



**3000 KW Back pressure steam turbine generator set**

**TURBINE:**

3000 kw Dresser—Rand single valve multi stage backpressure steam turbine, 4615 rpm, inlet steam 220 psig, 482 deg f, exhaust 40 psig, CW rotation looking from governor end, Woodward 505 governor. 10" class 300 inlet size, 24" class 150 up exhaust. Steam rate: 40.48 lbs/kwh, maximum flow 121,400 lbs/hr , 4 stages, Hand valve for part load operation. Lube oil system, gland steam condenser.

**GENERATOR:**

Kato 3750 kva, 3000 kw, 13800 v, 3 phase, 60 hz. Air cooled with brushless exciter. 1800 rpm, 0.8 pf

**SCOPE OF SUPPLY:**

Steam turbine, gear reducer, generator, trip and throttle valve, lube oil system mounted on common skid

Generator terminal box with surge protection system, ct's, pt's

Woodward 505 governor turbine control panel, PLC panel, Kato voltage regulator

Gland steam condenser with piping

Lube oil cooler and lube oil piping

Neutral ground resister 400 amps, 20 ohms, 8000 v

Manuals and drawings

Exhaust expansion joint

Inlet trip valve

History unit built 1994 shutdown 2016.

Generator breaker and generator protection relay be provided additional cost



Turbine



Generator



Lube oil Coolers



Gland steam condenser



Turbine control panel



Expansion joint



Neutral Ground Resister