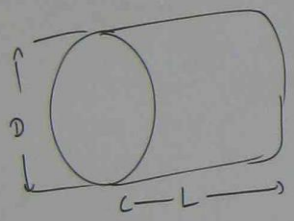
PRACTICAL

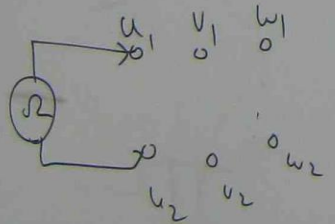
DETERMINATION OF MOTOR SIZE, WINDING RESISTANCE, INDUCTIVE REACTANCE, MOTOR NO LOAD CURRENT, POWER , POWER FACTOR

OBJECTIVE TO ESTIMATE MOTOR SIZE, WINDING RESISTANCE, IMPEDANCE AND OPERATION PARAMETERS

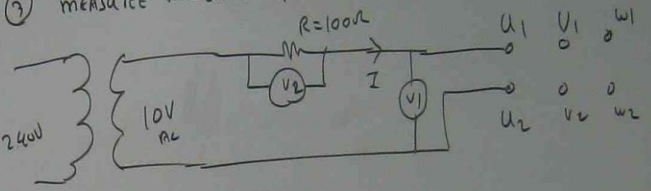
(1) MEASURE DIAMETER AND LENGTH OF GIVEN MOTOR



(2) MEASURE WINDING RESISTANCE



(3) MEASURE WINDING IMPEDANCE

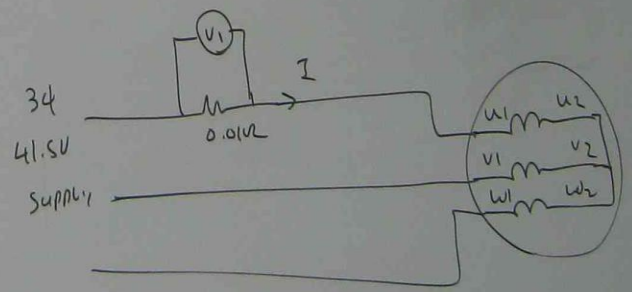


$$I = \frac{V_2}{100\Omega}$$

$$Z_{STATIC} = \frac{V1}{I} = \Omega$$

$$X_L = \sqrt{\left(Z_{STATIC}\right)^2 - R^2}$$

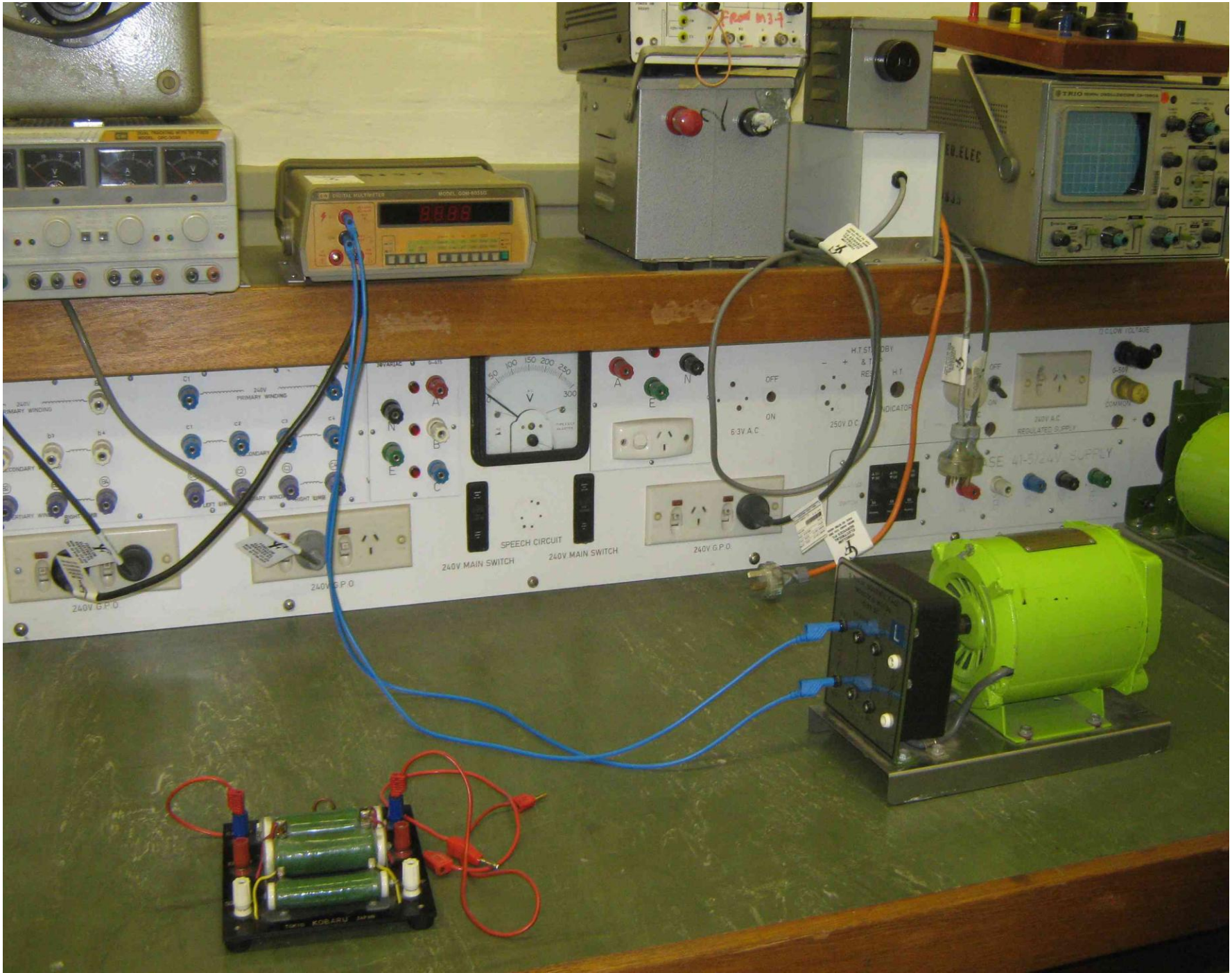
(4) RUN THE MOTOR AND MEASURE CURRENT, POWER FACTOR AND POWER

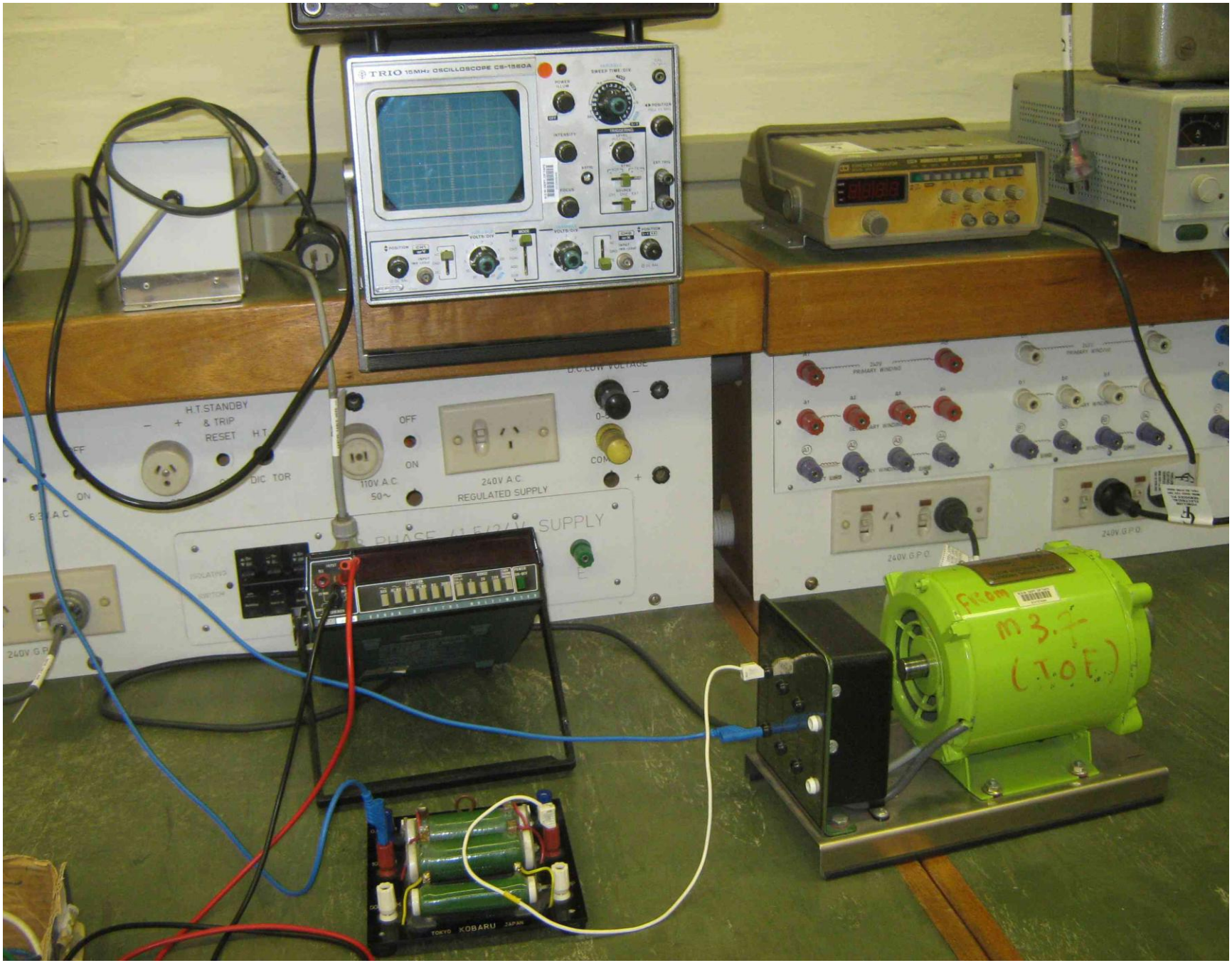


E = 41.5V

$$I = \frac{V1}{0.01\Omega} \qquad PF = ? \qquad POWER = \sqrt{3} \times E \times I \times Pf$$

MOTOR					
DIAMETER=	LENGTH=	Z= R= X_L=	POWER=	RUNNING CURRENT	PF


240V G.P.O
240V G.P.O
SPEECH CIRCUIT
240V MAIN SWITCH
240V MAIN SWITCH
240V G.P.O
6·3V A.C
250V D.C
240V A.C
REGULATED SUPPLY
TRIO


TRIO 15MHz OSCILLOSCOPE CS-1560A
H.T.STANDBY
& TRIP
RESET
110V A.C
50~
240V A.C
REGULATED SUPPLY
240V G.P.O
From
M3.7
(T.O.F.)
TOKYO KOBARU JAPAN


DWD 550 POWERSCOPE
TRIO
D.C LOW VOLTAGE
240V A.C
REGULATED SUPPLY
PHASE 41-5/24V SUPPLY
240V G.P.O.
240V G.P.O.


TRIO
240V A.C
REGULATED SUPPLY
240V G.P.O.