

ET401A/ET402A/ET401A1/ET402A1

IGNITION TRANSFORMER

PRODUCT HANDBOOK



INTRODUCTION

ET serial ignition transformer with high voltage cable output self tapping screw and power cable, suitable to be installed in burner control box, can be widely used with oil, gas and dual fuel burners. Enables big spark deformation on burners with a high fire-rating or high combustion-air velocity. In addition to this, it generates the lowest electromagnetic interferences of all known electronic ignition devices, which is especially important if the burner has to comply with EN 55014-2. ET serial ignition transformer combines low power consumption with a low inrush current.

The operation must be intermittent ignition, work-cycle limit of 3 minutes, in which the ignition time is less than 1 minute; it means 33 % E.D. in 3 minutes

CONSTRUCTIONAL FEATURES

ET serial ignition transformer adopt transistorized oscillator to produce a high frequency voltage which is then increased to 14 kV, compare with conventional iron cored transformer, despite they are very compact dimensions, they have outstanding performance. The dimensions of the housing and fixing holes are such that it can be mounted underneath the burner control box wiring base.

ET serial ignition transformer supply with 3 cores power cable (No show in dimension drawing), ET401 has 1 high voltage output self tapping screw connection, suitable for use with gas burners. ET402 has 2 high voltage output self tapping screw connections, suitable for use with oil, gas and dual fuel burners.

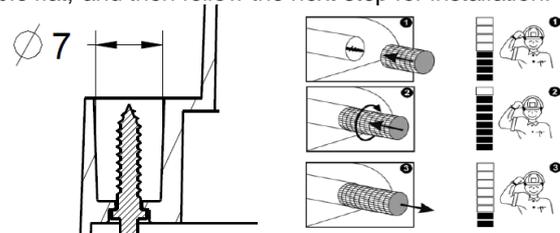
INSTALLATION INSTRUCTIONS

The applicable regulations must be observed when mounting the device and carrying out the electrical connections. Particular attention must be given to method used to install the H.T. cables. Avoid unnecessary lengths, sharp bends over hard edges, extremely high temperatures etc., any of which could give rise to reduced performance or possible problems. The length of power line is about 0.5 m; connect the wires with their terminals: brown-live wire, blue-null wire, yellow/green-ground wire.

For trouble-free operation, the correct spark gap at the ignition electrodes must be observed, supply voltage reductions of minus 15% and low as well as high ambient temperatures can give rise to problems. The positioning of the H.T. ignition cables with regard to TV and radio interference is also extremely important. The 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. See "Technical data" for recommended settings.

HIGH VOLTAGE CABLE CONNECTION

ET serial ignition transformer with high voltage cable output self tapping screw, cut the end of high voltage cable flat, and then follow the next step for installation.



1. Insert the HV cable in the special connection of ignitor transformer.
2. Screw the HV cable onto the self-tapping screw exerting discreet pressure in the direction of the connection.
3. Check that the HV cable has indeed been connected pulling lightly in the opposite direction to the connection.



CAUTION

Improper operation will cause personal injury or equipment damage, Disconnect the power connection before installation.

Must be well earthed!

When Ignition transformer is working, access to high voltage terminal is strictly prohibited!

When control fail, the ignition transformer ignites continuously, may cause overheating damage.



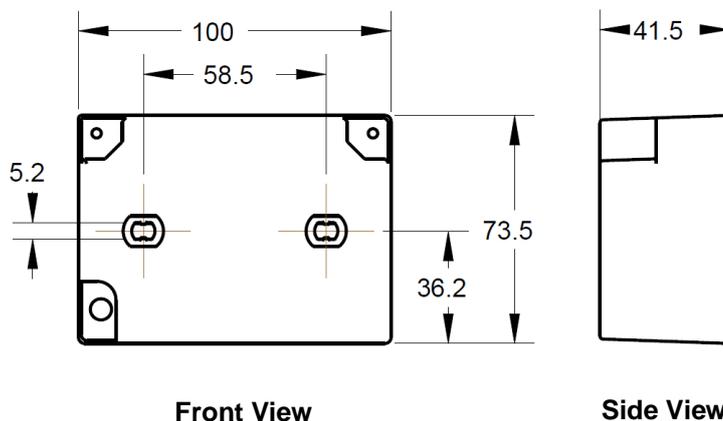
ELECTRIC SHOCK PROTECTION

Must considering the electric shock protection. Make sure the end-users cannot access the parts not proper insulated without tool. The ignition system must be fully insulated with the metal parts not earthed and the parts without electric shock protection.

TECHNICAL DATA

Model	ET 401A	ET 402A	ET 401A1	ET 402A1
Power supply	230VAC(-15~+10%), 0.25A, 50/60 Hz		110..120VAC(-15~+10%), 0.3A, 50/60Hz	
Ignition voltage output	> 14 kV amp	> 2 x 7 kV amp	> 14 kV amp	> 2 x 7 kV amp
High voltage output connection pin	1 self tapping screw	2 self tapping screws	1 self tapping screw	2 self tapping screws
Secondary current	35 mA rms ($\pm 20\%$)		30 mA rms ($\pm 20\%$)	
Secondary frequency	20 kHz ($\pm 10\%$)		14 kHz ($\pm 10\%$)	
Rating	33 % E.D. in 3 minutes			
Spark gap	3-5 mm			
Line voltage power cable connection type	Factory mounted molded 3-wire cable (L/N/G) with stripped ends, 0.5 m length			
Ignition cable connection type	7 mm ignition cable insert with threaded pin for fixation			
Insulation standard	IP40			
Permissible ambient	-15°C ~ +60°C			
Weight	550 g			
Install screw recommend	2 x M5 x 20			

ET 401/402 DIMENSIONS



Certification

ET401A1 (110..120Vac) have UL approval, CE approval (LVD) is pending for all ET400 models.

Honeywell

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