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ZT 930

# High frequency ignition unit

For oil and gas dual burners of small to medium rating. With plug-in ignition and power supply cables, designed to fit beneath the burner safety control box.

## INTRODUCTION

The ZT 930 high frequency ignition transformer is suitable for use with oil, gas and dual fuel burners of small to medium rating. The ZT 930 enables a big spark deformation on burners with a high fire-rating or high combustion-air velocity. In addition to this, it generates the lowest electromagnetic interferrences of all known electronic ignition devices, which is especially important if the burner has to comply with EN 55014. The ZT 930 combines a low power consumption with a low inrush current. The power connector is compatible with the widely used 3-wire connector. A replacement with a plugable coil trafo is therefore possible without any problems.

#### **CONSTRUCTIONAL FEATURES**

A transistorised oscillator produces a high frequency voltage, which is then increased to 14 kV by a conventional ironcored transformer. Despite the very compact dimensions of the ZT 930 ignition device, it has an outstanding performance in comparison to conventional stray field ignition transformers. The high frequency voltage produces an interrupting arc with high thermal energy and ideal ignition properties. The dimensions of the housing and fixing holes are such that it can be mounted underneath the burner control box wiring base. The power supply for the ZT 930 is provided in the form of a 3 pin AMP type socket connection with a corresponding plug and cable supplied.

In order to meet all likely requirements, the ZT 930 is available in 2 versions:

- ZT 930 4.0 mm pin to suit standard ignition cable connectors, e.g. for pre-assembled "Teflon" H.T. cables.
- ZT 930 1.0 mm pin to suit 7.0 mm silicon H.T. cable in conjunction with the Satronic 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 instal 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. For trouble-free operation, the correct spark gap at the ignition electrodes must be observed, supply voltage reductions and low ambient temperatures can give rise to problems if this is incorrect, see "Technical data" for recommended settings. 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.





### **TECHNICAL DATA**

Supply voltage 220 / 240 V (-15... +10%) 50 Hz (40 - 60 Hz) Connections: Live / neutral / earth 3 AMP plug type terminals 6.30 x 0.8 mm High tension ø 4 mm pin or ø 1 mm pin Primary current 0.25 A Rating Intermittent, 33 % E.D. in 3 minutes <N (VDE 0875) Interference level Ignition voltage 2 x 7 kV 40 mA rms Secondary current Secondary frequency 20 kHz Spark gap 3 - 5 mm Ignition cable plug-in type Insulation standard IP 40 -10° C... +60° C Permissable ambient temperature Mounting attitude any Weight 280 g

The ZT 930 is also available for a supply voltage of 110/120 V.





