

**Manual 26852 (Revision NEW, 8/2016)  
2301E / 2300E Digital Load Sharing and Speed Controls**

This document contains the following information:

- Where to obtain the complete 2301E / 2300E manuals
- Important Definitions
- Contacting Woodward or a Woodward Channel Partner
- Regulatory Compliance and Declarations



**See Manual 26641 (for 2301E) or Manual 26691 (for 2300E) for complete installation, operation, maintenance, and certification information. Publications can be found on our website at [www.woodward.com/publications](http://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.

**WARNING**

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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The latest version of most publications is available on the *publications page*. If your publication is not there, please contact your customer service representative to get the latest copy.



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](http://www.woodward.com/publications) for complete instructions for the 2301E control (Manual 26641) or the 2300E control (Manual 26691).

**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](http://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.

<b>Products Used In Electrical Power Systems</b>	<b>Products Used In Engine Systems</b>	<b>Products Used In Industrial Turbomachinery Systems</b>
<b>Facility ----- Phone Number</b>	<b>Facility ----- Phone Number</b>	<b>Facility ----- Phone Number</b>
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
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# Regulatory Compliance & Declarations

## European Compliance for CE Mark

These listings are limited only to those units bearing the CE Marking.

<b>Low Voltage Directive:</b>	Directive 2014/35/EU on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits
<b>ATEX – Potentially Explosive Atmospheres Directive:</b>	Directive 2014/34/EU on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres Zone 2, Category 3, Group II G, Ex nA IIC T3 Gc X Zone 2, Category 3, Group II G, Ex nA IIC T4 Gc X
<b>EMC Directive:</b>	Declared to Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to electromagnetic compatibility (EMC)

## North American Compliance

These listings are limited only to those units bearing the appropriate CSA identification and marking.

<b>CSA:</b>	CSA Certified for Class I, Division 2, Groups A, B, C, D, T3 or T4 Hazardous Locations and ordinary locations at 70 °C ambient. For use in Canada and the United States. Certificate 1150575
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**NOTE**—Wiring must be in accordance with applicable electric codes with the local authority having jurisdiction.

T3 when the Potential Transformer input is 240 Vac  
T4 when the Potential Transformer input is 120 Vac or less

## Special Conditions for Safe Use

The control must be installed in a suitable enclosure. The final combination must be approved by the local authority having jurisdiction.

Connect the ground terminal to earth ground.

Use supply wire rated for minimum 75 °C

Use signal wire rated for a minimum of 240 Vac.

Per EN 60079-15:2010: Device meets ATEX Zone 2 requirements when installed in an ATEX compliant IP54 or better enclosure.

T3 when the Potential Transformer input is 240 Vac.

T4 when the Potential Transformer input is 120 Vac or less.



### WARNING

**EXPLOSION HAZARD**—Do not remove covers or connect/disconnect electrical connectors unless power has been switched off or the area is known to be non-hazardous.

**Substitution of components may impair suitability for Class I, Division 2.**



### AVERTISSEMENT

**RISQUE D'EXPLOSION**—Ne pas enlever les couvercles, ni raccorder / débrancher les prises électriques, sans vous en assurez auparavant que le système a bien été mis hors tension; ou que vous vous situez bien dans une zone non explosive.

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

**EU DECLARATION OF CONFORMITY**

**EU DoC No.:** 00448-04-EU-02-01  
**Manufacturer's Name:** WOODWARD INC.  
**Manufacturer's Contact Address:** 1041 Woodward Way  
Fort Collins, CO 80524 USA  
**Model Name(s)/Number(s):** 2301E & 2300E Family of Controls

**The object of the declaration described above is in conformity with the following relevant Union harmonization legislation:**

Directive 2014/34/EU on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres

Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to electromagnetic compatibility (EMC)

Directive 2014/35/EU on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

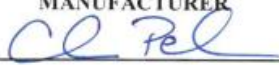
**Markings in addition to CE marking:** Ⓢ Category 3 Group II G, Ex nA IIC T3 Gc X  
Ⓢ Category 3 Group II G, Ex nA IIC T4 Gc X

**Applicable Standards:** EN61000-6-2, 2005: EMC Part 6-2: Generic Standards - Immunity for Industrial Environments  
EN61000-6-4, 2007/A1:2011: EMC Part 6-4: Generic Standards - Emissions for Industrial Environments  
EN50178, 1997: Electronic Equipment for Use in Power Installations  
EN60079-0, 2009: Explosive Atmospheres - Part 0: Equipment – General requirements  
EN60079-15, 2010: Explosive Atmospheres - Part 15: Equipment protection by type of protection "n"

**Last two digits of the year in which the CE marking was affixed for the first time:** 12

This declaration of conformity is issued under the sole responsibility of the manufacturer  
We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

**MANUFACTURER**



\_\_\_\_\_  
**Signature**

**Christopher Perkins**

\_\_\_\_\_  
**Full Name**

**Engineering Manager**

\_\_\_\_\_  
**Position**

**Woodward, Fort Collins, CO, USA**

\_\_\_\_\_  
**Place**

**01-JUN-2016**

\_\_\_\_\_  
**Date**

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