

CEN19MA190 Powerplants Group Chairman's Factual Report
Attachment C
Overspeed Governor S/N 20691854 Acceptance Test Sheets January 14, 2020

TEST RECORD FOR TURBO-PROP OVERSPEED GOVERNORS
(See WGC and Customer Chart for applicable governors)

1. Max. Speed (Section 2.2.1) (Test Schematic valve positions 2 open, 1,3,4, 5,6 closed)
a. Set point RPM at flow (*) at 150 +/- 10 PSI inlet. (Application information column on applicable drawing)

*RECORD RPM 4381 = 6.8 QPM

1/4 CCW
to get 4381 RPM
and 10.0 QPM
4432 = 10 QPM
RPM

2. Reset, Min. Speed. (Section 2.2.2) (Test Schematic valve positions 2 open, 1,3,4,5,6 closed)
a. Energize reset solenoid valve with 18 +/- 1 VDC, increase or decrease speed to obtain flow (*) at 150 +/- 10 PSI inlet pressure.

*RECORD RPM 3917 = 9.0 QPM

3910 = 9.0 QPM
RPM

3. Internal leakage. (Section 2.2.3) (Test Schematic valve positions 2 open, 1,3,4,5,6 closed)

- a. Set RPM to that specified. (Application information column on applicable drawing). With inlet pressure at 60 +/- 5 PSI, internal leak should be no more than (*).

*RECORD FLOW .6 QPM @ 4200 RPM

After adjust = 3850 RPM
and 9.0 QPM

4. Feather Solenoid Check. (Section 2.2.4) (Test Schematic valve positions 2,4,5,6 open, 1,3, closed)

- a. With stand speed at zero, energize feather solenoid with 22 +/- 1 VDC, increase or decrease inlet pressure to obtain the Delta P specified in Section 2.2.4. Flow should be as specified in Section 2.2.4.

RECORD FLOW 11.3 QPM

- b. Feather leak check. (Section 2.2.4.3) (Test Schematic valve positions 2,4,5, open, 1,3,6 closed)

Reduce voltage to .750 + 0-.1 with no undershoot. If flow is more than 2 QPM reject valve.

RECORD FLOW .1 QPM

5. Magnetic Pick-up Voltage. (Section 2.2.5) (Test Schematic valve positions 2, open, 1,3,4,5,6 closed)

- a. Set stand speed to 3200 +/- 10 RPM, magnetic Pick-up output voltage should be (*).

*RECORD VOLTAGE N/A

- b. Magnetic pick-up indicated RPM. Set stand speed to 3200 +/- 10 RPM. Indicated RPM should be as specified in Section 2.2.5.1.2.

RECORD RPM N/A

6. External Unfeather Adapter. (Section 2.2.6.1 & 2.2.6.2)
(Test Schematic valve positions 1,3 open, 2,4, 5,6 closed)

- a. Supply oil to the external connection at 200 +/- 10 PSI. Flow must be 4 QPM Min.

RECORD FLOW N/A

- b. Unfeather Adapter leak check. (Test Schematic valve positions 2 open, 1,3,4,5,6 closed)

With oil inlet pressure at 150 +/- 10 PSI. Leakage past the check valve shall not exceed 1 ounce per minute, Max.

RECORD LEAKAGE N/A

Internal
after adjust
1.46 QPM
at 4200 RPM

7. External Leakage Check. (Section 2.2.7) (Test Schematic valve positions 2, open, 1,3,4,5,6 closed)

NONE ALLOWED NONE

8. Torque Check. (Section 2.3)

9. Woodward I/N 210631-01 S/N 20491854

Reset Solenoid P/N 1310-105 S/N _____

Feather solenoid P/N 1310-115 S/N _____

Technician's name and date Matt Jeffers 01/14/2020

Sales Order No. 3655671

RETAIN ONE COPY FOR PERMANENT RECORD

(*) As specified on the applicable assy drawing.