

Voltage Transformer

01 VTB 110 M05 W00

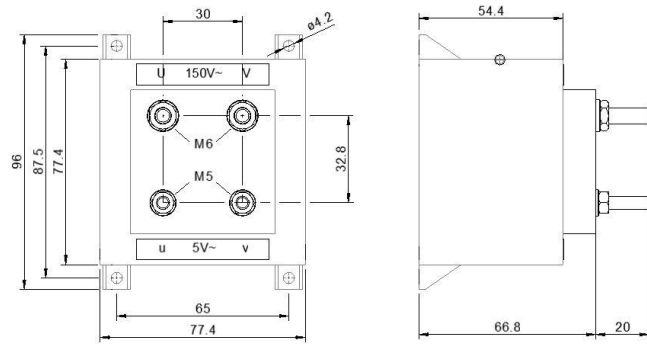
1 VA

$V_{in} = 150\text{ V}\sim$

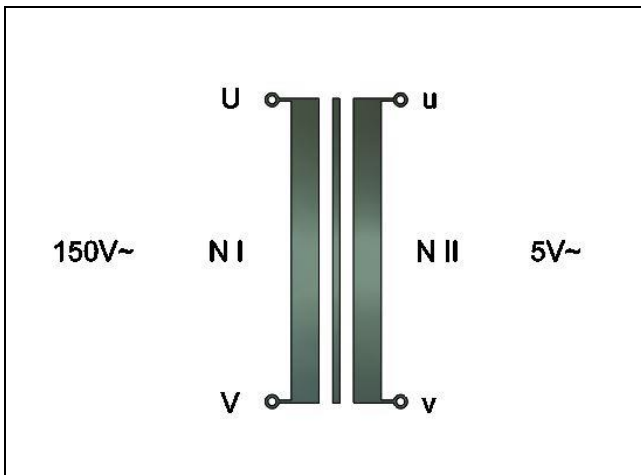
$V_{out} = 5\text{ V}\sim$



Dimensions:



Schutzvermerk nach DIN 24	Maßstab 1:1	Gewicht	Oberfläche	Werkstoff	Frümaßtoleranz DIN 2788m
	Datum	Name	Bezeichnung		
	Bearb. 31.07.18	Dieta	01 VTB 110 M05 W00		
	Gepr.		mechanical drawing		
	Name		Artikelnummer		
			1703-01		
			Ers. für:		
Zust.	Änderung	Datum	Name	Grau Elektronik GmbH	
				Ers. für:	
				Format A4	
				Blatt 1	
				Blätter 1	



50 Hz Voltage Measurement Transformer

f = 50 Hz

Vin	N _I	N _{II}
Transfer ratio		
0 V~ ... 180V~	30	1

Design acc. ISO 9001: 2015

Input to Output Isolation Voltage: 3kV rms, 50Hz t = 1 minute type test, routine tests 10 sec. ramp voltage

Measurement accuracy: $\leq 1.0\%$ - $40^{\circ}\text{C} \leq T_A \leq + 85^{\circ}\text{C}$,

Low magnetizing current and very copper losses

Low stray inductance: $\leq 1\%$ L_{nom}

All transformers piece unit tested at factory in Karlsbad, Germany

Voltage Transformer

01 VTB 110 M 05 W00

1 VA

SYMBOL	PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
--------	-----------	-----------------	-----	-----	-----	------

INPUT, OUTPUT						
V _{in}	Input voltage		0	120	180	V~
TR	Transformation ratio Vin Vout		30 : 1			
V _{out}	Output voltage			4	6	V~
Load	Resistive burden		20	25		Ω
f _{sw}	Frequency operation range		47	50	63	Hz
I _{out}	Output current at resistive burden	25Ω		0.2		A
L _I	Primary inductance	f = 10kHz measurement frequency	200	300	390	μH
L _{II}	Secondary inductance		1050	1500	1970	μH
ISOLATION						
	1minute @ type test	Input Output	4.0			kV _{ac}
	Ramp 2s - 6s - 2s @ piece unit test	Input Output		4.0		kV _{ac}
PROTECTION						
	Housing potted, plastic cover		IP 54			
	Tropical resistant					
Connecting	Input	M6 screw bolt				mm ²
	Output	M5 screw bolt				mm ²
Weight				0.9		kg

AMBIENT CONDITIONS

T _{Amb op}	Operating temperature range	EN 50155 class Tx 10 min.	- 50 + 70		+ 85 + 85	°C °C
T _{Storage}	Storage temperature range		- 50		+ 100	°C
	Cooling		Free convection			
	Humidity	EN 50155, IEC 60571	75% averaged per year, 95% 30 days			
	Vibration / Shock	IEC 61373, IEC 68 – 2 - 27 Kat. I: 3 Shocks each Axis	50 m / s ² , 30 ms			
Referenced standards	EN 50155: 2016	EN 50124-1	EN 61373			
	EN 50163	EN 60529				

Attention: the transformer may be used only for ac applications. There is no self protection against DC overload at input terminals!