



Plays well in the dirt.



CPC-II

Current-to-Pressure Converter.

Built to handle steam turbine users' #1 reliability problem — *dirty oil* — the new Woodward CPC-II features a robust design and self-cleaning action that **increases reliability**. The superb accuracy and resolution of this servo positioner make it ideal for improving steam turbine valve control performance.



Turbomachinery Controls
Improve Reliability • Enhance Performance

Woodward's CPC-II Provides:

High Tolerance to Dirty Oil

- Handles turbine lube oil — no additional filtering needed
- Corrosion-resistant materials 440C stainless steel for key components
- Self-cleaning control valve
- Large internal ports for contamination resistance
- "Silt-buster" algorithm to flush out dirt

Enhanced Feature Set

- Fast 2.5 ms scan time reduces control error
- 10-30 ms total response time for accurate control
- Redundant signal and power inputs for high reliability
- Two units can be installed in parallel for redundant control
- Easily test turbine servo system range with a screwdriver
- Isolated I/O eliminates electrical noise-induced errors
- Correction curve for non-linear systems delivers more predictable control
- PC-based service and trending tools for system troubleshooting
- Increased diagnostics information for better troubleshooting

Specification Highlights

- IECEx certified for use in hazardous locations
- ATEX compliant, CSA Certified, INMETRO Certified
- GOST R certified for use in explosive atmospheres
- Accuracy: $< \pm 0.2\%$ of full range
- Repeatability: 0.1% of full range
- Temperature drift: $< \pm 0.01\%$ of full range / $^{\circ}\text{C}$
- Pressure stability: $< \pm 2\%$ of setpoint
- Operating temperature range, -40°C to $+85^{\circ}\text{C}$

For more information, please refer to product spec 03352 and manual 26615.



Field Proven

The CPC-II Advantages:

Over the Old Style Woodward CPC



- 4 times the valve force
- Same mounting configuration
- Better tolerance to dirty oil

Over a Conventional I/H Converter



- More stable operation
- No sticking
- Greater linearity
 - < 0.2% for CPC-II
 - < 1.0% for I/H Converter
- Same mounting configuration, when using Woodward adaptor kit 9828-7240
- Better tolerance to dirty oil
- More valve force

TURNER ENGINE CONTROL SOLUTIONS

Stoke-on-Trent, United Kingdom info.uk@turner-ecs.com
Hoofddorp, The Netherlands info.nl@turner-ecs.com
Langen, Germany info.de@turner-ecs.com
Desio, Italy info.it@turner-mcs.com
Middle East (KSA, Qatar, UAE) info.me@turner-ecs.com



The CPC-II

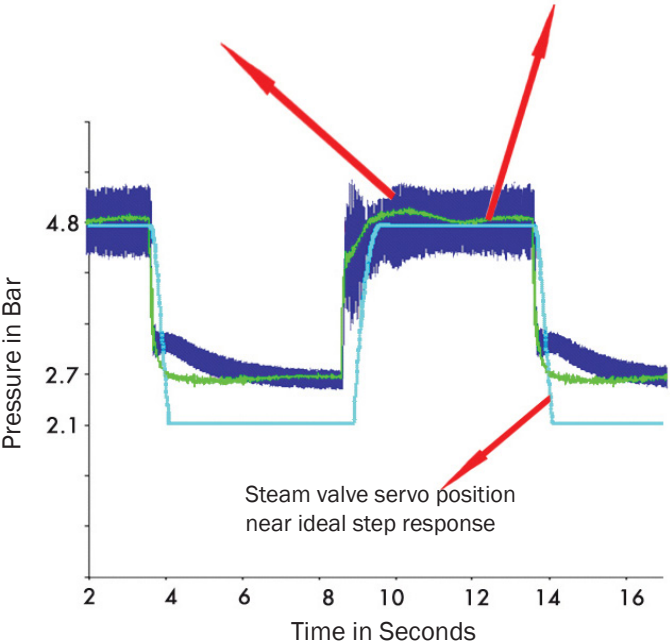
Compared to conventional I/H converter systems, the CPC-II output is quiet and stable —

Conventional I/H Converter Pressure Signal

Excess pressure “noise” causes increased wear in the servo system, while over-damped dynamics causes slow response

CPC-II Pressure Signal

Stable pressure for reduced system wear with rapid response



Models

Maximum Supply & Control Pressure Rating	Zone 2, Category 3 Group II G, Ex nAnL IIC T4 Gc Class I, Div. 2 Groups A, B, C, D, T4
Supply 25 Bar Control 10 Bar	9907-1200
Supply 25 Bar Control 25 Bar	9907-1198

Maximum Supply & Control Pressure Rating	Zone 1, Category 2 Group II G, d IIC T4 Gb Zone 2, Category 3 Group II G, Ex nAnL IIC T4 Gc Class I, Div. 1 Groups C and D and Class I, Div. 2 Groups A, B, C, D, T4
Supply 25 Bar Control 10 Bar	9907-1199
Supply 25 Bar Control 25 Bar	9907-1197

For more information go to woodward.com or email turbinfo@woodward.com.

WOODWARD

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