | | |
| INPUT SPEED (NORMAL/ACTUAL) | | 5800/5845 RPM | | | |
| GEAR BOX INPUT POWER | | 5760 KW | | | |
| TECHNICAL DETAILS | | | | | |
| PURCHASE ORDER NO | | PUR13-14/453/FY13-14/CON-187 DATE:- 06.06.2013 | | | |
| CUSTOMER | | MAXWATT TURBINES | | | |
| Scale:1:8 | 2013 | NAME | DATE |  | |
| Drawn | Checked | JAYASHREE | 04-08 | | |
| Weight in Kg | | R.K.RAO | | | |
| 3900 | Approved | PRASAD | | | |
| TITLE: | | Cast/Forg No | | A1 | |
| GENERAL ARRANGEMENT OF GEAR BOX | | Location: | | | |
| | | Dwg. No: | | | |
| | | TM1M17298 05 | | | |
| Model | HSC-450 | W.O.No.-C.A07.00116 | | Sheet: 1 of 1 | |

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THEIR PERMISSION IN WRITING



| | | |
|--|-------------------------|--------------|
| 02 | GEAR SHAFT | 0,25 TO 0,34 |
| 01 | PINION SHAFT | — |
| THRUST BEARING CLEARANCE | | |
| 02 | GEAR SHAFT OIL BAFFLE | 0,40 TO 0,47 |
| 01 | PINION SHAFT OIL BAFFLE | 0,43 TO 0,48 |
| DIAMETRICAL CLEARANCE | | |
| 02 | GEAR SHAFT BEARINGS | 0,19 TO 0,24 |
| 01 | PINION SHAFT BEARINGS | 0,23 TO 0,28 |
| DIAMETRICAL CLEARANCE | | |
| 01 | BACKLASH | 0,30 TO 0,56 |
| SL.No. | DESCRIPTION | VALUES IN mm |
| PUR13-14/453/FY13-14/CON-187 DATE:- 06.06.2013 | | |
| PURCHASE ORDER NO | | |
| CUSTOMER | | |
| 5 | 4 | 3 |
| MAXWATT TURBINES | | |

| SL NO | DRAWING NUMBER | DESCRIPTION | MATERIAL | QTY |
|-------|--|---|--|----------------------|
| | <div> Scale 1:8 Dimensions in mm</div> | <div>2013 NAME JAYASHREE DATE 26-09</div> | <div> ENGINEERING & INDUSTRIES LTD. MYSORE, INDIA</div> | |
| | <div>Surface Finish Weight in Kgs 3900</div> | <div>Checked PRADEEP Approved RUKMAR</div> | | |
| | <div> 1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection</div> | <div>TITLE: SECTIONAL ARRANGEMENT OF GEARBOX</div> | <div>Cast/Forg No Location Dwg No. TM1M7312</div> | <div>A1</div> |
| 13 | <div> 1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection  1st Angle Projection</div> | <div>MODEL HSG-450 W.O.No.-C.A07.00116</div> | <div>Sheet 1 of 1 REV</div> | <div>02</div> |

