



## Installation Procedure Supplement

Manual 35224 (Revision A, 1/2025)

### STExcite Industrial Gas Turbine Ignition System – Ignitor 603P960

This document contains the following information:

- Where to obtain the complete installation, operation, and maintenance technical manual for the STExcite Industrial Gas Turbine Ignition System
- Important definitions
- Contacting Woodward or a Woodward Channel Partner
- Regulatory compliance and declarations



See Manual 35220 for complete installation, operation, maintenance, and certification information. Publications can be found on our website at <http://www.woodward.com>

#### 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 completely 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.



This publication may have been revised or updated since this copy was produced. The latest version of most publications is available on the Woodward website.

#### Revisions

[Woodward Industrial Support: Get Help](#)

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 <http://www.woodward.com> for complete instructions (Manual 35220).

**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 is a flat-rate program and includes the full standard Woodward product warranty (Woodward Product and Service Warranty 5-09-0690).

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.

Charges for the Replacement/Exchange service are based on a flat rate plus shipping expenses. You are invoiced the flat rate replacement/exchange charge plus a core charge at the time the replacement unit is shipped. If the core (field unit) is returned within 60 days, a credit for the core charge will be issued.

**Flat Rate Repair:** Flat Rate Repair is available for the majority of standard 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. All repair work carries the standard Woodward service warranty (Woodward Product and Service Warranty 5-09-0690) on replaced parts and labor.

**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 and carry with it the full standard Woodward product warranty (Woodward Product and Service Warranty 5-09-0690). 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 authorization number
- Name and location where the control is installed
- Name and phone number of contact person
- Complete Woodward part number(s) and serial number(s)
- Description of the problem
- 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 at <https://www.woodward.com/support>, which also contains the most current product support and contact information.

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

<u>Facility</u>	<u>Phone Number</u>
Brazil	+55 (19) 3708 4800
China	+86 (512) 8818 5515
Germany	+49 (711) 78954-510
India	+91 (124) 4399500
Japan	+81 (43) 213-2191
Korea	+82 (32) 422-5551
Poland	+48 (12) 295 13 00
United States	+1 (970) 482-5811

#### Products Used in Engine Systems

<u>Facility</u>	<u>Phone Number</u>
Brazil	+55 (19) 3708 4800
China	+86 (512) 8818 5515
Germany	+49 (711) 78954-510
India	+91 (124) 4399500
Japan	+81 (43) 213-2191
Korea	+82 (32) 422-5551
The Netherlands	+31 (23) 5661111
United States	+1 (970) 482-5811

#### Products Used in Industrial Turbomachinery Systems

<u>Facility</u>	<u>Phone Number</u>
Brazil	+55 (19) 3708 4800
China	+86 (512) 8818 5515
India	+91 (124) 4399500
Japan	+81 (43) 213-2191
Korea	+82 (32) 422-5551
The Netherlands	+31 (23) 5661111
Poland	+48 (12) 295 13 00
United States	+1 (970) 482-5811

# Regulatory Compliance & Declarations

NOTE: The information shown here is specific to the 603P960 Ignitors only. See manual 35220 for complete information on the entire STExcite ignition system.

## European Compliance for CE Mark

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

**ATEX – Potentially Explosive Atmospheres Directive:** Directive 2014/34/EU on the harmonization of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres.

Ignitors  
 II 2 G Ex db IIB+H2 490C Gb  
 S/N 23232815 - 23232882: ETL23ATEX0301X  
 S/N 23232883 - 23232900: ETL24ATEX0370X  
 S/N 23232901 - 23233002: ETL24ATEX0450X  
 NOTE: Ignitors are listed by serial number on the certificate.

## Other European Compliance:

Compliance with the following European Directives or standards does not qualify this product for application of the CE Marking:

**RoHS Directive:** Restriction of Hazardous Substances 2011/65/EU:  
 Woodward turbomachinery systems products are intended exclusively for sale and use only as a part of Large Scale Fixed Installations per the meaning of Art.2.4(e) of directive 2011/65/EU. This fulfills the requirements stated in Art.2.4(c), and as such, the product is excluded from the scope of RoHS2.

## Other International Compliance

These listings are limited only to those units bearing the IECEx certificate number:

**IECEx:** Certified for use in explosive atmospheres per certificate:

Ignitors  
 II 2 G Ex db IIB+H2 490C Gb  
 S/N 23232815 - 23232882: IECEx ETL 23.0026X  
 S/N 23232883 - 23232900: IECEx ETL 24.0004X  
 S/N 23232901 - 23233002: IECEx ETL 24.0047X  
 NOTE: Ignitors are listed by serial number on the certificate

## Special Conditions for Safe Use:

See manual 35220 for complete Special Conditions of Use on the entire system.

## Specific Conditions of Use for IECEx and ATEX:

### Ignitor Special Conditions:

- The maximum process temperature at the mounting threads shall be no more than 480°C.
- No modification or repair shall be made on the flamepaths.
- The ignitor shall be used with a connector assembly certified in IECEx ETL 23.0027X and ETL23ATEX0302X.
- Product Ambient Range is -20°C < Tamb < +70°C
- The product ignitor has been evaluated with respect to a maximum pressure of 2800 kPa. It shall be ensured that pressure within the ignition chamber does not exceed this.
- Earthing of the equipment is intended to be completed through installation to the turbine housing and through connection to the connector assembly. The end user shall verify earth connection is made to equipment body.



## WARNING

**EXPLOSION HAZARD – Do not apply power to the STExcite™ without first connecting both igniter cable assemblies to both the STExcite and to the igniters.**



## WARNING

**In locations where high external humidity and internal temperature variations (e.g., frequent on-off cycles) may cause condensation inside the equipment, the interior should be periodically inspected.**



## WARNING

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

Woodward reserves the right to update any portion of this publication at any time. Information provided by Woodward is believed to be correct and reliable. However, no responsibility is assumed by Woodward unless otherwise expressly undertaken.

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# WOODWARD

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Phone +1 (970) 482-5811

Email and Website—[www.woodward.com](http://www.woodward.com)


<b>EU DECLARATION OF CONFORMITY</b>
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**EU DoC No.:** 00662-EU-02-01  
**Manufacturer's Name:** WOODWARD INC.  
**Manufacturer's Contact Address:** 201 Forrester Dr. Ste. A1  
 Greenville, SC 29607 USA

**Model Name(s)/Number(s):** Ignitor P/N 603P960, Serial numbers:

23232815	23232841	23232849	23232857	23232875
23232834	23232842	23232850	23232858	23232876
23232835	23232843	23232851	23232859	23232877
23232836	23232844	23232852	23232860	23232878
23232837	23232845	23232853	23232861	23232879
23232838	23232846	23232854	23232872	23232880
23232839	23232847	23232855	23232873	23232881
23232840	23232848	23232856	23232874	23232882
23232815	23232841	23232849	23232857	23232875

The object of the declaration described above is in conformity with the following relevant Union harmonization legislation: Directive 2014/34/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 equipment and protective systems intended for use in potentially explosive atmospheres

**Markings in addition to CE marking:**  II 2 G, Ex db IIB+H2 490C Gb

**Applicable Standards:**

**ATEX:** EN IEC 60079-0:2018 – Explosive atmospheres – Part 0: Equipment – General requirements  
 EN 60079-1:2014 – Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”  
 ETL23ATEX0301X

**Third Party Certification:**

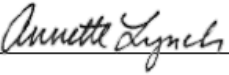
Intertek Testing Services NA, Inc. (2903)  
 14920-135 Ave, Edmonton, AB, T5V 1R9 CANADA

**Conformity Assessment:** Intertek Testing Services NA, Inc. (2903) per Annex V for Product Verification

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**

**Annette Lynch**  
 \_\_\_\_\_  
**Full Name**

**Engineering Manager**  
 \_\_\_\_\_  
**Position**

**Woodward, Fort Collins, CO, USA**  
 \_\_\_\_\_  
**Place**

**15 December 2023**  
 \_\_\_\_\_  
**Date**

<b>EU DECLARATION OF CONFORMITY</b>
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EU DoC No.: 00662-EU-02-04  
 Manufacturer's Name: WOODWARD INC.

Manufacturer's Contact Address: 201 Forrester Dr. Ste. A1  
 Greenville, SC 29607 USA


Model Name(s)/Number(s): Ignitor P/N 603P960, Serial numbers:

23232883	23232884	23232885	23232886	23232887
23232888	23232889	23232890	23232891	23232892
23232893	23232894	23232895	23232896	23232897
23232898	23232899	23232900		

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

Directive 2014/34/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 equipment and protective systems intended for use in potentially explosive atmospheres

Markings in addition to CE marking:

 II 2 G, Ex db IIB+H2 490C Gb

Applicable Standards:

ATEX: EN IEC 60079-0:2018 – Explosive atmospheres – Part 0: Equipment – General requirements  
 EN 60079-1:2014 – Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”

Third Party Certification:

ETL24ATEX0370X  
 Intertek Testing Services NA, Inc. (2903)  
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MANUFACTURER

Signature



Annette Lynch

Full Name

Engineering Manager

Position

Woodward, Fort Collins, CO, USA

Place


26 November 2024

Date

<b>EU DECLARATION OF CONFORMITY</b>
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**EU DoC No.:** 00662-EU-02-05  
**Manufacturer's Name:** WOODWARD INC.  
**Manufacturer's Contact Address:** 201 Forrester Dr. Ste. A1  
 Greenville, SC 29607 USA  
**Model Name(s)/Number(s):** Ignitor P/N 603P960, Serial numbers: 23232901- 23233002

**The object of the declaration described above is in conformity with the following relevant Union harmonization legislation:** Directive 2014/34/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 equipment and protective systems intended for use in potentially explosive atmospheres

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 Intertek Testing Services NA, Inc. (2903)  
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Signature



Full Name

Annette Lynch

Position

Engineering Manager

Place

Woodward, Fort Collins, CO, USA

Date

15 January 2025