

Installation Procedure Supplement

Manual 26788 (Revision B, 3/2015) 723PLUS Digital Control Hardware



See manual 02877 for complete installation, operation, maintenance, and certification information. Publications can be found on our website at www.woodward.com/publications.

Important Definitions



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

- DANGER—Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING—Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION—Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE—Indicates a hazard that could result in property damage only (including damage to the control).
- IMPORTANT—Designates an operating tip or maintenance suggestion.



The engine, turbine, or other type of prime mover should be equipped with an overspeed shutdown device to protect against runaway or damage to the prime mover with possible personal injury, loss of life, or property damage.

The overspeed shutdown device must be totally independent of the prime mover control system. An overtemperature or overpressure shutdown device may also be needed for safety, as appropriate.



Read this entire manual and all other publications pertaining to the work to be performed before installing, operating, or servicing this equipment. Practice all plant and safety instructions and precautions. Failure to follow instructions can cause personal injury and/or property damage.



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www.woodward.com/publications

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Any unauthorized modifications to or use of this equipment outside its specified mechanical, electrical, or other operating limits may cause personal injury and/or property damage, including damage to the equipment. Any such unauthorized modifications: (i) constitute "misuse" and/or "negligence" within the meaning of the product warranty thereby excluding warranty coverage for any resulting damage, and (ii) invalidate product certifications or listings.

NOTICE

To prevent damage to a control system that uses an alternator or battery-charging device, make sure the charging device is turned off before disconnecting the battery from the system.

NOTICE

To prevent damage to electronic components caused by improper handling, read and observe the precautions in Woodward manual 82715, Guide for Handling and Protection of Electronic Controls, Printed Circuit Boards, and Modules.

Go to www.woodward.com/publications for complete instructions (manual 02877).

Replacement/Exchange: Replacement/Exchange is a premium program designed for the user who is in need of immediate service. It allows you to request and receive a like-new replacement unit in minimum time (usually within 24 hours of the request), providing a suitable unit is available at the time of the request, thereby minimizing costly downtime.

This option allows you to call your Full-Service Distributor in the event of an unexpected outage, or in advance of a scheduled outage, to request a replacement control unit. If the unit is available at the time of the call, it can usually be shipped out within 24 hours. You replace your field control unit with the like-new replacement and return the field unit to the Full-Service Distributor.

Flat Rate Repair: Flat Rate Repair is available for many of the standard mechanical products and some of the electronic products in the field. This program offers you repair service for your products with the advantage of knowing in advance what the cost will be.

Flat Rate Remanufacture: Flat Rate Remanufacture is very similar to the Flat Rate Repair option, with the exception that the unit will be returned to you in "like-new" condition. This option is applicable to mechanical products only.

Returning Equipment for Repair

If a control (or any part of an electronic control) is to be returned for repair, please contact your Full-Service Distributor in advance to obtain Return Authorization and shipping instructions.

When shipping the item(s), attach a tag with the following information:

- return number;
- name and phone number of contact person;
- description of the problem;

- name and location where the control is installed;
- complete Woodward part number(s) and serial number(s);
- · instructions describing the desired type of repair.

Contacting Woodward's Support Organization

For the name of your nearest Woodward Full-Service Distributor or service facility, please consult our worldwide directory published at www.woodward.com/directory.

You can also contact the Woodward Customer Service Department at one of the following Woodward facilities to obtain the address and phone number of the nearest facility at which you can obtain information and service.

Products Used In Electrical Power Systems	Products Used In Engine Systems	Products Used In Industrial Turbomachinery Systems
FacilityPhone Number	FacilityPhone Number	FacilityPhone Number
Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800
China+86 (512) 6762 6727	China +86 (512) 6762 6727	China +86 (512) 6762 6727
Germany:	Germany +49 (711) 78954-510	India+91 (129) 4097100
Kempen +49 (0) 21 52 14 51	India+91 (129) 4097100	Japan+81 (43) 213-2191
Stuttgart - +49 (711) 78954-510	Japan+81 (43) 213-2191	Korea+82 (51) 636-7080
India+91 (129) 4097100	Korea+82 (51) 636-7080	The Netherlands+31 (23) 5661111
Japan+81 (43) 213-2191	The Netherlands+31 (23) 5661111	Poland+48 12 295 13 00
Korea+82 (51) 636-7080	United States+1 (970) 482-5811	United States+1 (970) 482-5811
Poland+48 12 295 13 00		
United States+1 (970) 482-5811		

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PO Box 1519, Fort Collins CO 80522-1519, USA 1000 East Drake Road, Fort Collins CO 80525, USA Phone +1 (970) 482-5811 • Fax +1 (970) 498-3058

Email and Website—www.woodward.com

Regulatory Compliance & Declarations

European Compliance for CE Mark

EMC Directive

Declared to 2004/108/EC COUNCIL DIRECTIVE of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and all applicable amendments.

This controlling device, manufactured by the Woodward Governor Company, is applied solely as a component to be incorporated into a larger, prime mover, system. Woodward Governor declares that this controlling device complies with the EMC Directive requirements when put into service per the installation and operating instructions outlined the product manual. All wiring must also follow the wiring and shielding requirements given in the specific, separate, software manual.



This controlling device is intended to be put into service only upon incorporation into a prime mover system that itself has met the requirements of the above Directive and bears the CE mark.

Low Voltage Directive

Declared to 2006/95/EC COUNCIL DIRECTIVE of 12 December 2006 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

North American Compliance

CSA

CSA Certified for Class I, Division 2, Groups A, B, C, and D, T4A at 70 °C ambient for use in the United States and Canada: CSA Certificate 2244634. These listings are limited to those units bearing the CSA agency identification.



EXPLOSION HAZARD—Do not connect or disconnect while circuit is live unless area is known to be non-hazardous.

Substitution of components may impair suitability for Class I, Division 2 or Zone 2 applications.



RISQUE D'EXPLOSION—Ne pas raccorder ni débrancher tant que l'installation est sous tension, sauf en cas l'ambiance est décidément non dangereuse.

La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Division 2 ou Zone 2.



Installation wiring must be in accordance with Class I, Division 2 wiring methods in Article 501–4(b) of the NEC, and in accordance with the authority having jurisdiction.



All peripheral equipment must be suitable for the location in which used.

Safety Related Installation Limitations

- Wiring must be in accordance with North American Class I, Division 2 wiring methods as applicable, and in accordance with the authority having jurisdiction.
- Field wiring must be suitable for at least 75 °C for operating ambient temperatures expected to exceed 50 °C.
- A fixed wiring installation is required.
- Do not connect more than one main power supply to any one fuse or circuit breaker.
- Connect ground screw to earth ground (see Figures 1-1a, 1-1b).

Marine Type Approval Compliance

American Bureau of 2007 Steel Vessel Rules 1-1-4/7.7, 4-2-1/7.3,

Shipping (ABS) 4-2-1/7.5.1, 4-9-3/17, 4-9-7/13, 4-9-2/11.7 & 4-9-4/23

(Low Voltage Models only)

Bureau Veritas (BV) Certified for Environmental Category EC Code: 33

Certified for use on AUT-UMS, AUT-CSS, AUT-PORT and AUT-IMS Classed

Vessels

Det Norske Veritas Certified for Marine Applications, Temperature Class

(DNV) B, Humidity Class A, Vibration Class B, EMC Class A, and Enclosure Class B

per DNV Rules for Ships Pt. 4, Ch. 9 Control and Monitoring Systems and Pt.

4, Ch.'s 2 & 3, Rotating Machinery

Germanischer Lloyd Environmental Category C; EMC2 per Type Tests Part

(GL) 2, Edition 2003: Regulations for the Use of Computer and Computer on Board

Lloyd's Register LR Type Approval Test Specification No. 1:1996 for

(LR) Environmental Categories ENV1, ENV2, and ENV3

Nippon Kaiji Kyokai Rules Ch. 1, Part 7, of Guidance for the approval and

(NKK) Type approval of materials and equipment for marine use and relevant

Society's Rules (Low Voltage Models only)

Registro Italiano RINA Rules for the Classification of Ships – Part C

Navale (RINA) Machinery, Systems and Fire Protection – Ch. 3, Sect. 6, Tab. 1.

DECLARATION OF CONFORMITY

Manufacturer's Name: WOODWARD GOVERNOR COMPANY (WGC)

Industrial Controls Group

Manufacturer's Address: 1000 E. Drake Rd.

Fort Collins, CO, USA, 80525

Model Name(s)/Number(s): 723, 723 Plus and 828 Digital Control

P/N: 9906-130, 9906-619 and similar (18-40Vdc Input)

Conformance to Directive(s): Declared to 2004/108/EC COUNCIL DIRECTIVE of 15 December

2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and all applicable amendments.

Applicable Standards: EN61000-6-4, (2007): EMC Part 6-4: Generic Standards - Emissions

for Industrial Environments

EN61000-6-2, (2005): EMC Part 6-2: Generic Standards - Immunity

for Industrial Environments

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

MANUFACTURER

Signature

Sam Coleman

Full Name

Compliance Engineering Supervisor

Position

WIC, Fort Collins, CO, USA

Place

August 12, 2009

5-09-1183 00115-04-CE-02-01

DECLARATION OF CONFORMITY

Manufacturer's Name: WOODWARD GOVERNOR COMPANY (WGC)

Industrial Controls Group

Manufacturer's Address: 1000 E. Drake Rd.

Fort Collins, CO, USA, 80525

Model Name(s)/Number(s): 723, 723 Plus and 828 Digital Control

P/N: 9906-131, 9906-620 and similar

(90-150Vdc Input)

Conformance to Directive(s): Declared to 2004/108/EC COUNCIL DIRECTIVE of 15 December

2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and all applicable amendments.

Declared to 2006/95/EC COUNCIL DIRECTIVE of 12 December 2006 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

Applicable Standards: EN61000-6-4, (2007): EMC Part 6-4: Generic Standards - Emissions

for Industrial Environments

EN61000-6-2, (2005): EMC Part 6-2: Generic Standards - Immunity

for Industrial Environments

EN50178, January 1997: Electronic Equipment for Use in Power

Installations

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

MANUFACTURER

Signature

Sam Coleman

Full Name

Compliance Engineering Supervisor

Position

WIC, Fort Collins, CO, USA

Place

Dota

5-09-1183 00115-04-CE-02-02



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