

Data sheet: Safety isolating transformers type FTLG

Description: safety isolating transformer according to VDE 0551/EN 60 742

Test voltage PRI - SEC 5000 V, 50 Hz
PRI - PRI 1000 V, 50 Hz
SEC - SEC 250 V, 50 Hz

Short-circuit protection: non-short-circuit proof

Construction: open design, potted in insulation housing

Protection class: prepared for protection class II

Protection index: connections IP 00
housing IP 65

Max ambient temperature: + 40 °C

Insulation class of the
insulation system.....: E

Input voltage.....: 2 x 115 V

Frequency: 50 - 60 Hz

Output voltage.....: according to chart

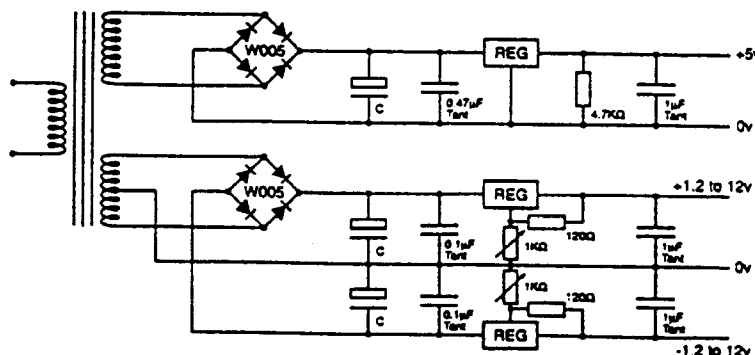
Connections.....: soldering pins 0,8 mm Ø, for printed circuit board mounting

Mounting.....: additional method of mounting with self tapping screws
(type FTLG 45 with M3 screws)

Extras: Phillips self tapping screws (type LS), 2,9 x 9,5mm DIN 7981
LS10 package 10 pieces
LS100 package 100 pieces
LS1000 package 1000 pieces

Packing: separately packed in cartons

Schematic plan : typical recommended circuit



Description:

The FTLG type resin moulded safety isolating transformer, with its extremely low profile is most suited for printed circuit boards as well as 19" rack systems.

These transformers are designed to provide 5V and $\pm 12V$ DC when used in conjunction with readily available bridge rectifiers and regulators.

The use of two chamber glass-fibre reinforced polyamid bobbins and the immersion in resin enables a hipot test of 5000 V ac to be carried out.

The transformer can be secured with self tapping screws 2,9 x 9,5 mm DIN 7981 (as extras available). This can be an advantage when the transformer is soldered, via soldering bath, to a printed circuit board, because no extra space, which is precious, is needed to secure the transformer to the PCB and pollution of the soldering bath is averted.

The input windings are dual and separated from one another so that the windings must be connected in parallel for 115 V and in series for 230 V.

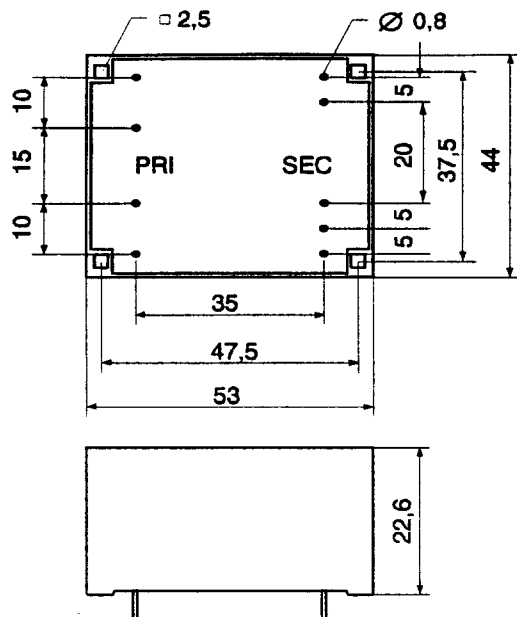
Note :

- * vacuum epoxy resin moulded
- * selfextinguishing epoxy resin UL 94 V-0 listed
- * also available in all selfextinguishing materials according to UL 94 V-0
- * minimal difference between load and no-load voltage
- * high electrical efficiency

Output power 6 VA Type FTLG6 9+2x14 Core-type UI 30/10,5
 Height 22,6 mm Weight 175 g
 Ground area 53 mm x 44 mm

AC Full Load Voltage (V).....	SEC1	SEC2
.....9	14-0-14	
DC Output Current (A).....	0,1	2x0,075
Smoothing Cap. C (µF).....	470	2x220
Regulator Reference.....	7805	317L,337LZ

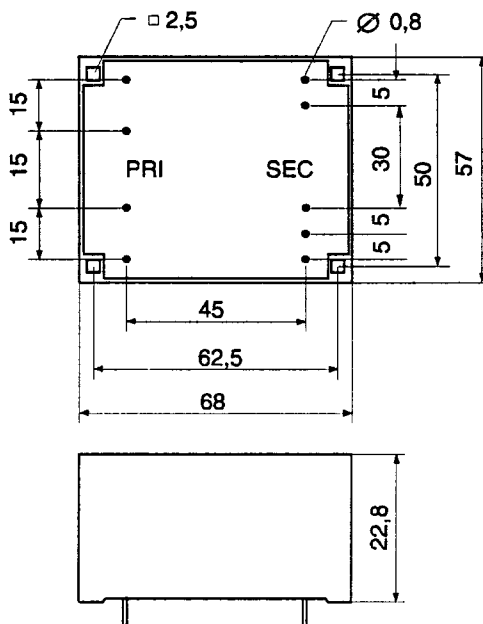
No load output voltage x Faktor = typ. 1,33
 Regulation typ. 25 %
 No load (active) power typ. 1,2 W
 Efficiency typ. 68 %



Output power 10 VA Type FTLG10 9+2x14 Core-type UI 39/8
 Height 22,8 mm Weight 280 g
 Ground area 68 mm x 57 mm

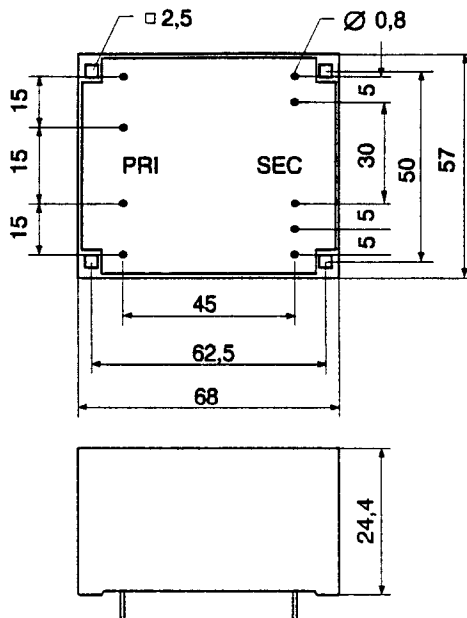
AC Full Load Voltage (V).....	SEC1	SEC2
.....9	14,5-0-14,5	
DC Output Current (A).....	0,25	2x0,10
Smoothing Cap. C (µF).....	1000	2x220
Regulator Reference.....	7805	317L,337LZ

No load output voltage x Faktor = typ. 1,32
 Regulation typ. 24 %
 No load (active) power typ. 1,2 W
 Efficiency typ. 71 %



Output power 14 VA Type FTLG14 9+2x14 Core-type UI 39/10,2
 Height 24,4 mm Weight 315 g
 Ground area 68 mm x 57 mm

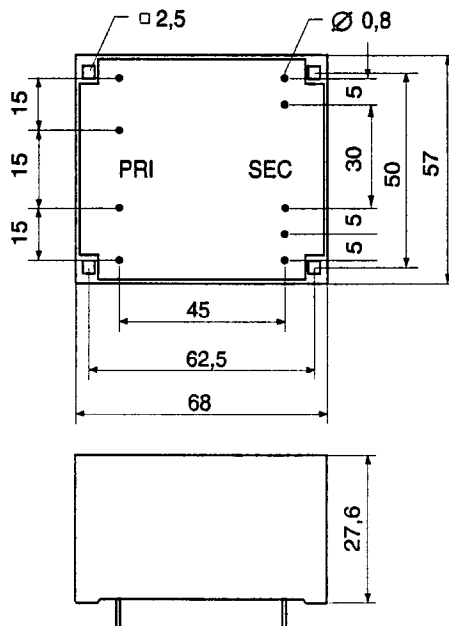
AC Full Load Voltage (V).....	SEC1	SEC2
.....9		14,5-0-14,5
DC Output Current (A).....	0,30	2x0,15
Smoothing Cap. C (μF)	1000	2x220
Regulator Reference	7805	317L,337LZ



No load output voltage x Faktor =	typ. 1,28
Regulation	typ. 22 %
No load (active) power	typ. 1,4 W
Efficiency	typ. 72 %

Output power 18 VA Type FTLG18 9+2x14 Core-type UI 39/13,5
 Height 27,6 mm Weight 375 g
 Ground area 68 mm x 57 mm

AC Full Load Voltage (V).....	SEC1	SEC2
.....9		14,5-0-14,5
DC Output Current (A).....	0,50	2x0,15
Smoothing Cap. C (μF)	2000	2x220
Regulator Reference	7805	317L,337LZ



No load output voltage x Faktor =	typ. 1,26
Regulation	typ. 21 %
No load (active) power	typ. 1,4 W
Efficiency	typ. 74 %

Output power 24 VA Type FTLG24 9+2x14 Core-type UI 39/17

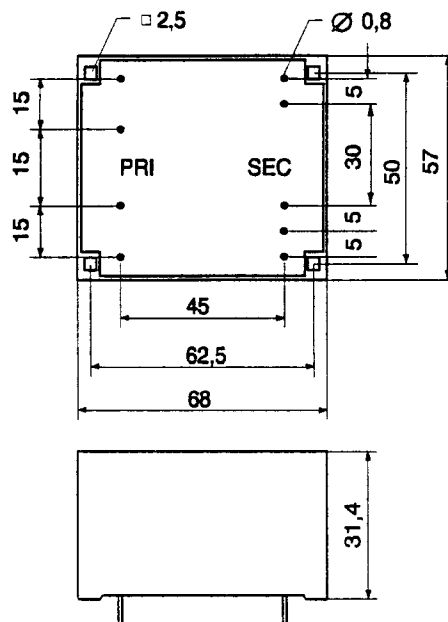
Height 31,4 mm

Weight 445 g

Ground area 68 mm x 57 mm

AC Full Load Voltage (V).....	SEC1	SEC2
.....	9	14,5-0-14,5
DC Output Current (A).....	0,75	2x0,2
Smoothing Cap. C (µF).....	4700	2x1000
Regulator Reference.....	7805	317L,337LZ

No load output voltage x Faktor =	typ. 1,22
Regulation	typ. 17,9 %
No load (active) power	typ. 1,8 W
Efficiency	typ. 76 %



Output power 30 VA Type FTLG30 9+2x14 Core-type UI 39/21

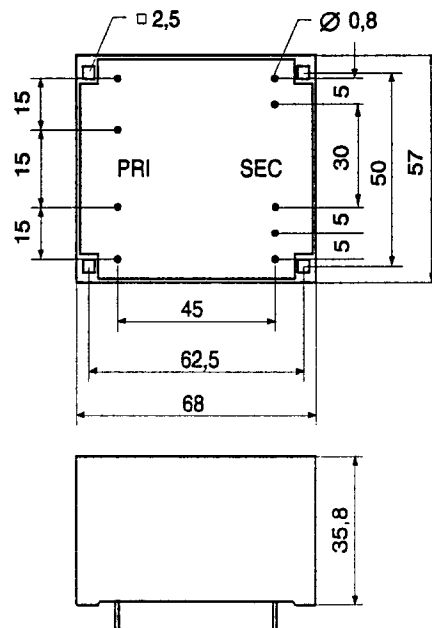
Height 35,8 mm

Weight 530 g

Ground area 68 mm x 57 mm

AC Full Load Voltage (V).....	SEC1	SEC2
.....	9	14,5-0-14,5
DC Output Current (A).....	1,0	2x0,30
Smoothing Cap. C (µF).....	4700	2x1000
Regulator Reference.....	7805	317L,337LZ

No load output voltage x Faktor =	typ. 1,25
Regulation	typ. 20 %
No load (active) power	typ. 2,2 W
Efficiency	typ. 77 %



Output power 45 VA Type FTLG45 9+2x14 Core-type UI 48/17
 Height 39 mm Weight 715 g
 Ground area 83,5 mm x 70 mm

AC Full Load Voltage (V).....	SEC1	SEC2
.....	9	14,5-0-14,5
DC Output Current (A).....	1,0	2x0,60
Smoothing Cap. C (µF)	4700	2x1000
Regulator Reference	7805	317L,337LZ

No load output voltage x Faktor =	typ. 1,24
Regulation	typ. 19,8 %
No load (active) power	typ. 3,8 W
Efficiency	typ. 78 %

