

Honeywell

ET401A1 Ignition Transformer

PRODUCT DATA



- ET401A1 ignition transformer combines low power consumption with a low inrush current.
- The dimensions of the housing and mounting holes are such that the ET401A1 can be mounted underneath the burner control box.
- Weighs 1.2 pounds (0.55 kilograms).
- Meets UL Standards 1012 and 506.

SPECIFICATIONS

IMPORTANT

The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not match the listed specifications exactly. Also, this product is tested and calibrated under closely controlled conditions and some minor differences in performance can be expected if those conditions are changed.

APPLICATION

The ET401A1 is a Ignition Transformer that is suitable to be installed in burner control boxes for gas fuel burner systems.

Model: ET401A1 Single high voltage electrode for gas, with self-tapping screw connector.

FEATURES

- Ignites interrupted gas pilots with electrode spacings between 0.12 to 0.20 inches (3 and 5 mm).
- ET401A1 has 14.0 kV output peak voltage for a reliable light-off.
- Generates the lowest electromagnetic interferences of all known electronic ignition devices; especially important if the burner has to comply with EN 55014-2.

Electrical Ratings:

Voltage and Frequency:

ET401A1 -110 VAC (+10%, -15%), 50/60 Hz.

Output peak voltage: 14.0 kV.

Secondary Frequency: 14.0 kHz

Interrupted Ignition only:

ET401A1 - Duty cycle 33%; 60 seconds on/120 seconds off.

Spark Characteristics:

Spark Gap:

ET401A1 - 0.12 to 0.20 in. (3 to 5 mm).

Contents

Application	1
Features	1
Specifications	1
Installation	2



32-00185-03

Ambient Temperature Range: 5°F to 140°F
(-15°C to 60°C).

Insulation Standard: IP40

Weight: 1.213 lb. (0.55 kg).

Dimensions: See Fig. 1.

Approvals (ET401A1 only):

Underwriters Laboratories Inc. Component Recognized: Certificate No. 20180201-E494797.

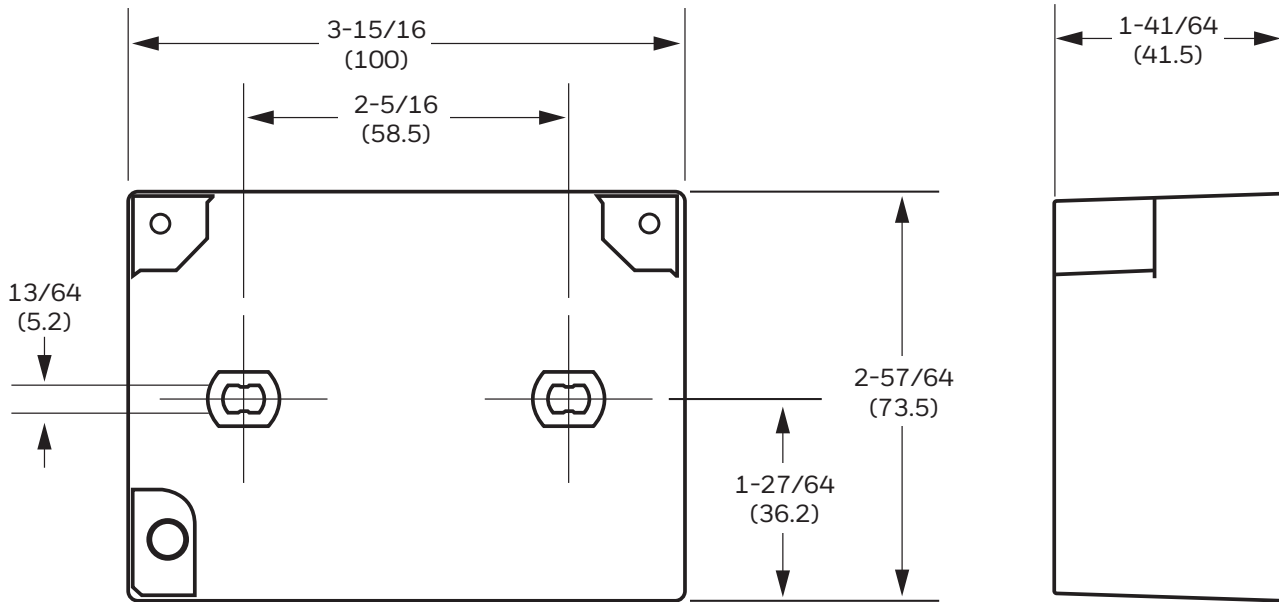


Fig. 1. ET401A1 dimensions in in. (mm).

INSTALLATION

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced, flame safeguard control technician.
4. Particular attention must be given to the method used to install the H.T. cables.
 - a. Avoid unnecessary lengths, sharp bends over hard edges, extremely high temperatures, etc., any of which could potentially reduce performance or possible returns.
 - b. The length of the power line is about 1.6 feet (0.5 m).
 - c. Connect the wires with their terminals: brown - live wire, blue - null wire, yellow/green - ground wire.
 - d. Cut the end of the high voltage cable flat, insert high voltage cable into the shroud and screw onto the high voltage self tapping screw. The connection is convenient and reliable (See Fig. 2 & 3).
5. After installation is complete, check out product operation as provided in these instructions.

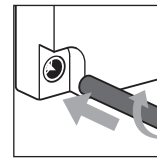


Fig. 2.

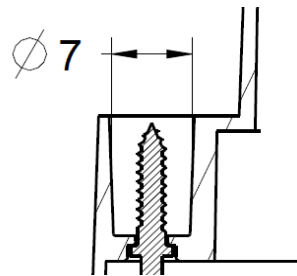


Fig. 3.



WARNING

Electrical Shock Hazard.

Can cause serious injury, death or property damage.

Disconnect power supply before beginning installation to prevent electrical shock and equipment damage. More than one disconnect may be required.

IMPORTANT

1. All wiring must comply with applicable local electrical codes, ordinances and regulations.
2. Voltage and frequency of the power supply must match the ET401A1 being used.
3. Make sure the ET401A1 is properly grounded.
4. For trouble-free operation:
 - a. Observe the correct spark gap at the ignition electrodes.
 - b. Ensure supply voltage reductions of -15%.
 - c. Control for temperatures outside of the specified operating range.
 - d. The positioning of the H.T. ignition cables with regard to TV and radio interference is extremely important.
 - e. Cables should be kept short, run as close together as possible and should not cross or be in contact with any other power cables or fittings.
 - f. See "Technical Data" for recommended settings.

Model	ET401A1
Power supply	110VAC(-15~+10%), 0.3A, 50/60Hz
Ignition Voltage Output	> 14 kV amp
High Voltage Output Connection Pin	1 self tapping screw
Secondary Current	30 mA rms ($\pm 20\%$)
Secondary Frequency	14 kHz ($\pm 10\%$)
Rating	33 % E.D. in 3 minutes
Spark Gap	3-5 mm
Ignition Cable Connection Type	Ignition Cable Insert and Screw Type
Insulation Standard	IP40
Permissible Ambient	5°F to 140°F (-15°C to 60°C)
Weight	1.2 lbs (0.55 kg)
Install Screw Recommended	2 x M5 x 20
Connection Cable Specifications	
Cable Jacket Material	High Voltage Silicone
Isolation Voltage	>17kV
Wire Diameter	7 mm
Recommended Wire Length	9.8 ft (3 m)

For More Information

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

Honeywell Process Solutions

Honeywell Thermal Solutions (HTS)
1250 West Sam Houston Parkway
South Houston, TX 77042
ThermalSolutions.honeywell

® U.S. Registered Trademark
© 2018 Honeywell International Inc.
32-00185-03 M.S. 08-18
Printed in United States

Honeywell