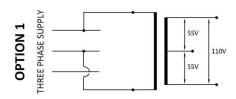
Manufacturers of Transformers, Coils, Rectifier Units

Unit 6 Weston Works, Weston Lane, Tyseley, Birmingham B11 3RP.
Tel. 0121 764 5600 Fax. 0121 764 5551 e-mail sales@birminghamtransformers.co.uk

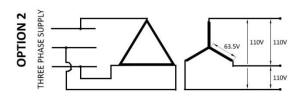
# Supplying a Single Phase Load from a 3 phase supply – Various Transformer options



## Option 1:-

Connection across two phases of a three phase supply using a single phase transformer. Output winding can be centre tapped and taken to earth to give 55-0-55V.

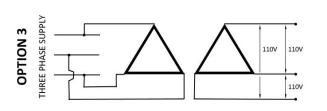
This is the best option to use as multiple transformers can be used to balance the load across the three phases.



#### Option 2:-

Three phase transformer with secondary voltage 110V L-L. Can give three phase 110V and single phase 110V between lines.

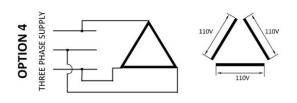
It is possible to earth the star point to give 63.5V to earth. Only suitable when single phase loads can be spread over the three phases.



#### Option 3:-

This option has a delta connected secondary giving 110V L-L three phase or 3 off 110V circuits between the lines.

Only suitable when single phase loads can be spread over the three phases.

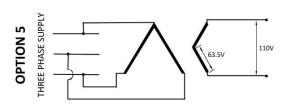


### Option 4:-

Three phase transformer with 3 separate 110V windings. Each winding can be centre tapped if required.

Would not be able to supply a three phase load with this

Only suitable when single phase loads can be spread over the three phases.



#### Option 5:-

Three to one phase transformer. A neutral is available which can be can to earth to give 63.5V.

This option gives an imbalanced load, which see one of the phases seeing double the current of the other two phases.

Option 2,3 and 4 can only be used if you can spread the single loads over the three phases.

Option 1 and 5 can be used when there is one large single phase load.

Note:- This sheet is for guidance only. Any transformer fitted must be carried out by a qualified electrician.