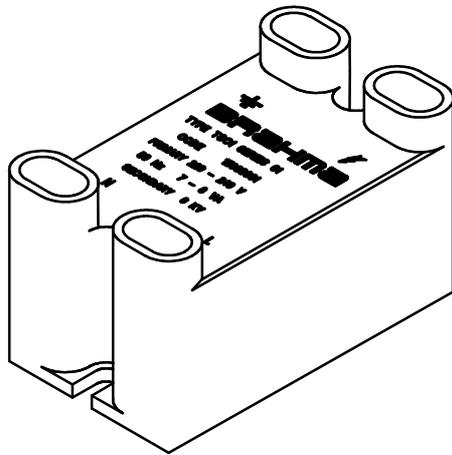


TSC... SERIES

CAPACITIVE-DISCHARGE IGNITORS



DESCRIPTION

The devices of this series are capacitive-discharge ignitors for continuous operation, suitable for gas combustion in atmospheric burners. The available types essentially differ for their spark frequency and its energy; remember that the ignition power of a capacitive-discharge ignitor is directly proportional to its discharge energy.

Thanks to its high discharge energy the TSC1 is suitable even for the applications in which normal capacitive-discharge ignitors are not effective. The plastic case and an internal epoxy resin casting grant an adequate insulation.

Notes:

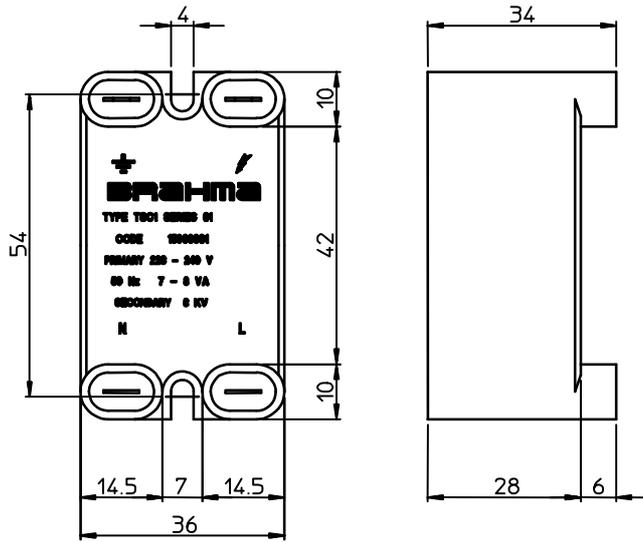
- Remember that an excessively long ignition cable connected to the ignitor can lead to a discharge energy reduction, because of the production of a parasitic capacity between the cable and the nearby ground planes.
- Avoid laying the ignition cable next to other conductors: energy transfer between close conductors due to parasitic capacity phenomena could damage connected devices, especially the electronic ones.

TECHNICAL FEATURES

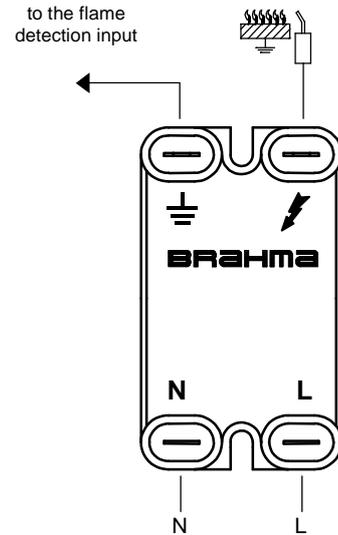
- Operating temperature range: -20°C +60°C
- Protection degree: IP20
- Recommended distance between the electrodes:
 - 5 mm -> TSC1 220-240 V 50 Hz
 - > TSC 220-240 V 50-60 Hz
 - > TSC1 110-120 V 50-60 Hz
 - > TSC1/F 220-240 V 50-60 Hz
 - 1 mm -> TSC1/Z 110-120 V 50-60 Hz
- Max. supply cable length: 1 m
- Max. ignition cable length: 2 m
- Duty cycle: 100%
- Weight: 80 gr
- High voltage connectors: fast-on 2,8x0,5
- Supply connectors: fast-on 6,35x0,8

Type	Power supply	Available discharge voltage	Discharge frequency	Discharge energy	Power consumption
TSC	220-240Vac 50-60Hz	20kV	25Hz	2mJ	2 VA
TSC1	220-240Vac 50Hz	20kV	50Hz	9mJ	7,5VA
TSC1	110-120Vac 50-60Hz	20kV	50Hz	3mJ	4VA
TSC1/Z	110-120Vac 50-60Hz	10kV	50Hz	6mJ	4VA
TSC1/F	220-240Vac 50-60Hz	20kV	50Hz	8mJ	7,5VA

OVERALL DIMENSIONS



CONNECTION DIAGRAMS (MONOELECTRODE)



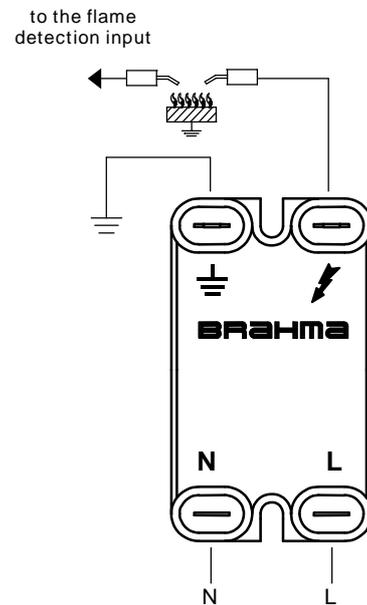
INSTALLATION

- Connect and disconnect the ignition transformer only after switching off power supply.
- Respect the applicable national and European standards (e.g. EN 60355-1 / EN 50165 / EN 61558-1-2-3) regarding electrical safety.
- Make sure the earth of the transformer and the earth of the electrical system are well connected. The device can be mounted in any position.
- Avoid placing high voltage cables close to other cables.
- Make sure the protection degree is suitable to the system.
- Reduce the ignition cable length to a minimum (this reduces stray capacitance and the possibility that the ignition cable acts like an antenna transferring interference to the nearby cables).
- Make ignition cables follow a separate path close to ground planes (this reduces the influence of interference on the remaining electrical wires).
- Arrange a single earth centre, thus preventing earth conductors from creating ring paths.

CONNECTION

- The power supply connection occurs by means of 6,3X0,8 fast-on connectors; the high voltage part is connected by means of 2,8X0,5 fast-on connectors..

CONNECTION DIAGRAMS (BIELECTRODE)



ATTENTION -> Company Brahma S.p.A. declines any responsibility for any damage resulting from the Customer's interfering with the device

BRAHMA S.p.A.

Via del Pontiere, 31
37045 Legnago (VR)
Tel. +39 0442 635211 - Telefax +39 0442 25683
<http://www.brahma.it>
E-mail : brahma@brahma.it

2007/10/10 Subject to amendments without notice