power supply

system 6000

D700

product specification

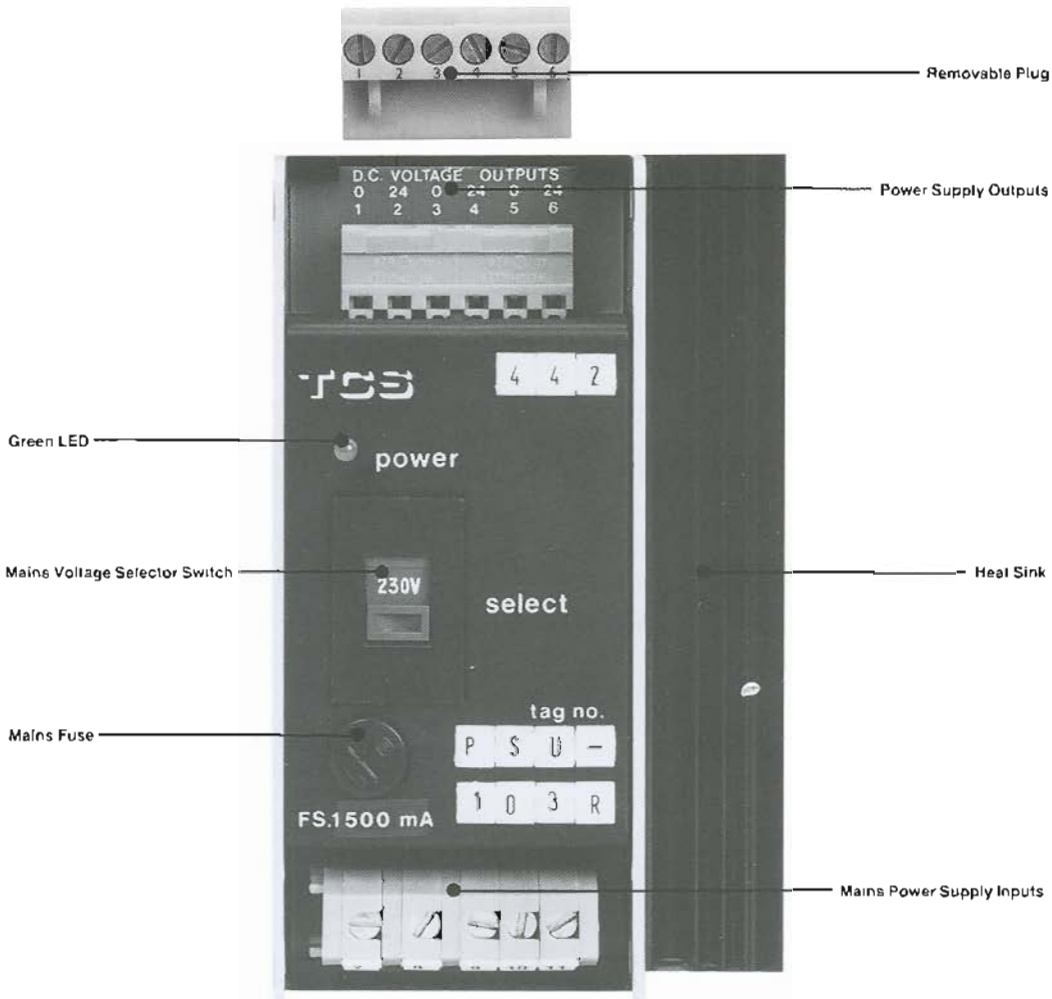
Functional description

The function of this instrument is to generate a power supply of 1A at 24V AC or rectified 24V DC while being supplied from either 110V AC or 240V AC. Choice of mains potential is established by a fascia-mounted two-position selection switch

Power-on indication is achieved by a fascia-mounted green LED, whilst instrument protection is by a 500mA fuse also mounted on the fascia

This instrument is designed to mount onto the "top hat" (Type T35) DIN rail

The D700 can be used to supply rectified 24V DC power to any single TCS microprocessor based instrument, plus any two additional "D" series instruments. Alternatively, the D700 will supply up to eight "D" series instruments.



External features

The output power supply connections are made with the plug-in terminal block at the top to simplify access to the instrument and to simplify system maintenance. The mains power connections are made directly to the terminal block at the bottom which will take 4mm wires Both terminal blocks are protected by flip-up covers which carry labels giving the instrument name and a hazardous voltage warning.

A heat sink is attached to the side of the instrument to dissipate the internally generated heat.

Connection and installation

The pin numbering is 1 to 6, left to right on the top connector and 7 to 11 left to right on the bottom

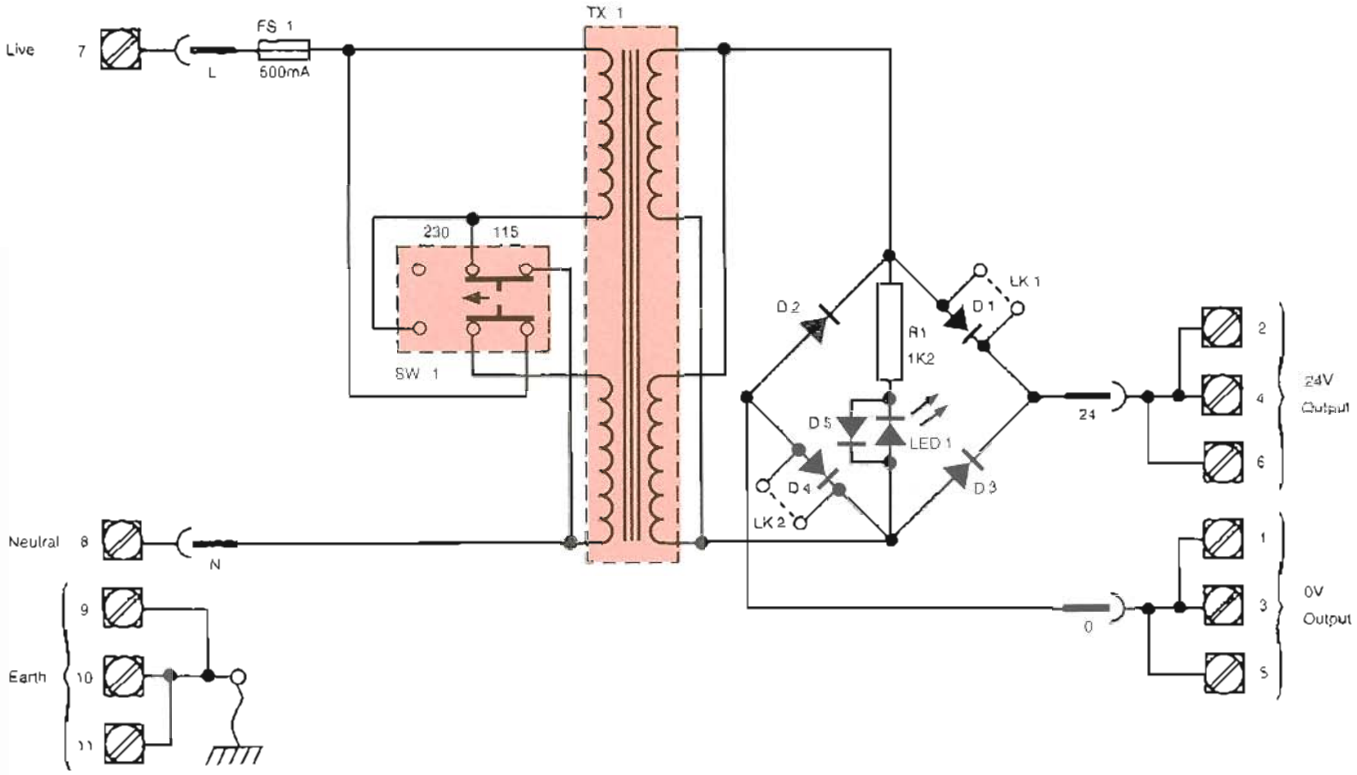
PIN	FUNCTION	
1	0 Volts	Outputs
2	24 Volts	
3	0 Volts	
4	24 Volts	
5	0 Volts	
6	24 Volts	
7	Live	Power supply
8	Neutral	
9	Earth	
10	Earth	
11	Earth	

The instrument may be powered from either 110V or 240V AC mains. Three Earth terminals are supplied to allow daisy-chain connections between instruments or for direct connection to earth studs etc. There is a high pressure earthing contact on the back of the instrument giving direct and automatic earth connection to the DIN rail.

When increased power supply integrity is required, two D700 instruments may be connected in parallel, thus providing full power supply back-up. Note, however, that in this configuration, the total current required must not exceed 1 Amp

The mounting of the instrument is directly to the "top hat" cross section DIN rail (Type T35) To install, the unit is rolled down until it clips into position. To remove, a screw driver is used to release the spring catch

The instrument should be mounted with the heat sink fins in the vertical plane. Contact between the fins and other temperature sensitive modules should be avoided



Labelling

Two labelling areas are provided on the fascia. These labels are made up with Dekafix* markers. The use of this labelling system ensures that the label is legible and may be transferred if the instrument is replaced or the system reconfigured.

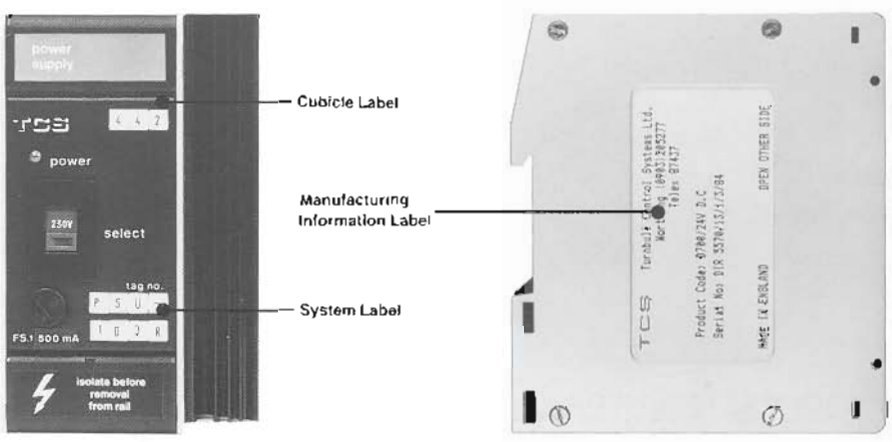
The upper label, three markers, is provided for system identification and will normally indicate the position of the instrument within the housing.

The lower label, eight markers, is provided for functional identification or tag number.

These positions will normally be supplied with blank markers but particular labelling may be specified within a system order.

There is a printed label on the side of the box with manufacturing information and the order code

*Dekafix is a registered trade name of Klippon Electricals Ltd.



Performance

30VA Power Supply

50/60 Hz Mains Supply	Voltage Range	Output @ 1A
240V AC	264 – 216	22 – 19V DC
220V AC	242 – 198	21 – 17V DC
115V AC	127 – 104	22 – 18V DC
110V AC	122 – 99	21 – 17V DC

Ordering information

Description	Order code
110/240V AC Input – 24V AC Output	D700/24V AC
110/240V AC Input – 24V DC Output	D700/24V DC

Details

Overall dimensions in mm of housings:

width:	68
height:	110
depth:	97

TCS
Advanced Instrumentation

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