

## ET401 / ET402 IGNITION TRANSFORMER

### PRODUCT HANDBOOK



### INTRODUCTION

ET serial ignition transformer with high voltage cable connection pin 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 a 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 transistorised 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, ET401 has 1 high voltage output pin connection, suitable for use with gas burners. ET402 has 2 high voltage output pin connections, suitable for use with oil, gas and dual fuel burners. The pin diameter is  $\varnothing 1$  mm (Show in dimension drawing). Connect with high voltage cable with fasten clip. ,

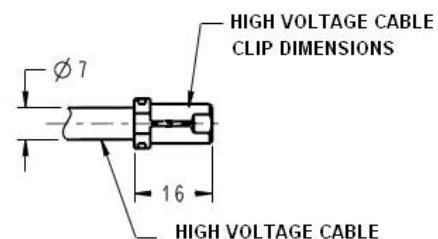
### INSTALLATION INSTRUCTIONS

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 FASTEN CLIP

High voltage cable fasten clip is a self-lock clip. Insert the cable to clip, then fold it till to the lock position.



### 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 ignite continuously, may cause overheating damage.**



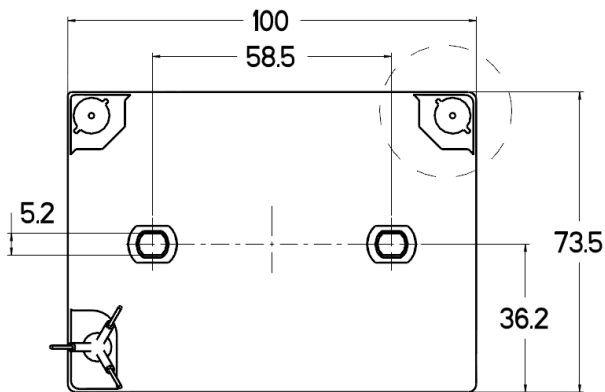
### ELECTRIC SHOCK PROTECTION

Must consider the electric shock protection. make sure the end-users can not 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.

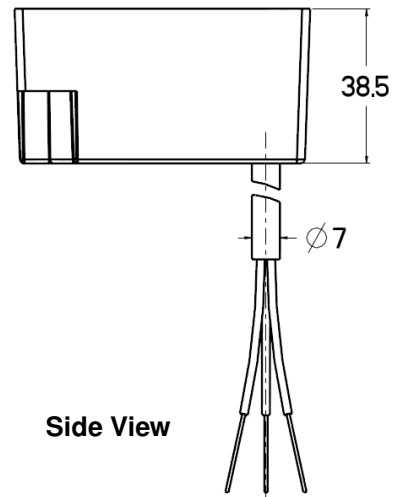
## TECHNICAL DATA

Model	ET 401	ET 402
Power supply	230 V~ (-15 ~ +10%), 0.25 A, 50/60 Hz	
Ignition voltage output	> 14 kV amp	> 2 x 7 kV amp
Secondary current	< 40 mA rms	
Secondary frequency	20 kHz	
High voltage output connection pin	Ø1mm Pin	2 x Ø1mm Pin
Rating	33 % E.D. in 3 minutes	
Spark gap	3-5 mm	
Ignition cable type	Cable plug, the self-lock clip provided	
Insulation standard	IP40	
Permissible ambient	-15°C ... +60°C	
Weight (g)	290	300

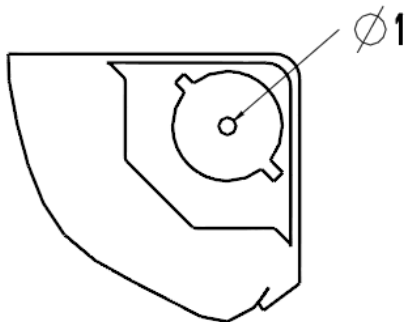
## ET 401/402 DIMENSIONS



Front View



Side View



High Voltage Cable  
Connection Pin

# Honeywell

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