

TSC... SERIES

CAPACITIVE-DISCHARGE IGNITORS

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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 capacitivedischarge 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℃ +60℃
- Protection degree:

5 mm

1 mm

Recommended distance between the electrodes:

- -> 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
- -> TSC1/Z 110-120 V 50-60 Hz
- Max. supply cable length:
- Max. ignition cable length: 2 m
 - Duty cycle:
- 100% 80 gr Weight:
- High voltage connectors: fast-on 2,8x0,5
- Supply connectors:

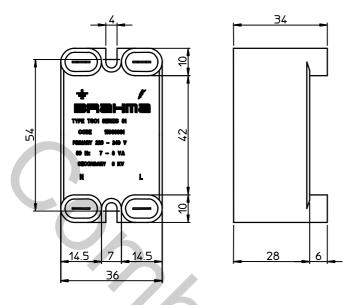
Type	Power supply	Available discharge voltage	Discharge frequency	Discharge energy	Power consumption
TSC	220-240Vac 50-60Hz	20kV	25Hz	2mJ	2 VA
TSC1	220-240Vac 50Hz	20kV	50Hz	9mJ	7,5VA
TSC1	110-120Vac 50-60Hz	20kV	50Hz	3mJ	4VA
TSC1/Z	110-120Vac 50-60Hz	10kV	50Hz	6mJ	4VA
TSC1/F	220-240Vac 50-60Hz	20kV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

IP20

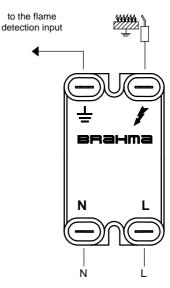
1 m

fast-on 6,35x0,8

OVERALL DIMENSIONS



CONNECTION DIAGRAMS (MONOELECTRODE)



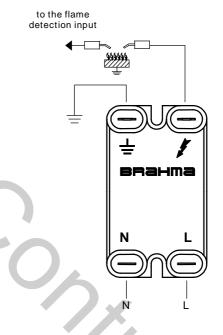
CONNECTION DIAGRAMS (BIELECTRODE)

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..



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

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