

Asset Details

- Asset ID: PMP01
- Asset Name: Water treatment pump 1
- Maker: Ebara
- Model: EVMSL64-5_2-30
- Rated Power: 30 kW
- Rated voltage: 400 V
- Location: PUB Station Bedok

Performance Summary

- Data Period: 2025-10-01 to 2025-11-30
- Total power consumption: No data available
- Daily average power consumption: No data available

Parameter	Average	Min	Max	Std Dev
Energy	23.2 kWh	22.02 kWh	28.33 kWh	1.28 kWh
Temperature DE	59.03°C	55.0°C	72.22°C	3.53°C
Temperature NDE	59.32°C	55.28°C	72.58°C	3.55°C
Vibration DE	3.89 mm/s RMS	3.3 mm/s RMS	5.55 mm/s RMS	0.46 mm/s RMS
Vibration NDE	3.97 mm/s RMS	3.37 mm/s RMS	5.66 mm/s RMS	0.47 mm/s RMS

Operational Status

- All monitored parameters show flat trends indicating stable operation
- Energy consumption remains consistent with low variability (std 1.28 kWh)
- Temperature readings at both drive end and non-drive end are stable with similar patterns
- Vibration levels at both ends maintain steady operation within acceptable ranges
- Recent data shows normal operational patterns with no significant deviations

Risk Assessment

- Pump drive end overall vibration velocity RMS operates within API 610 Preferred Operating Region with average 3.89 mm/s RMS and maximum 5.55 mm/s RMS, well below the 5.0 mm/s RMS Alert threshold
- Pump non drive end overall vibration velocity RMS shows similar performance with average 3.97 mm/s RMS and maximum 5.66 mm/s RMS, slightly exceeding the Alert threshold of 5.0 mm/s RMS but remaining below the Danger threshold of 6.5 mm/s RMS
- Pump drive end temperature and pump non drive end temperature readings show elevated levels with maximums of 72.22°C and 72.58°C respectively, requiring monitoring for thermal management
- The pump operates within acceptable vibration limits per API 610 standards for pumps below 300 kW, though NDE vibration occasionally enters Alert zone
- Monitor vibration trends closely, particularly at non-drive end, and plan maintenance inspection as maximum values approach Alert Operating Region limits according to API 610 standards