

БРАHMA

Trasformatori di accensione
Ignition transformers

Serie TT / TT Series



- Alimentazione a 230VAC oppure a 110-120VAC 50/60Hz
- Funzionamento temporizzato (60s alla massima potenza)
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con fast-on o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4mm o a vite
- Filtro antidisturbi incorporato
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -20°C / +60°C
- Certificazione IMQ
- **Certificazione UL per versione 110-120 VAC**
 - 230VAC or 110-120VAC 50/60Hz supply voltage
 - Timed operation (60s at maximum power)
 - 1 or 2 poles execution
 - Supply connector with fast-on or triangular plug
 - High voltage connector with 4mm Ø cylindrical connector or screw connector
 - Built-in EMC filter
 - Max high voltage cables length 1.5 m
 - Operating temperature -20°C / +60°C
 - IMQ certification
 - **UL CERTIFICATION FOR 110-120 VAC VERSION**

230VAC	TT1xx fino a 60s/ up to 60s	TT1xx dopo 60s/ after 60s	TT2xx fino a 60s/ up to 60s	TT1xx dopo 60s/ after 60s
Tensione di picco / Peak voltage	17kV	17kV	2x13kV	2x13kV
Corrente RMS di cc / RMS current on sc	37mA	26mA	30mA	21mA
Consumo / Consumption	31VA	23VA	29VA	19VA

110-120VAC	TT1xx fino a 60s/ up to 60s	TT1xx dopo 60s/ after 60s	TT2xx fino a 60s/ up to 60s	TT1xx dopo 60s/ after 60s
Tensione di picco / Peak voltage	17kV	17kV	2x13kV	2x13kV
Corrente RMS di cc / RMS current on sc	34mA	25mA	27mA	19mA
Consumo / Consumption	28VA	20VA	25VA	18VA

Serie TCD / TCD Series



- Alimentazione a 230VAC oppure a 110-120VAC 50/60Hz
- Funzionamento intermittente al 33% in 3 minuti o continuo
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con fast-on o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Filtro antidisturbi incorporato
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -20°C / +60°C
- Certificazione IMQ
- 230VAC or 110-120VAC 50/60Hz supply voltage
- 33% in 3 minutes or continuous operation
- 1 or 2 poles execution
- Supply connector with fast-on or triangular plug
- High voltage connector with 4 mm Ø cylindrical connector or screw connector
- Built-in EMC filter
- Max high voltage cables length 1.5 m
- Operating temperature -20°C / +60°C
- IMQ certification

230VAC	TCD1xAx	TCD1xSx	TCD2xAx	TCD2xSx
Tensione di picco / Peak voltage	17kV	17kV	2x13kV	2x13kV
Corrente RMS di cc / RMS current on sc	37mA	26mA	30mA	21mA
Consumo / Consumption	31VA	23VA	29VA	19VA

110-120VAC	TCD1xAx	TCD1xSx	TCD2xAx	TCD2xSx
Tensione di picco / Peak voltage	17kV	17kV	2x13kV	2x13kV
Corrente RMS di cc / RMS current on sc	34mA	25mA	27mA	19mA
Consumo / Consumption	28VA	20VA	25VA	18VA

Serie TCD 12-24VDC / TCD 12-24VDC Series



- Alimentazione a 12VDC oppure a 24VDC
- Funzionamento intermittente al 33% in 3 min o continuo
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con fast-on
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Funzione protezione sovratemperatura integrata
- Lunghezza massima cavi di accensione 1.5 m
- Opzione abilitazione/disabilitazione trasformatore (opzione enable)
- Temperatura di esercizio -20°C / +60°C
- 12VDC or 24VDC supply voltage
- 33% in 3 min or continuous operation
- 1 or 2 poles execution
- Supply connector with fast-on
- High voltage connector with 4mm Ø cylindrical connector or screw connector
- Built-in overtemperature protection function
- Max high voltage cables length 1.5 m
- Transformer enabling / disabling option (enable option)
- Operating temperature -20°C / +60°C

12VDC	TCD1xAx	TCD1xSx	TCD2xAx	TCD2xSx
Tensione di picco / Peak voltage	18kV	18kV	2x14kV	2x14kV
Corrente RMS di cc / RMS current on sc	39mA	28mA	29mA	21mA
Consumo / Consumption	40VA	13VA	24VA	13VA

24VDC	TCD1xAx	TCD1xSx	TCD2xAx	TCD2xSx
Tensione di picco / Peak voltage	22kV	20kV	2x15kV	2x15kV
Corrente RMS di cc / RMS current on sc	48mA	31mA	40mA	23mA
Consumo / Consumption	35VA	15VA	40VA	14VA

Serie TC-TD / TC-TD Series



- Alimentazione a 220-240VAC o 110-120VAC 50/60Hz
- Funzionamento intermittente al 50% in 2 minuti o continuo
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con cavo o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Opzione filtro antidisturbi
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -10°C / +60°C
- **Certificazione UL per versione 110-120 VAC**
- 220-240VAC or 110-120VAC supply voltage 50/60Hz
- 50% in 2 minutes or continuous operation
- 1 or 2 poles execution
- Supply connector with fast-on or triangular plug
- High voltage connector with 4mm Ø cylindrical connector or screw connector
- Optional EMC filter
- Max high voltage cables length 1.5 m
- Operating temperature -10°C / +60°C
- **UL certification for 110-120 VAC version**

220-240VAC	TC/D1xxxAx	TC/D1xxxSx	TC/D2xxxAx	TC/D2xxxSx
Tensione di picco / Peak voltage	15kV	15kV	2x12kV	2x12kV
Corrente RMS di cc / RMS current on sc	25mA	15mA	30mA	20mA
Consumo / Consumption	45VA	25VA	55VA	30VA

110-120VAC	TC/D1xxxAx	TC/D1xxxSx	TC/D2xxxAx	TC/D2xxxSx
Tensione di picco / Peak voltage	15kV	15kV	2x12kV	2x12kV
Corrente RMS di cc / RMS current on sc	20mA	14mA	27mA	20mA
Consumo / Consumption	45VA	25VA	55VA	30VA

Serie TC-TD / TC-TD Series



- Alimentazione a 24VAC 50/60Hz o 24VDC
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con cavo o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Opzione filtro antidisturbi
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -10°C / +60°C
- 24VAC 50/60Hz or 24VDC supply voltage
- 1 or 2 poles execution
- Supply connector with fast-on or triangular plug
- High voltage connector with 4mm Ø cylindrical connector or screw connector
- Optional EMC filter
- Max high voltage cables length 1.5 m
- Operating temperature -10°C / +60°C

24VAC	TC/D1xxxAx	TC/D2xxxAx
Tensione alimentazione / Supply voltage	24VAC	24VAC
Tensione di picco / Peak voltage	15kV	2x12kV
Corrente RMS di cc / RMS current on sc	19mA	26mA
Consumo / Consumption	65VA	79VA

24VDC	TC/D1xxxAx	TC/D2xxxAx
Tensione alimentazione / Supply voltage	24VDC	24VDC
Tensione di picco / Peak voltage	15kV	2x12kV
Corrente RMS di cc / RMS current on sc	17mA	25mA
Consumo / Consumption	38W	52W

Serie TA-TB / TA-TB Series



- Alimentazione a 220-240VAC o a 110-120VAC 50/60Hz
- Funzionamento intermittente al 50% in 2 minuti o continuo
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con cavo o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Opzione filtro antidisturbi
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -10°C / +60°C
- 220-240VAC or 110-120VAC 50/60Hz supply voltage
- 50% in 2 minutes or continuous operation
- 1 or 2 poles execution
- Supply connector with fast-on or triangular plug
- High voltage connector with 4 mm Ø cylindrical connector or screw connector
- Optional EMC filter
- Max high voltage cables length 1.5 m
- Operating temperature -10°C / +60°C

220-240VAC	TA/B1xxxAx	TA/B1xxxSx	TA/B2xxxAx	TA/B2xxxSx
Tensione di picco / Peak voltage	17kV	17kV	2x15kV	2x12kV
Corrente RMS di cc / RMS current on sc	26mA	17mA	40mA	22mA
Consumo / Consumption	35VA	30VA	46VA	35VA

110-120VAC	TA/B1xxxAx	TA/B1xxxSx	TA/B2xxxAx	TA/B2xxxSx
Tensione di picco / Peak voltage	17kV	16kV	2x12kV	2x12kV
Corrente RMS di cc / RMS current on sc	26mA	14mA	35mA	22mA
Consumo / Consumption	35VA	30VA	45VA	35VA

Serie TTA-TTB / TTA-TTB Series



TTB

TTA

- Alimentazione a 220-240VAC o a 110-120VAC 50/60Hz
- Funzionamento temporizzato (60s alla massima potenza)
- Esecuzione a 1 oppure a 2 poli
- Connessione alimentazione con cavo o presa triangolare
- Connessione alta tensione con connettore cilindrico Ø 4 mm o a vite
- Filtro antidisturbi incorporato
- Lunghezza massima cavi di accensione 1.5 m
- Temperatura di esercizio -10°C / +60°C
- 220-240VAC or 110-120VAC 50/60Hz supply voltage
- Timed operation (60s at maximum power)
- 1 or 2 poles execution
- Supply connector with fast-on or triangular plug
- High voltage connector with 4mm Ø cylindrical connector or screw connector
- Built-in EMC filter
- Max high voltage cables length 1.5 m
- Operating temperature -10°C / +60°C

220-240VAC	TTA/B1 fino 60s / up to 60s	TTA/B1 dopo 60s after 60s	TTA/B2 fino 60s / up to 60s	TTA/B2 dopo 60s after 60s
Tensione di picco / Peak voltage	20kV	20kV	2x15kV	2x15kV
Corrente RMS di cc / RMS current on sc	32mA	21mA	40mA	22mA
Consumo / Consumption	35VA	25VA	45VA	35VA

110-120VAC	TTA/B1 fino 60s / up to 60s	TTA/B1 dopo 60s after 60s	TTA/B2 fino 60s / up to 60s	TTA/B2 dopo 60s after 60s
Tensione di picco / Peak voltage	20kV	20kV	2x15kV	2x15kV
Corrente RMS di cc / RMS current on sc	29mA	21mA	28mA	20mA
Consumo / Consumption	35VA	25VA	45VA	35VA



Serie TSM / TSM Series

- Alimentazione a 220-240VAC o a 110-120VAC 50/60Hz
- Funzionamento intermittente al 50% in 2 minuti
- Connessione alimentazione con connettore Stelvio 3 vie
- Connessione alta tensione mediante fast-on 2.8 x 0.5 mm
- Filtro antidisturbi incorporato
- Adatto per applicazioni monoelettrodo e bielettrodo
- Lunghezza massima cavi di accensione 2 m
- Temperatura di esercizio -20°C / +60°C
- 220-240VAC or 110-120VAC 50/60Hz supply voltage
- 50% in 2 minutes operation
- Supply connection with 3-way Stelvio connector
- High voltage connection with 2.8 x 0.5 mm fast-on
- Built-in EMC filter
- Suitable for monoelectrode or bielectrode applications
- Max high voltage cables length 2 m
- Operating temperature -20°C / +60°C

220-240VAC	TSM
Tensione di picco / Peak voltage	15kV
Corrente RMS di cc / RMS current on sc	2,85mA
Consumo / Consumption	17VA

110-120VAC	TSM
Tensione di picco / Peak voltage	15kV
Corrente RMS di cc / RMS current on sc	1,76 mA
Consumo / Consumption	12VA



Serie TSC / TSC Series

- Alimentazione a 220-240VAC o a 110-120VAC 50/60Hz
- Funzionamento continuo
- Connessione alimentazione con fast-on 6.35 x 0.8 mm
- Connessione alta tensione con fast-on 2.8 x 0.5 mm
- Filtro antidisturbi incorporato
- Adatto per applicazioni monoelettrodo e bielettrodo
- Lunghezza massima cavi di accensione 2 m
- Temperatura di esercizio -20°C / +60°C
- 220-240VAC or 110-120VAC 50/60Hz supply voltage
- Continuous operation
- Supply connection with 6.35 x 0.8 mm fast-on
- High voltage connection with 2.8 x 0.5 mm fast-on
- Built-in EMC filter
- Suitable for monoelectrode or bielectrode applications
- Max high voltage cables length 2 m
- Operating temperature -20°C / +60°C

220-240 V	TSC	TSC1	TSC1F	TSC2
Tensione di picco / Peak voltage	20kV	20kV	20kV	20kV
Energia di scarica / Discharge energy	2mJ	9mJ	8mJ	0,5mJ
Consumo / Consumption	2VA	7,5VA	7,5VA	3VA

110 - 120 V	TSC1	TSC1Z
Tensione di picco / Peak voltage	20kV	10kV
Energia di scarica / Discharge energy	3mJ	6mJ
Consumo / Consumption	4VA	4VA

Serie TR2 / TR2 Series



- Accenditore remoto
 - Temperatura di esercizio -20°C / +60°C
 - Lunghezza massima cavi di accensione 1 m
 - Tensione di picco di scarica 15 kV
- Questi dispositivi per il loro funzionamento devono essere accoppiati ad un dispositivo della serie Microflat filtrato con accenditore remoto (XXY/FR)
- Remote ignitor
 - Operating temperature -20°C / +60°C
 - Max high voltage cables length 1 m
 - Peak voltage 15 kV
- These devices must be fitted to a filtered Microflat series device with remote igniter (XXY/FR)

Trasformatori di accensione ad induzione / Induction ignition transformers



Inoltre la gamma BRAHMA di trasformatori di accensione si completa con gli storici:

Other BRAHMA ignition transformers are the historic:

T8/T11/T13/T14/T16/T17/T18/T20



Cavi per Alta Tensione / High voltage cables

Serie PC... - PD... / PC... - PD... Series

Idonei per il collegamento tra l'uscita alta tensione dei trasformatori e gli elettrodi di accensione e anche per il collegamento dell'elettrodo di rilevazione fiamma. Sono corredati di resistori per la soppressione dei disturbi (1 Kohm, 2.7 Kohm, 4.7 Kohm). Il cavo con presa diritta e anche quello a 90° resistono fino a temperature di 270°C e possono essere forniti con varie possibilità di lunghezza e di terminazione.

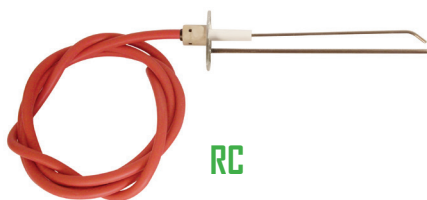
Suitable to connect transformers high voltage outputs to ignition electrodes and also to detection electrodes. They are supplied with resistors for noise suppression (1 Kohm, 2.7 Kohm, 4.7 Kohm). Both straight and 90° plug cables are able to withstand a temperature up to 270°C and can be supplied with different lengths and terminals.

Elettrodi di Accensione e Rilevazione / Ignition and detection electrodes

Serie RC, RS / RC, RS Series

Costituiti da un'asta metallica in Kanthal, da una parte isolante in allumina vetrinata, da una staffa di fissaggio e da involucro in materiale termoplastico, sono stati studiati per applicazioni in ambienti con temperature <270°C.

They consist of a Kanthal metal rod, a glazed alumina insulating part, a galvanized iron fixing bracket and a casing made of high-temperature resistant thermoplastic material. They are suitable for applications with temperatures <270°C.



RC



RS

Serie ALV / ALV Series

Per le loro caratteristiche costruttive gli elettrodi di questa serie sono ideali per l'impiego in ambienti che presentano elevate temperature (>270°C). Possono essere costituiti da un'asta metallica in Kanthal o acciaio AISI, da un isolatore Ø 8 o Ø 10 in allumina vetrinata.

They are suitable for applications with temperatures >270°C. They consist of a Kanthal or AISI steel metal rod, a glazed alumina insulator 8 Ø or 10 Ø.

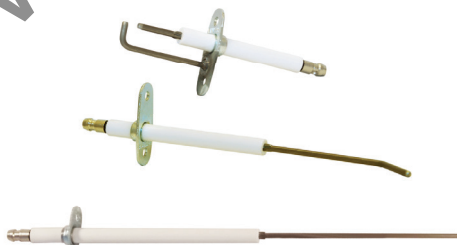


ALV

Serie SALV / SALV Series

Per le loro caratteristiche costruttive gli elettrodi di questa serie sono ideali per l'impiego in ambienti che presentano elevate temperature (>270°C). Possono essere costituiti da un'asta metallica in Kanthal o acciaio AISI, da un isolatore Ø 8 o Ø 10 in allumina vetrinata e da una staffa di fissaggio.

They are suitable for applications with temperatures >270°C. They consist of a Kanthal or AISI steel metal rod, a glazed alumina insulator 8 Ø or 10 Ø and a galvanized iron fixing bracket.



SALV

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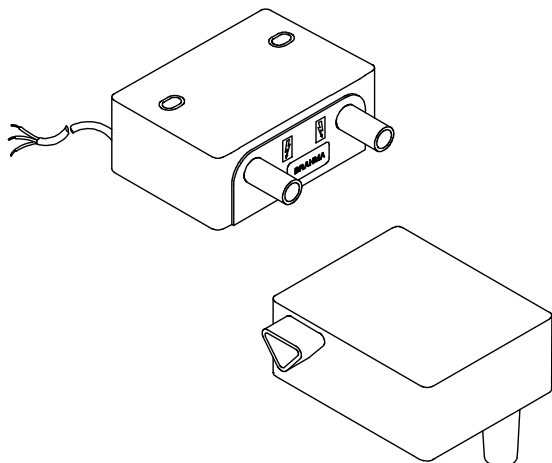
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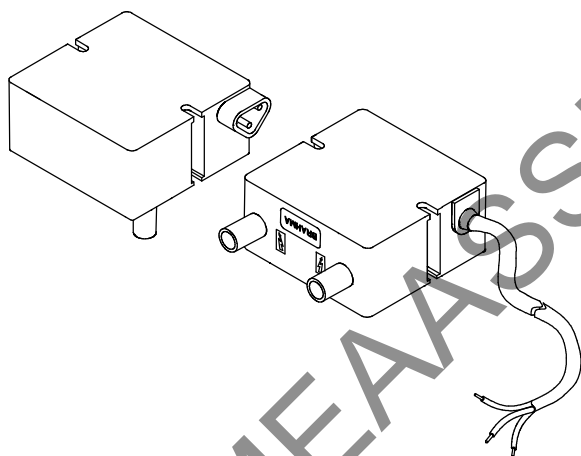
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ELECTRONIC IGNITION TRANSFORMERS FOR PERMANENT OPERATION

TC....S. Series



TD....S. Series



DESCRIPTION

These ranges of electronic ignition transformers are characterized by extremely limited overall dimensions and are particularly suitable to equip water cleaners, forced draught burners for gas and light or heavy oil, for civil and industrial applications.

The working principle is based on a high frequency electronic oscillator; the voltage it generates is then increased by using a transformer with ferrite nucleus, reaching in this way output voltage values up to 15 kV.

All types can be supplied with filter to minimize the emission of electromagnetic interference. In this way this series of electronic transformers is in compliance with the EMC directive 2004/108/EC without the use of external filters.

The transformers of this series can also be supplied for non-permanent operation (50% duty cycle in 2 minutes). For further information see relevant data sheets (TC....A. and TD....A.).

FEATURES

Followings are the main features of these ranges of transformers:

- available with inbuilt EMC filter;
- 100% duty cycle;
- limited weight and overall dimensions;
- high efficiency and ignition power;
- low consumption;
- single pole or double-pole high voltage output;
- different fixing and connecting systems;
- inbuilt protection against short circuit;
- in oil and gas burners, the safety of ignition transformers depends on the control unit.

APPROVALS

- The transformers comply with the essential requirements of the "Low Voltage Directive (LVD) 73/23/EEC", as they are approved by **IMQ** according to the product standards EN 61558-1:1997 + A1:1998 + A11:2003 and EN 61558-2-3:2000.

Type	Voltage	Certificate no. 
TC1...S.	220-240 V 50/60 Hz	CA04.03571
TD1...S.	110-120 V 50/60 Hz	CA04.03821
TC2...S.	220-240 V 50/60 Hz	CA04.03572
TD2...S.	110-120 V 50/60 Hz	CA04.03822

The transformers are also provided with "CB TEST CERTIFICATE No. IT-3904" stating their compliance with the international standards IEC 61558-1 (ed. 1) + am1 and IEC 61558-2-3 (ed. 1).

TECHNICAL DATA

	TC1...S - TC1...SF TD1...S - TD1...SF		TC2...S - TC2...SF TD2...S - TD2...SF	
	110-120	220-240	110-120	220-240
Number of poles	1		2	
Output peak voltage kV (1)	15		2x12	
Rated output voltage kV (4)	4.3	5.5	2 x (2.3 ÷ 2.5)	2 x (2.8 ÷ 3.3)
Output peak current mA (2)	45		55	
Rated output current mA (2)	14	15	20	20
Output voltage frequency kHz (1)	6		8.5	
Output voltage frequency kHz (2)	10		12	
Consumption VA (3)	25		30	

(1) No-load output and 30 pF load.

(2) Short circuit output.

(3) 10 mm spark gap.

(4) No-load output.

- **Supply voltage:** 220-240 V 50/60 Hz
on request: 110-120 V 50/60 Hz
- **Protection fuse according to EN 60127:** F1A 250V
- **Duty cycle:** 100 %
- **Operating temperature range:** -10 ... +60 °C
- **Protection degree:** IP00
- **Winding class:** H
- **Recommended distance between the electrodes:** 3÷5 mm
- **Max. ignition cable length:** 1.5 m
- **Standard supply cable length:** 560 mm
- **Weight:** TC series 420 g approx.
TD series 360 g approx.

CONSTRUCTION

The working principle based on the use of a high frequency electronic oscillator has enabled to develop a device with limited dimensions and weight, but with high ignition power.

The electronic circuit and the transformer with ferrite nucleus are bathed in a special kind of resin with very good thermal conductivity and a specific coefficient of expansion, which ensures high resistance to temperature variations and to the overload due to protracted working.

An inbuilt varistor protects the device from possible voltage transients in the mains supply.

The transformers of these series are available in different versions as regards the number of poles, the position of the isolators, the type of connection, the power supply connection and the availability of an EMC filter; on this subject, see the following scheme:

TC/TD X X X X S X

- : without EMC filter;
F: with EMC filter;
- S: permanent operation (100% duty cycle);
- C: supplied with cable (Fig. 1, 2, 3 and 4);
P: supplied with outlet (Fig. 6 and 7);
- V: screw fixing system (Fig. 8);
T: fixing system with terminal Ø 4 (Fig. 8);
- L: lateral isolators (Fig. 1 and 3);
S: bottom isolators (Fig. 2 and 4);
- 1: single pole;
2: double pole;

For instance, the designation TC2LVPSF indicates that the transformer belongs to the TC series, is provided with two lateral isolators, screw fixing system, power supply with outlet, EMC filter and is for permanent operation.

OVERALL DIMENSIONS

The TD series differs from the TC series for its more reduced overall dimensions; Fig. 1, Fig. 2, Fig. 3 and Fig. 4 show the main dimensions of both transformer series.

To fix the transformers, screws type M4 or M5 should be used (in the transformers of the TC series, the oval holes enable a variation of the fixing wheel base between 57 mm and 64 mm).

TC1L – TC2L

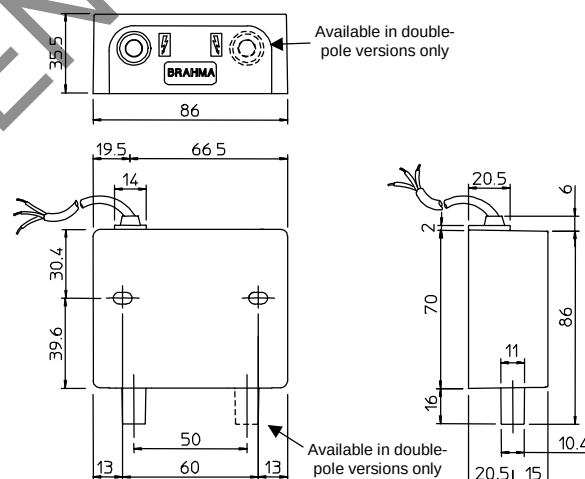


Fig. 1

TC1S – TC2S

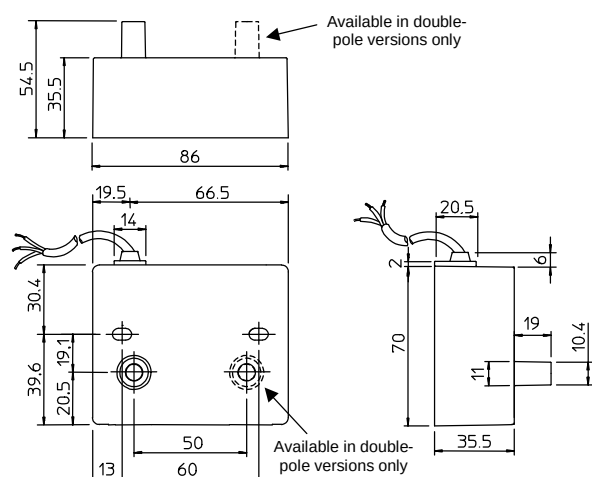


Fig. 2

TD1L - TD2L

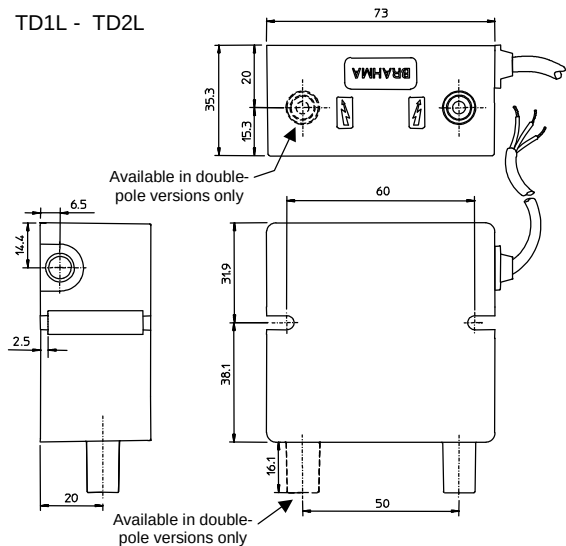


Fig. 3

TD1S - TD2S

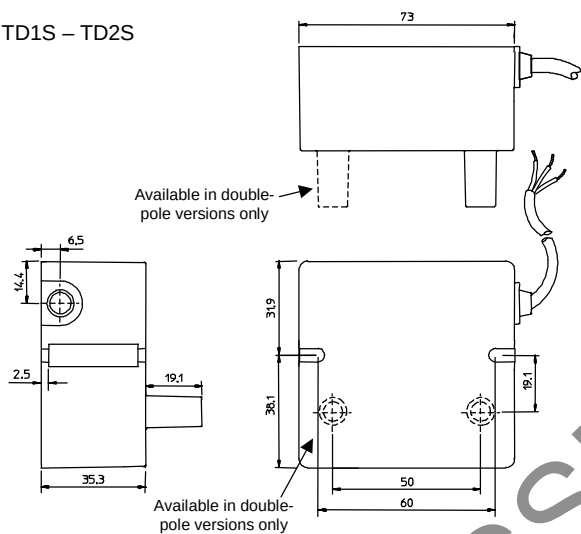


Fig. 4

CONNECTION

These ranges of ignition transformers have been developed in order to be used with control boxes of our own production, which can be mounted on the ignition devices by means of fixing screws type M4x45, as shown in Fig. 5.

All transformers can be supplied with cable or supply outlet; see, for instance, Fig. 6 and Fig. 7, which show the dimensions of a transformer provided with supply outlet (with laterals isolators).

TC

TD

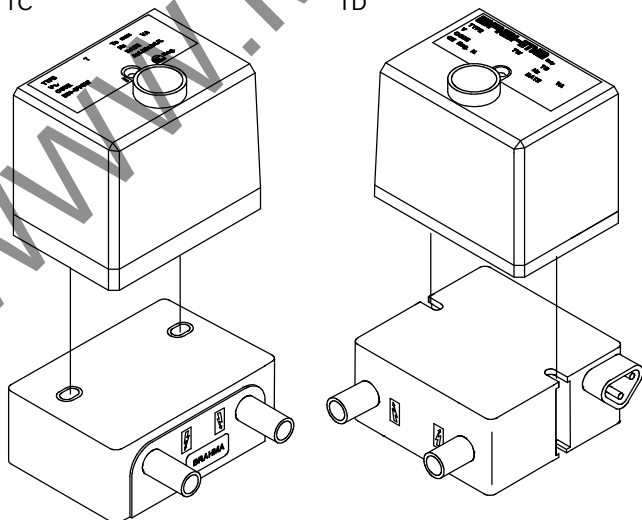


Fig. 5

TC

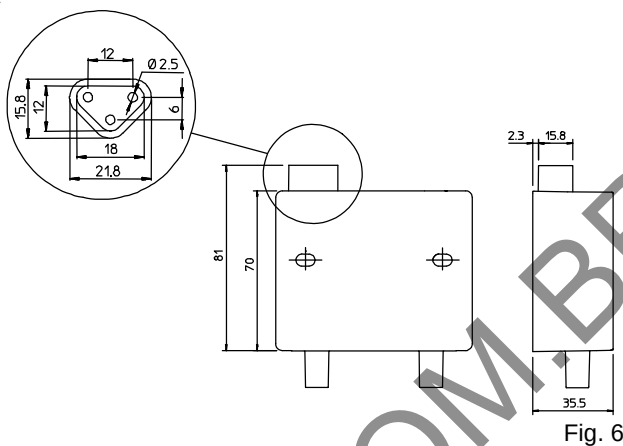


Fig. 6

TD

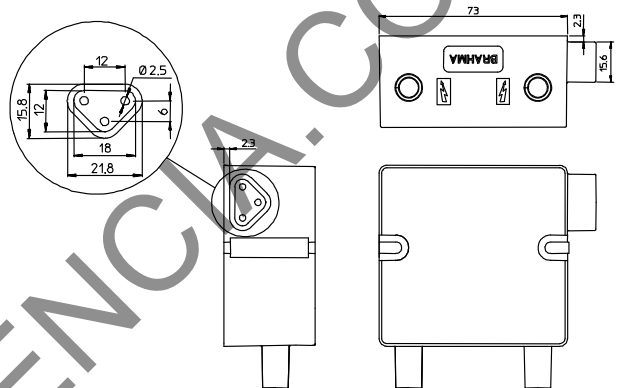


Fig. 7

The connection of high voltage cables can be of two types, according to the terminals used inside the isolators: connections can be carried out by means of a screw or of a cylindrical terminal with 4 mm diameter, as shown in Fig. 8. All connectors, including the ones complete with cable, can be supplied on request.

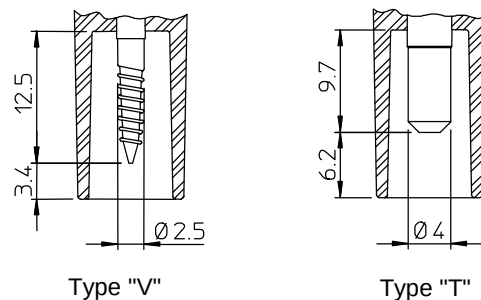


Fig. 8

INSTALLATION



- Caution! There might be dangerous voltages.
- Connect and disconnect the ignition transformer only after interrupting the mains supply.
- Respect the applicable national and European standards (e.g. EN 60355-1 / EN 50165) regarding electrical safety.
- Make sure that the earth of the ignition transformer and the earth of the electrical system are well connected.
- The device can be mounted in any position.
- Avoid putting high voltage cables next to other cables.
- Ensure a protection degree suitable to the application.

EMC FILTER

With particular reference to the use of ignition transformers in oil or gas burners, you will find here below some remarks about the application of these devices, resulting from the research carried out by the Brahma Test Laboratory. This Laboratory, in compliance with EN 55014-1 and with CISPR 16-1, is adequately equipped for the measuring of electromagnetic interference in boilers, burners, hot air generators and heating systems in general.

According to the EMC directive 2004/108/EC, the above mentioned products must be subjected to the measuring of conducted electromagnetic interference in the mains supply, irradiated by the supply cable; the measuring is carried out on the basis of a frequency range from 150 kHz to 30 MHz in case of conducted interference, and from 30 to 300 MHz in case of irradiated interference.

Electromagnetic interference is mainly due to power variations in the electric circuits (i.e. current peaks); the greater and faster these variations, the higher the interference. In the case we are considering, the main source of interference is the discharge of the ignition transformer: the irregular discharge current causes the emission of interference on a wide frequency range.

To keep the products within the limits allowed by the present standards, a special capacitive-inductive filter is generally installed in series to the mains supply, in order to reduce electromagnetic interference with frequency up to 20 MHz approx. For the frequency range beyond this limit, it is useful to mount a resistor of a few k Ω s in series to the ignition electrode, as in this case the interference is due to the high current peak generated whenever an electric arc is produced. The stronger the stray capacitance between ignition electrodes and cables and burner metal casing, the higher the current peak. The above mentioned resistor has the function of keeping the current peak as low as possible; the closer to the source of electric discharge, the greater the effectiveness of the resistor. Besides the obvious advantage of reduced assembly costs, the fitting of an EMC filter inside the ignition transformer ensures the elimination of electromagnetic interference in close proximity to their source, without involving the remaining electric circuit.

Finally, the following solutions are always effective to reduce the emission of electromagnetic interference:

- ignition cables should be as short as possible (this will reduce their stray capacitance and their possibility of acting as antennas, transferring electromagnetic interference to the nearby cables);
- use distributed resistance cables or mount a resistor near the electrodes (few k Ω s can reduce the current peak);
- let ignition cables follow a separate path, close to ground planes (this will reduce the influence of electromagnetic interference on the remaining electric cables);
- make a single earth centre, preventing the earth conductors from creating circular paths.

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

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