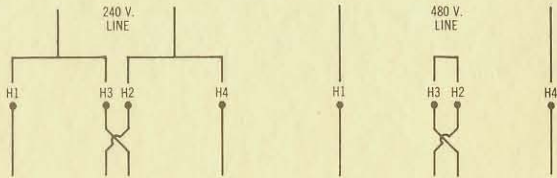


TYPE S SINGLE PHASE  
240 x 480 TO 120/240 VOLTS

PRIMARY CONNECTIONS



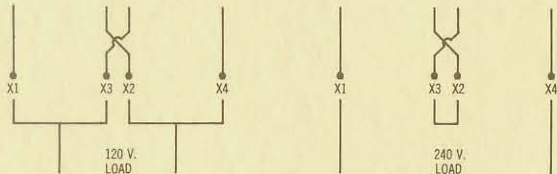
CONNECT H1 & H3  
CONNECT H2 & H4  
CONNECT H1-H3 & H2-H4  
TO 240 VOLT SERVICE

240 VOLT SERVICE

CONNECT H3 & H2  
CONNECT H1 & H4  
TO 480 VOLT SERVICE

480 VOLT SERVICE

SECONDARY CONNECTIONS

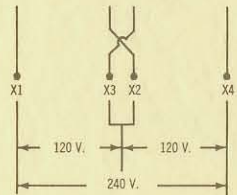


CONNECT X1 & X3  
CONNECT X2 & X4  
CONNECT LOAD  
TO X1-X3 & X2-X4

120 VOLT 2 WIRE  
CIRCUIT

CONNECT X3 & X2  
CONNECT LOAD  
TO X1 & X4

240 VOLT 2 WIRE  
CIRCUIT

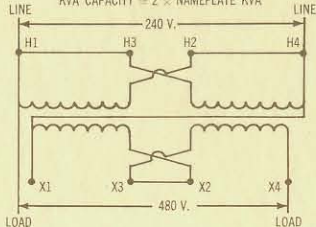


THE JUNCTION OF X3-X2 MAY BE USED AS THE NEUTRAL  
OF A 3 WIRE SYSTEM AND MAY BE GROUNDED.

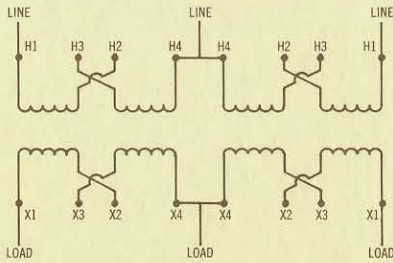
240/120 VOLT 3 WIRE CIRCUIT

SINGLE UNIT CONNECTED AS AUTO TRANSFORMER  
240 VOLT TO 480 VOLT

KVA CAPACITY = 2 x NAMEPLATE KVA



TWO UNITS CONNECTED OPEN DELTA



FOR 480 VOLT DELTA PRIMARY —  
CONNECT H3 TO H2 IN EACH PHASE

FOR 240 VOLT DELTA PRIMARY —  
CONNECT H3 TO H1 AND H2 TO H4 IN EACH PHASE

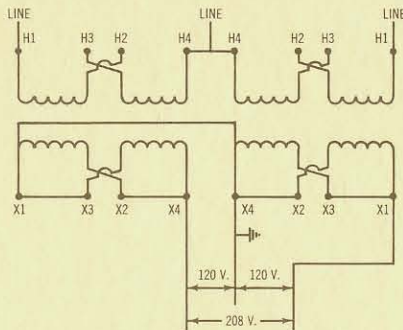
FOR 240 VOLT DELTA SECONDARY —  
CONNECT X3 TO X2 IN EACH PHASE

FOR 120 VOLT DELTA SECONDARY —  
CONNECT X3 TO X1 AND X2 TO X4 IN EACH PHASE

THREE PHASE KVA CAPACITY = TOTAL KVA OF BOTH UNITS x .86

TWO UNIT TRANSFORMERS CONNECTED IN "HOPPLY-HOOKUP" FOR SINGLE PHASE  
LIGHTING AND SINGLE PHASE POWER LOADS FROM THREE PHASE SUPPLY.

THIS CONNECTION ALLOWS CHANGEOVER OF EXISTING SINGLE PHASE SERVICE TO  
THREE PHASE SERVICE WITHOUT CHANGING EXISTING LIGHTING PANELS OR  
SECONDARY NEUTRALS. THE NEUTRAL CURRENT WILL BE THE SAME AS WITH THE  
ORIGINAL SINGLE PHASE SERVICE RATHER THAN INCREASING BY THE FACTOR  
OF 1.73 (√3). NOTE: THE PRIMARY COMMON CURRENT WILL BE THE √3 x  
THE CURRENT IN THE OTHER TWO LINES.



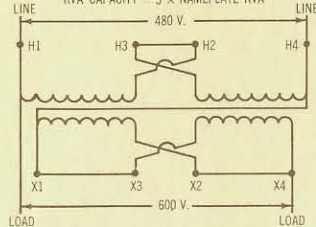
FOR 480 VOLT PRIMARY —  
CONNECT H2 TO H3 IN EACH UNIT

FOR 240 VOLT PRIMARY —  
CONNECT H3 TO H1 AND H2 TO H4 IN EACH UNIT

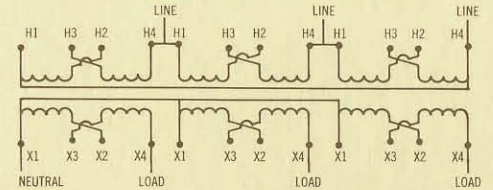
SECONDARY KVA CAPACITY = TOTAL NAMEPLATE KVA OF BOTH TRANSFORMERS

SINGLE UNIT CONNECTED AS AUTO TRANSFORMER  
480 VOLT TO 600 VOLT

KVA CAPACITY = 5 x NAMEPLATE KVA



THREE UNITS CONNECTED DELTA WYE, FOR THREE PHASE OPERATION



FOR 480 VOLT DELTA PRIMARY —  
CONNECT H3 TO H2 IN EACH PHASE

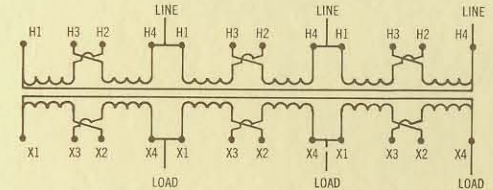
FOR 416Y/240 VOLT SECONDARY —  
CONNECT X3 TO X2 IN EACH PHASE

FOR 240 VOLT DELTA PRIMARY —  
CONNECT H3 TO H1 IN EACH PHASE AND  
H2 TO H4 IN EACH PHASE

FOR 208Y/120 VOLT SECONDARY —  
CONNECT X3 TO X1 AND X2 TO X4 IN  
EACH PHASE

THREE PHASE KVA CAPACITY = TOTAL KVA OF THREE UNITS

THREE UNITS CONNECTED DELTA DELTA FOR THREE PHASE OPERATION



FOR 480 VOLT DELTA PRIMARY —  
CONNECT H3 TO H2 IN EACH PHASE

FOR 240 VOLT DELTA SECONDARY —  
CONNECT X3 TO X2 IN EACH PHASE

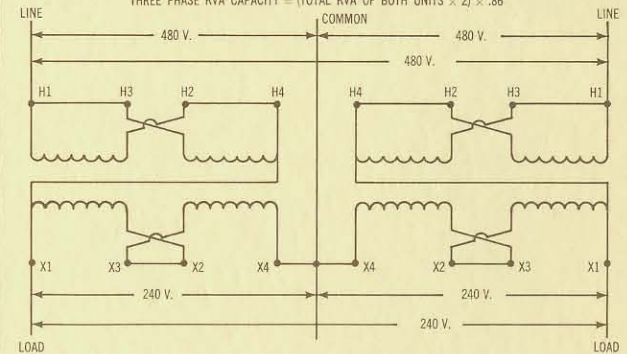
FOR 240 VOLT DELTA PRIMARY —  
CONNECT H3 TO H1 AND H2 TO H4 IN  
EACH PHASE

FOR 120 VOLT DELTA SECONDARY —  
CONNECT X3 TO X1 AND X2 TO X4 IN  
EACH PHASE

THREE PHASE KVA CAPACITY = TOTAL KVA OF THREE UNITS

TWO UNITS CONNECTED AS OPEN DELTA AUTO TRANSFORMER  
FOR THREE PHASE OPERATION

THREE PHASE KVA CAPACITY = (TOTAL KVA OF BOTH UNITS x 2) x .86



TWO UNITS CONNECTED AS OPEN DELTA AUTO TRANSFORMER  
FOR THREE PHASE OPERATION

THREE PHASE KVA CAPACITY = (TOTAL KVA OF BOTH UNITS x 5) x .86

