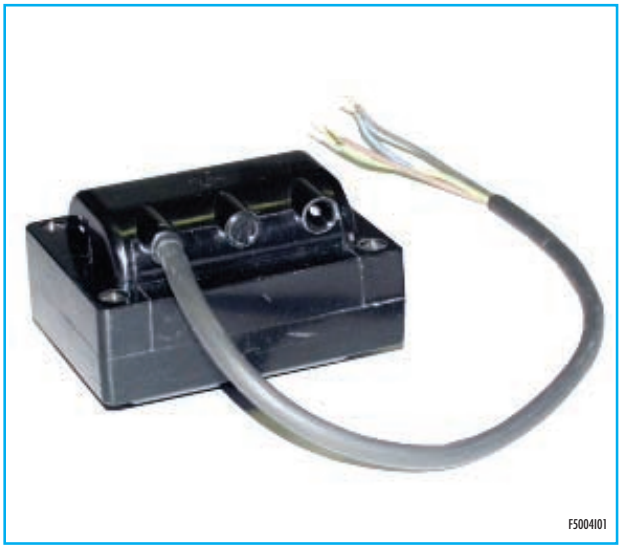
IGNITION TRANSFORMER FOR BURNERS
TAR SERIES

INTRODUCTION

TAR series ignition transformers are used to generate the electrical spark for industrial burner ignition.



APPLICATIONS

- Gas burners.
- Gas oil burners.
- Fuel oil burners.

FEATURES TAR-10

Primary voltage:	115 / 230 V
Frequency:	50 / 60 Hz
Secondary voltage:	1 x 8000 V
Primary current:	2 / 1 A
Secondary current:	20 mA
Power consumption:	220 VA
Intermittence every 3 minutes:	20%
Mass:	1.3 kg
Length of supply cable:	19 cm
H.T. connection:	self-threading
Type of H.T. cable	siliconic (external diameter 7 mm)
Max length of H.T. cable:	1 meter (max 2 m)
Working temperature:	0 ÷ 70 °C
Transformer function :	ignition and detection
Mounting position:	any

Transformer TAR-10 substitutes all models previoulsy sold.

FEATURES TAR-13

Primary voltage:	115 / 230 V
Frequency:	50 / 60 Hz
Secondary voltage:	1 x 6000 V
Primary current:	0.8 / 0.4 A
Secondary current:	10 mA
Power consumption:	100 VA
Intermittence:	100 % (fixed)
Mass:	2 kg
Length of supply cable:	38 cm
H.T. connection:	self-threading
Type of H.T. cable	siliconic (external diameter 7 mm)
Max length of H.T. cable:	1 meter (max 2 m)
Working temperature:	0 ÷ 60 °C
Transformer function:	only ignition
Mounting position:	any

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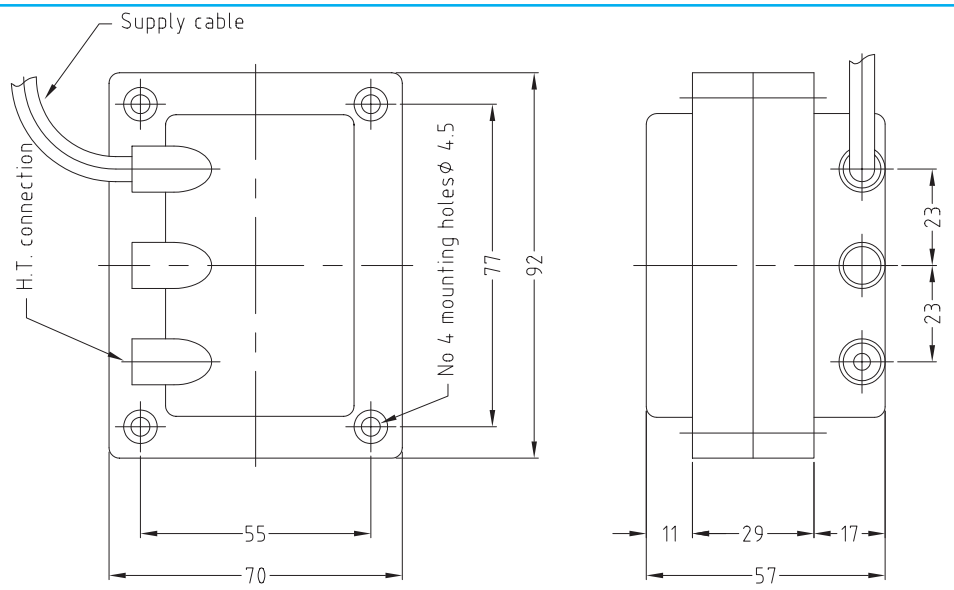
DESCRIPTION

TAR series ignition transformers may be used with different flame detection systems and on any kind of spark electrode of whatever form. It is possible assemble the transformer inside optional box ESA TRAFO (see E5005).

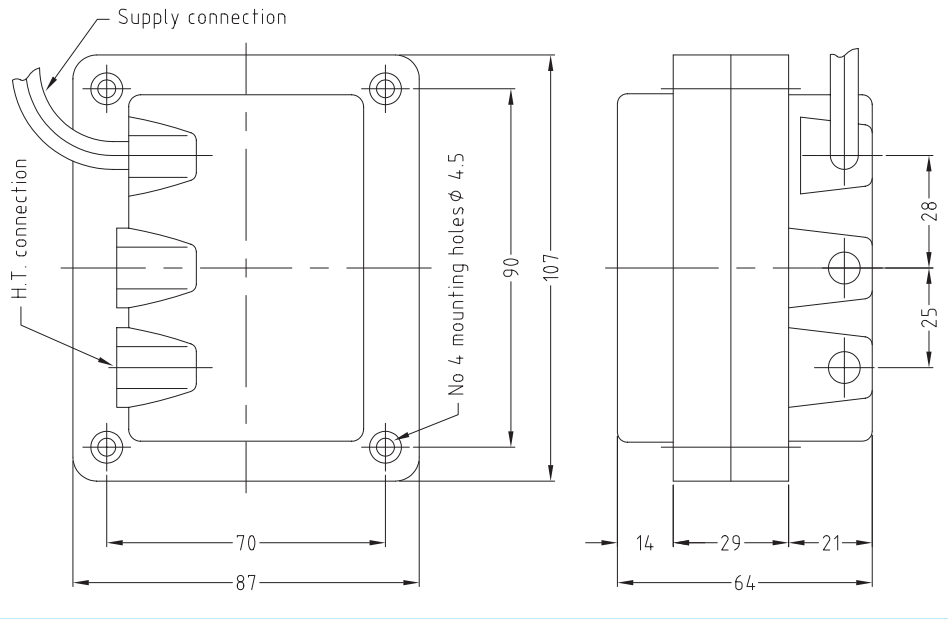
INSTALLATION

- The equipment can be mounted in any positions, avoiding placing it in proximity of heat or direct irradiation sources, and in such condition as to be exposed with products of the combustion, liquid, solvents or corrosive gas.
- The equipment must be installed by skilled staff, in compliance with the regulations in force at the time and in the place of installation.
- This device is intended for permanent connection to the electric installation and should never be fitted with a reverible mains plug. Check correct connections after installation and verify that supply voltage and frequency are correct.
- In the connection between ignition transformer and ignition electrode, employ only silicon cables for high voltage use serious VS or GVR, avoiding to place them in metallic conduit or plastic conduit, even if these last doesn't create remarkable problems, ideally the cable must be left free in air. Main point is not dispose more high voltage cables coming from different ignition transformers in the same conduit.
- Respect the maximum lengths of high voltage cables (max 2 m), even if the suggested length is 1 m.
- Detection probes and connectors (if any) must be isolated and out of reach. The casing must be adequately protected; only skilled personnel should be allowed to touch or work on it. Suitable warnings should be placed next to the probes, if necessary.
- Always connect the protection groung to the correct terminals and to any metallic frames using conductors of suitable section.
- Before carrying out any operation on ignition transformer, ensure that supply voltage are disconnected.

DIMENSIONS TAR-10

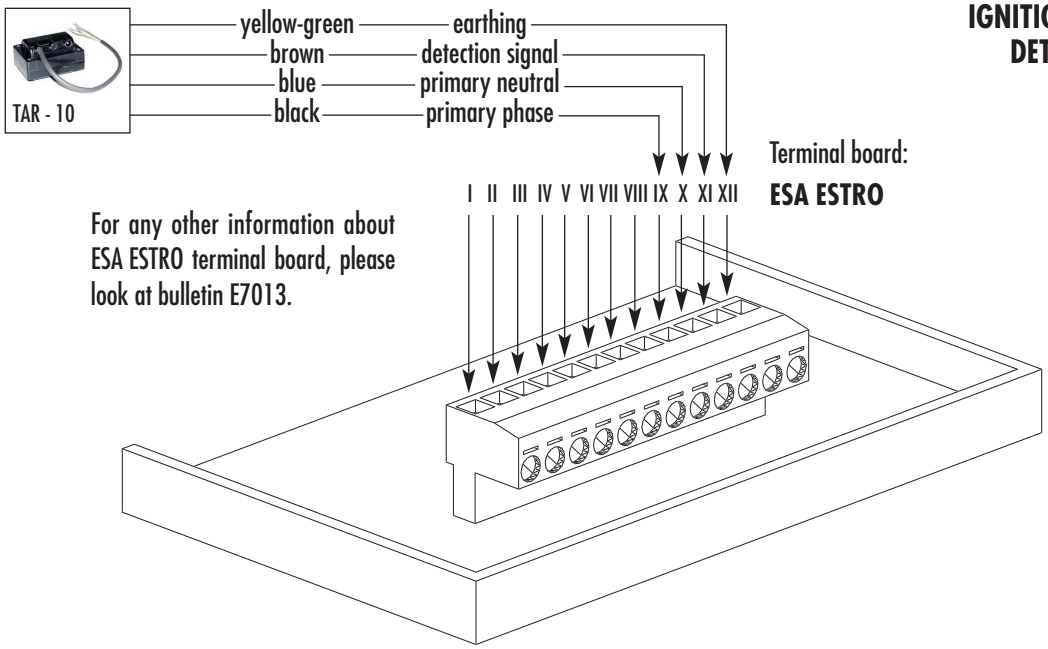


DIMENSIONS TAR-13

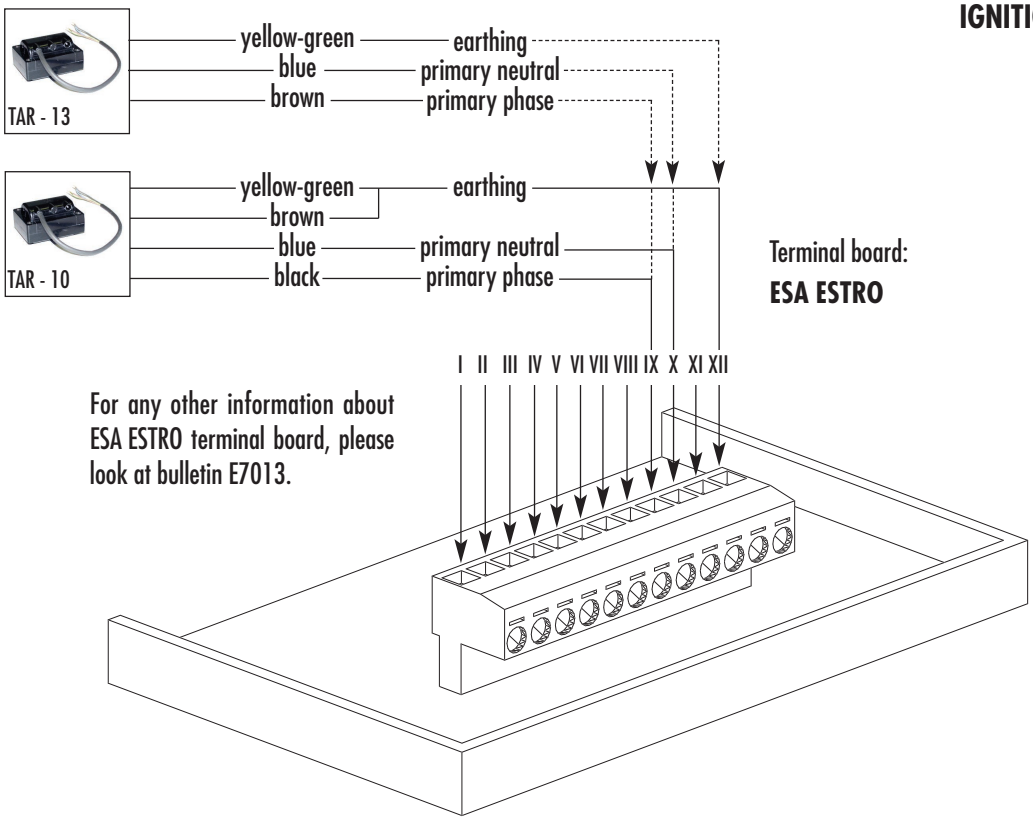


ELECTRICAL WIRING (ESA ESTRO)

IGNITION AND DETECTION

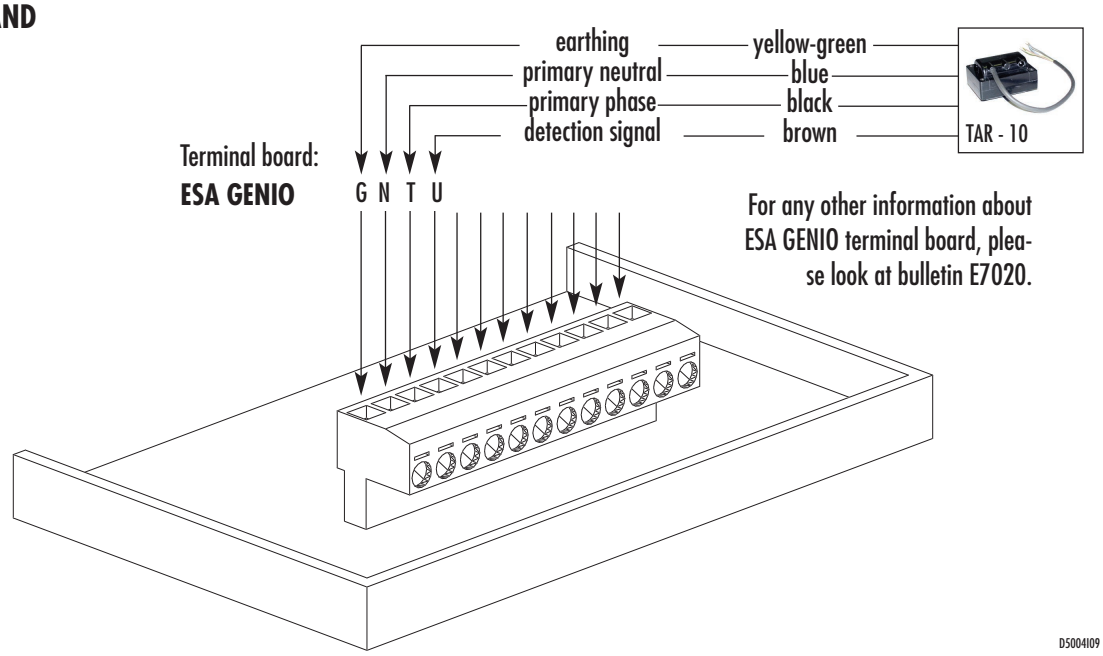


IGNITION ONLY

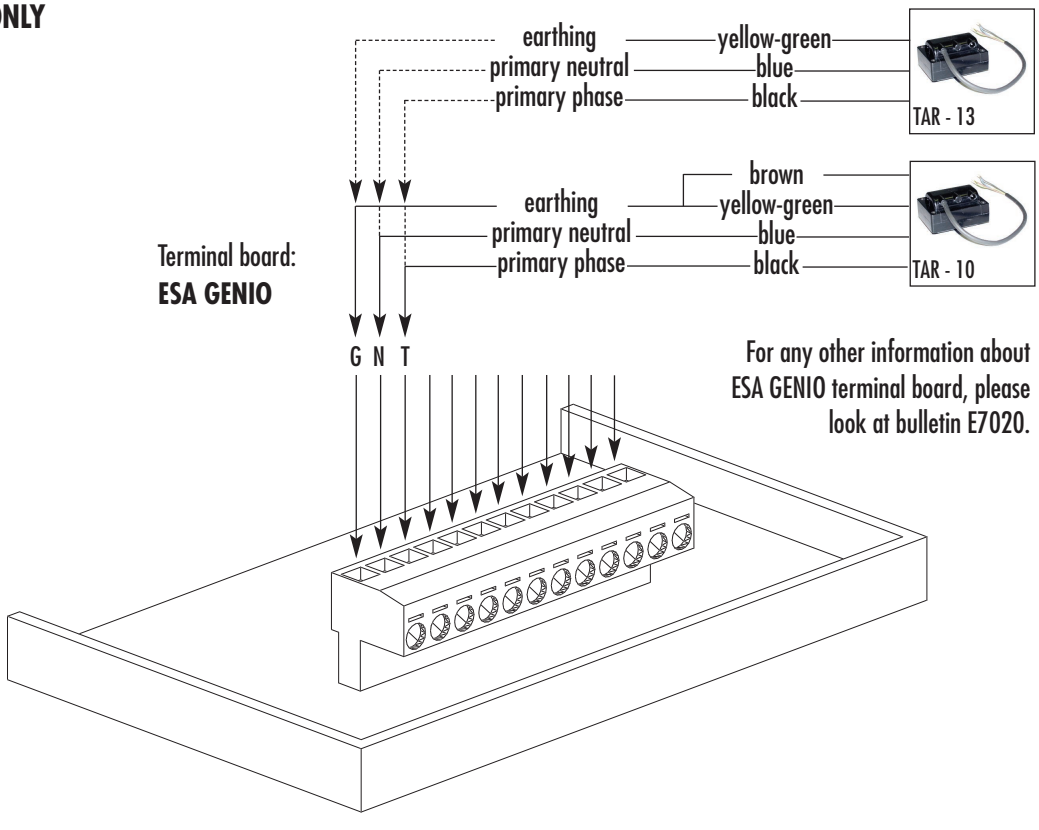


ELECTRICAL WIRING (ESA GENIO)

IGNITION AND DETECTION

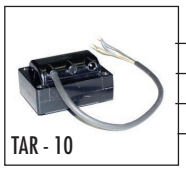


IGNITION ONLY



ELECTRICAL WIRING (ESA BOSS-II AND ESA QUAD)

IGNITION AND DETECTION (only with ESA devices)



yellow-green — earthing
brown — detection signal
blue — primary neutral
black — primary phase

A B 1 2 3 4 5 6 7 8 9 10

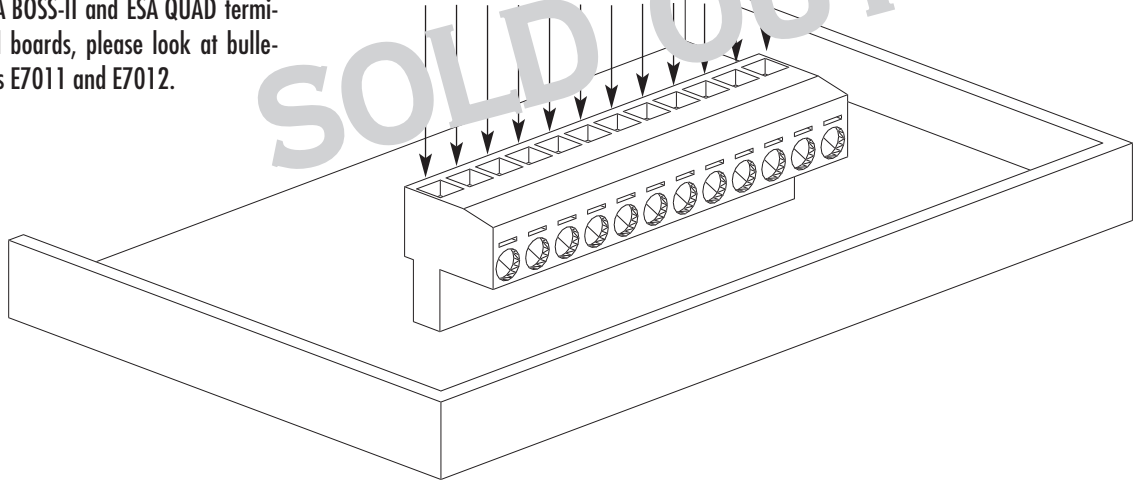
L N G + - G V N T N - -

Terminal boards:

ESA BOSS-II

ESA QUAD

For any other information about ESA BOSS-II and ESA QUAD terminal boards, please look at bulletins E7011 and E7012.



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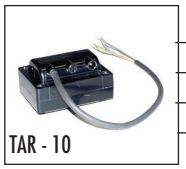
IGNITION ONLY



yellow-green — earthing
brown
blue — primary neutral
black — primary phase

A B 1 2 3 4 5 6 7 8 9 10

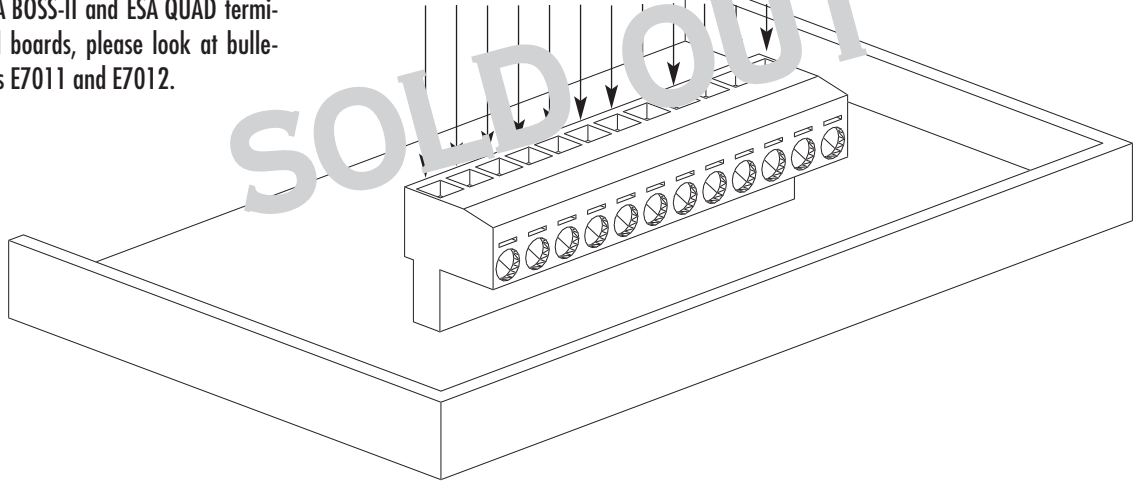
L N G + - G V N T N - -

Terminal boards:

ESA BOSS-II

ESA QUAD

For any other information about ESA BOSS-II and ESA QUAD terminal boards, please look at bulletins E7011 and E7012.

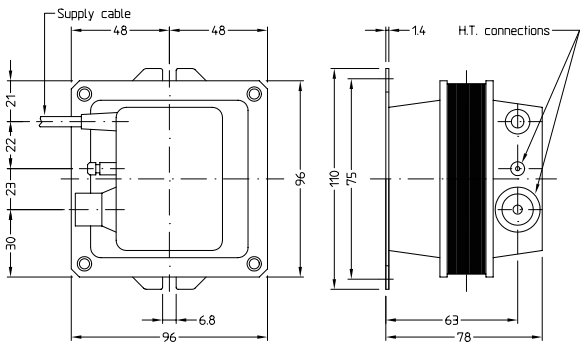


D5004I09

SOLD OUT TRANSFORMER

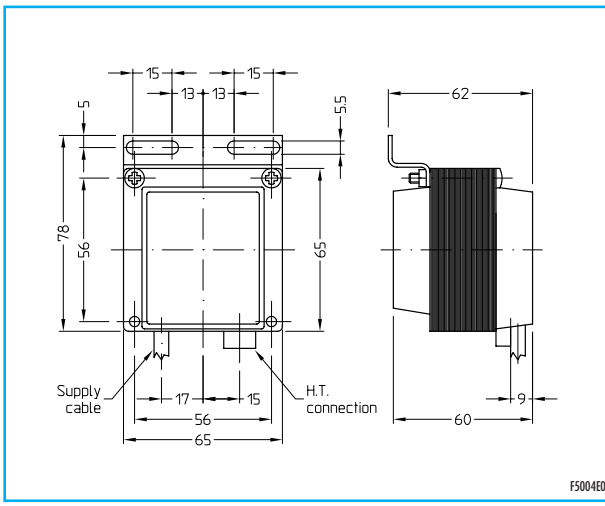
FEATURES TAR-2

- Primary voltage: 110/220 V
- Frequency: 50 Hz
- Secondary voltage: [illegible] V
- Primary current: 2/[illegible] A
- Secondary current: 20 [illegible]A
- Power consumption: 240 VA
- Intermittency every 3 minutes: 33%
- Mass: 2 kg
- Length of supply cable: 55 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Suitable for double electrodes systems



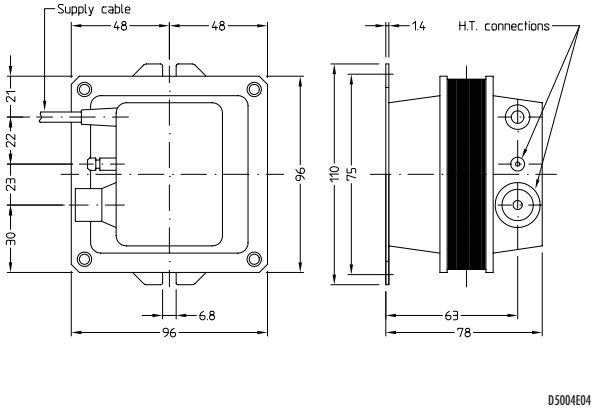
FEATURES TAR-4

- Primary voltage: 115/230 V
- Frequency: 50 Hz
- Secondary voltage: [illegible] V
- Primary current: 0[illegible]/0.[illegible] A
- Secondary current: 13 [illegible]A
- Power consumption: 105 VA
- Intermittency every 3 minutes: 15%
- Mass: 1 kg
- Length of supply cable: 25 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Suitable for single and double electrodes systems



FEATURES TAR-5

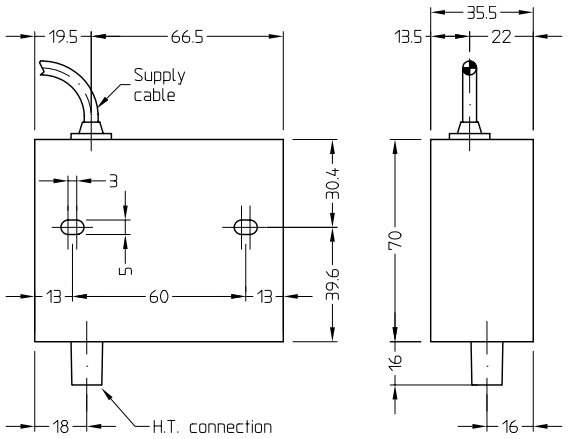
- Primary voltage: 110/220 V
- Frequency: 50 Hz
- Secondary voltage: [illegible] V
- Primary current: 1[illegible]/0.[illegible] A
- Secondary current: 16 [illegible]A
- Power consumption: 145 VA
- Intermittency: 100%
- Mass: 2 kg
- Length of supply cable: 55 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Suitable for double electrodes systems



SOLD OUT TRANSFORMER

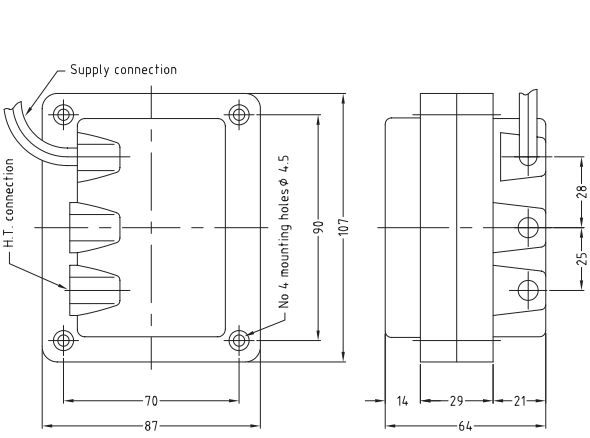
FEATURES ELECTRONIC TAR-6

- Primary voltage: 110/220 V
- Frequency: 50/60 Hz
- Secondary voltage: 1 [illegible] V
- Primary current: [illegible] A
- Secondary current: 25 mA
- Power consumption: 45 VA
- Intermittence every 2 minutes: 50%
- Mass: 370 g
- Length of supply cable: 56 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Max. length WAND outer tubing: 70 mm
- Suitable for single and double electrodes systems



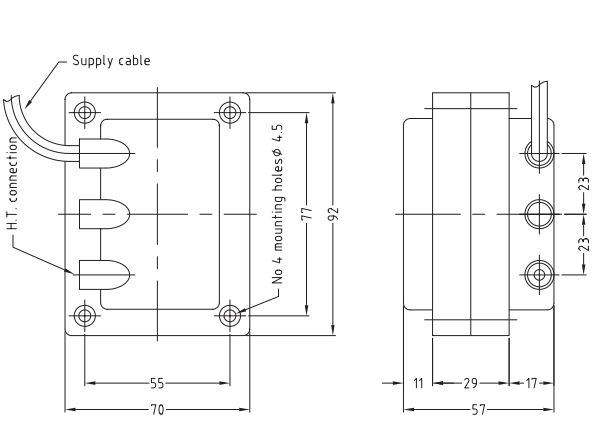
FEATURES TAR-7

- Primary voltage: 115/230 V
- Frequency: 50/60 Hz
- Secondary voltage: 1 x [illegible] V
- Primary current: [illegible] A
- Secondary current: 20 mA
- Power consumption: 220 VA
- Intermittence every 4 minutes: 25%
- Mass: 1.9 kg
- Length of supply cable: 38 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Suitable for single and double electrodes systems



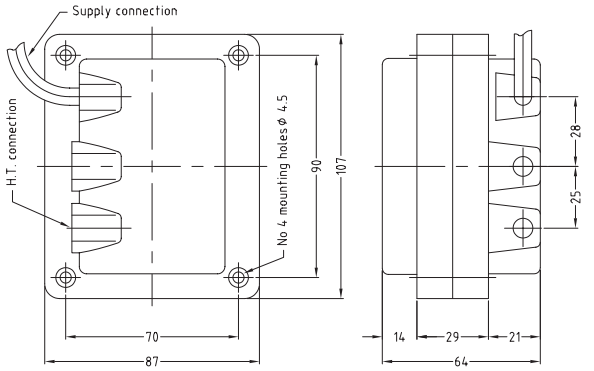
FEATURES TAR-8

- Primary voltage: 115/230 V
- Frequency: 50/60 Hz
- Secondary voltage: 1 x [illegible] V
- Primary current: [illegible] A
- Secondary current: 20 [illegible] A
- Power consumption: 220 VA
- Intermittence every 3 minutes: 20%
- Mass: 1.3 kg
- Length of supply cable: 38 cm
- H.T. connection: self-threading
- Max length of H.T. cable: 1 meter
- Suitable for double electrodes systems



FEATURES TAR-11

- Primary voltage: 115 / 230 V
- Frequency: 50 / 60 Hz
- Secondary voltage: 1 x 8000 V
- Primary current: 2 / 1 A
- Secondary current: 1 mA
- Power consumption: 220 VA
- Intermittence: % (fixed)
- Mass: 2 kg
- Length of supply cable: 38 cm
- H.T. connection: self-threading
- Type of H.T. cable: siliconic (external diameter 7 mm)
- Max length of H.T. cable: 1 meter (max 2 m)
- Working temperature: 0 ÷ 70 °C
- Transformer function: only ignition
- Mounting position: any



ELECTRICAL WIRING

Catalog No.	Use	Wires colour				
		Primary phase	Primary neutral	Secondary outlet	Detection signal	Earthing
TAR-2	ignition only	brown	blue	H.T self threading screw	-	yellow/green
TAR-4	ignition and detection	black	blue	H.T self threading screw	brown	yellow/green
	ignition only	black	blue	H.T self threading screw	-	brown & yellow/green
TAR-5	ignition only	brown	blue	H.T self threading screw	-	yellow/green
TAR-6	ignition and detection	brown	blue	H.T self threading screw	yellow/green	(*)
	ignition only	brown	blue	H.T self threading screw	-	yellow/green
TAR-7	ignition and detection	black	blue	H.T self threading screw	brown	yellow/green
	ignition only	black	blue	H.T self threading screw	-	brown & yellow/green
TAR-8	ignition only	brown	blue	H.T self threading screw	-	yellow/green
TAR-10	ignition and detection	black	blue	H.T self threading screw	brown	yellow/green
	ignition only	black	blue	H.T self threading screw	-	brown & yellow/green
TAR-11	ignition only	brown	blue	H.T self threading screw	-	yellow/green
TAR-13	ignition only	brown	blue	H.T self threading screw	-	yellow/green

(*) only with ESA-PYRONICS instruments