

# AUXILIARY TRANSFORMER

## Model 82X

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI/IEEE C57.13.  
Classified by U.L. in accordance with IEC 44-1

### APPLICATIONS:

This auxiliary transformer can be used in two ways:  
(1) As a voltage transformer at a maximum of 0.8 Volts per turn.  
(2) As a current transformer.

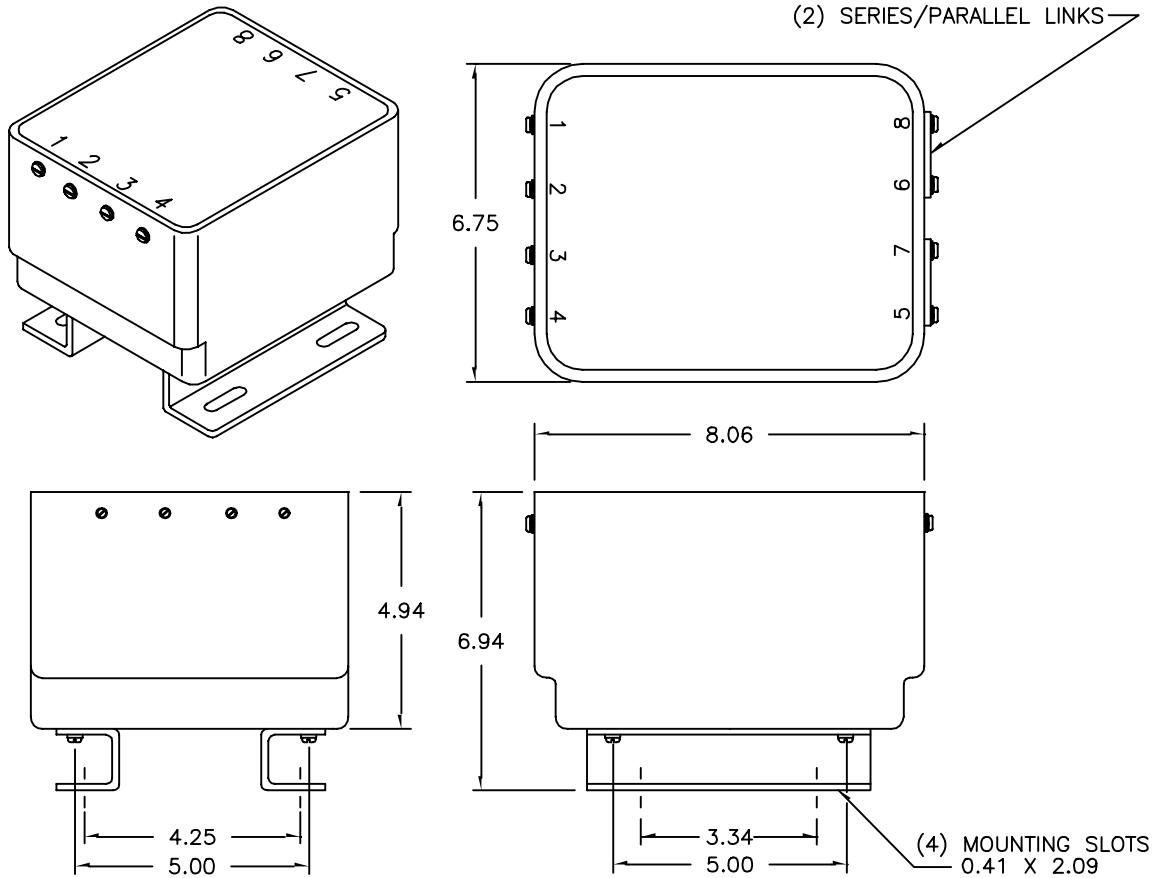
### FREQUENCY:

60 Hz as V.T.  
25-60 Hz as C.T.

### ACCURACY:

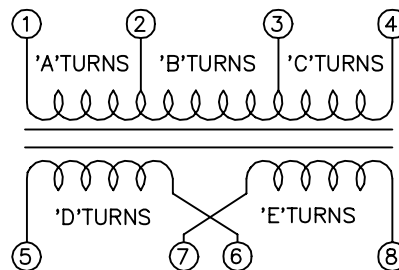
0.3 thru B0.5, 0.6 thru B1.8.  
@ 800 ampere-turns  
T50 OR T100 depending on ratio.

- Terminals are 1/4-20 brass screws with one flatwasher and lockwasher (8 places).
- Alternate base arrangement: channels can be removed to provide mounting on 5" X 5" centers to 1/4-20 inserts.
- The transformer winding is vacuum encapsulated in a polyurethane resin.
- When used as an auxiliary current transformer, the turns can be selected to effect a ratio change by inserting an input winding in series with the secondary winding of a line current transformer.
- Approximate weight 27 lbs.



The table below shows some commonly used tap arrangements. Other taps can be provided to suit particular applications within the scope of APPLICATIONS (1) AND (2).

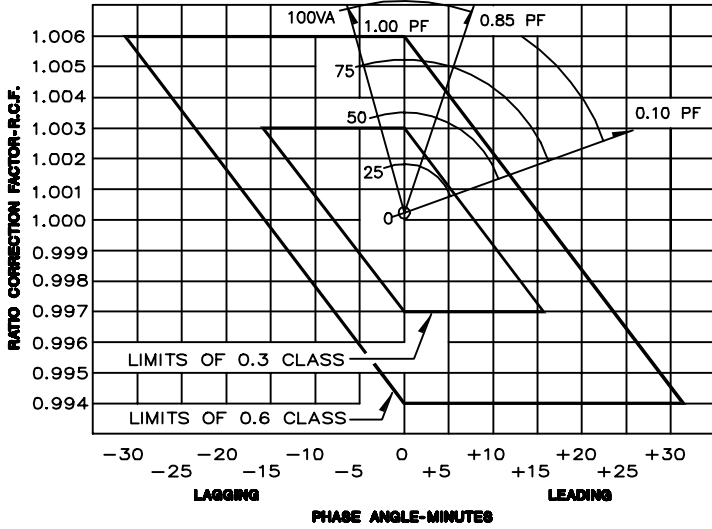
TERMINALS 1,2,3,4 DASH NO.	TURNS			TERMINALS 5,6 & 7,8 DASH NO.	TURNS	
	A	B	C		D	E
P1	72	18	30	S1	25	25
P2	125	25	50	S2	36	36
P3	144	36	60	S3	72	72
P4	180	7	29	S4	90	90
				S5	108	108
				S6	180	180
				S7	360	360
				S8	720	720



Transformers with two windings will use terminal positions 1-4 and 5-8.  
Typical ratios will be 5:5A, 5:10A, 5:15A, 5:20A and 10:5A, 15:5A, 20:5A.  
Transformers labeled with specific ratios will have the primary terminals marked H1, H2 and secondary terminals marked X1, X2.  
A typical part number would be; 82X-P3-S7.

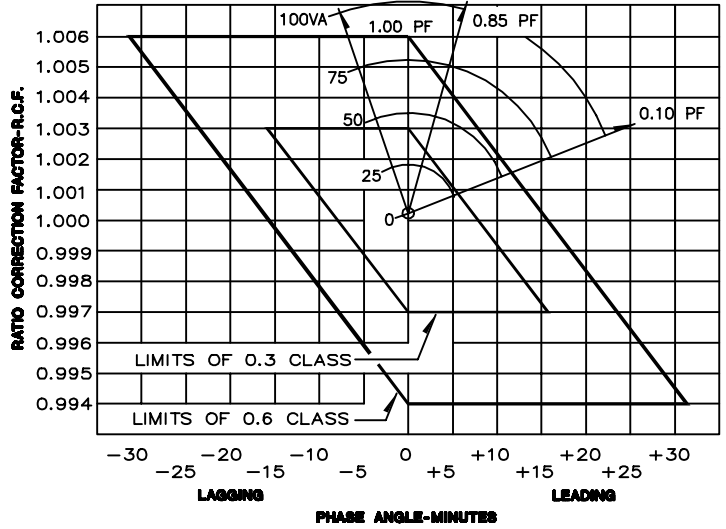
# 82X-P4-S5

**VOLTAGE TRANSFORMER CIRCLE DIAGRAM  
FOR A 120:69.282V SETUP  
THIS GRAPH IS DRAWN FOR A 0.6 P.F. SYSTEM LOAD**



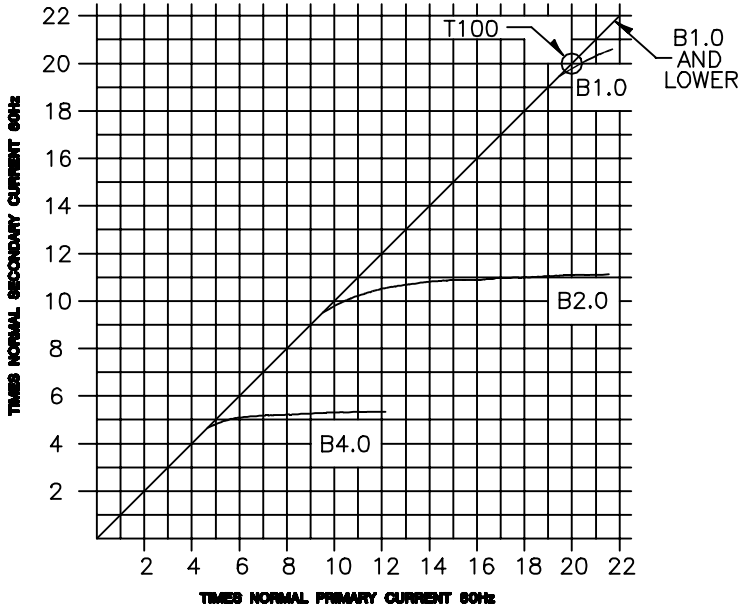
INPUT TERMINALS; 1 & 3  
OUTPUT TERMINALS; 5 CONNECTED TO 7, IN PARALLEL  
AND 6 CONNECTED TO 8, IN PARALLEL

**VOLTAGE TRANSFORMER CIRCLE DIAGRAM  
FOR A 120:120V SETUP  
THIS GRAPH IS DRAWN FOR A 0.6 P.F. SYSTEM LOAD**



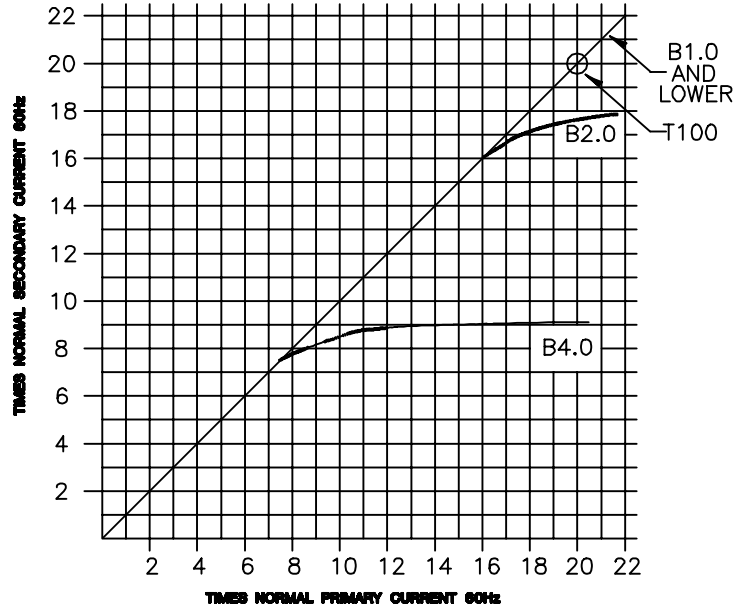
INPUT TERMINALS; 1 & 4  
OUTPUT TERMINALS; 5 & 8  
WITH 6 CONNECTED TO 7, IN SERIES

**TYPICAL OVERCURRENT RATIO CURVE AT 60Hz**



OUTPUT TERMINALS; 5 & 6 CONNECTED  
IN PARALLEL WITH 7 & 8

**TYPICAL OVERCURRENT RATIO CURVE AT 60Hz**



OUTPUT TERMINALS; 5 & 6 CONNECTED  
IN SERIES WITH 7 & 8