# TRA1000 Isolation Transformer



Safe Galvanic Isolation Transformer with shielding winding

Dual Input Voltage 230 and 400 Vac

Dual Output Voltage 0 - 115 / 0 - 115 Vac

Shielding winding between input and output

Reduce inrush current

Hight performance for the volume of compact design

Very good corrosion protection and low noise due to vacuum impregnation

Isolation test: 5000 Vac / 6.000 Vdc

#### **Feature**

The New TRA Line, Safe Galvanic Isolation Transformer are the perfect choice per general purpose or industrial application, when it is required a Galvanic isolation to limit the leakage current or establish a strong protection in isolated area against Surge.

They ensures continuous supply of your controls circuit combined with robust design. The insulating transformer are available in the range from 300 up to 1000W. DIN rail version in 300VA. Under request UL version for US market.

Input Data	
Nominal Input Voltage (2 x Vac)	230 – 400 Vac
Manual select Input from 230 to 400 Vac	
Input Voltage range: (230)	207 – 253 Vac
(400)	360 – 440 Vac
Frequency	47 – 63 Hz
External Fuse (recommended)	10 A (MCB curve C)
Output Data	
Output Secondary winding Double	0-115 / 0-115 Vac
Rated Power in VA	1000 VA
Efficiency	≥ 87 %
Max Dissipation Power at Vn In 40°C	60W
Output sustained overvoltage	9% (no load, hot state)
Ma. Voltage drop at rated load	0.6%
No load losses	7 W
Short Circuit Voltage	0.0832
Output Overload protection	external
Output Overvoltage protection	external
Output Short Circuit protection	external
Climatic Data	
Ambient Temperature operation	-25 up to +70 °C
	(>60°derating 2.5% °C)
Ambient Temperature Storage	-40 up to +85 °C
Humidity at 25 °C, no condensation	95 % to 25 °C
Altitude: 0 to 2 000m - 0 to 6 560ft	No restrictions
Altitude: 2 000 to 6 000m - 6 560 to 20 000ft	De-rating 5°C/1000m
Cooling	Auto convention
General Data	
Isolation Voltage (In / Out)	5000 Vac
Isolation Voltage (In / PE)	2000 Vac
Isolation Voltage (Out / PE)	2000 Vac
Electrical Insulation class	Class B
Overvoltage Category: conforming to VDE	Class I
0106-1	
Protection Class (EN/IEC 60529)	IP 20
Reliability: MTBF IEC 61709	> 500.000 h
Pollution Degree Environment	2
Input Connection Terminal Blocks Screw Type	4 mm <sup>2</sup> (30 – 10 AWG)
Output Connection Terminal Blocks Screw	4 mm <sup>2</sup> (30 – 10 AWG)
Type	
Ground Connection Terminal Blocks Screw	Faston 6.3mm
Type Fixing Mode	Dy 4 coroug diameter:
Fixing wode	By 4 screws diameter: 6 mm
-	V IIIIII

TC

I with PE connected
Without
155x160x140 mm
110x125 mm
10.6 kg approx.

## Norms and certifications

The CE mark in According to EMC 2014/30/UE and Low voltage directive 2014/35/UE

## **Electrical Safety**

According to IEC/EN 60950 (VDE 0805) e EN 50178 (VDE 0160) for assembling device. The unit must be installed according to IEC/EN 60950.Input / Output separation: SELV EN60950-1 and PELV EN 60204-1. Double or reinforced insulation.

# EMC Immunity to: EN 62041

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN61000-6-2

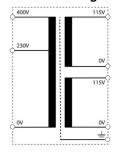
### **EMC Emission:**

EN61000-6-4; EN61000-3-3

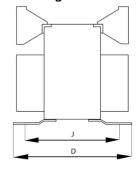
# Standards Conformity

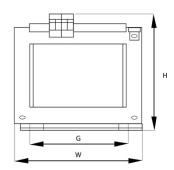
EN 60204-1 Safety of EN61010; EN 61558-1; EN 61558-2-6

## **Electrical Diagram**



## **Drawings**





Protective Treatment