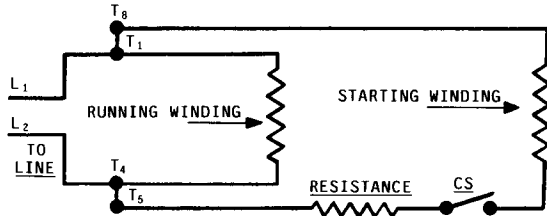


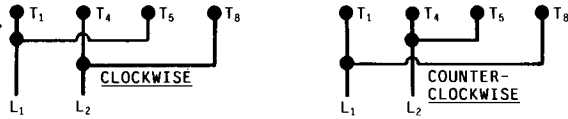
SINGLE PHASE MOTORS

SPLIT-PHASE: SQUIRREL CAGE

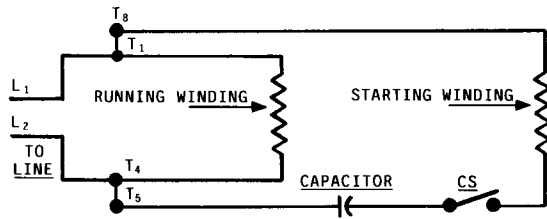
A. RESISTANCE START:



CENTRIFUGAL SWITCH (CS) OPENS AFTER REACHING 75% OF NORMAL SPEED.



B. CAPACITOR START:



- NOTE: 1. A RESISTANCE START MOTOR HAS A RESISTANCE CONNECTED IN SERIES WITH THE STARTING WINDING.
2. THE CAPACITOR START MOTOR IS EMPLOYED WHERE A HIGH STARTING TORQUE IS REQUIRED.

FULL-LOAD CURRENT

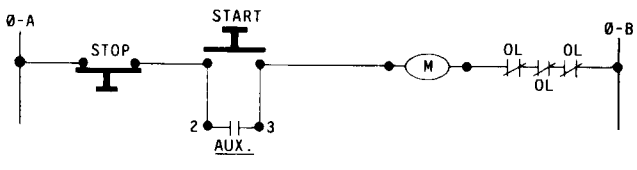
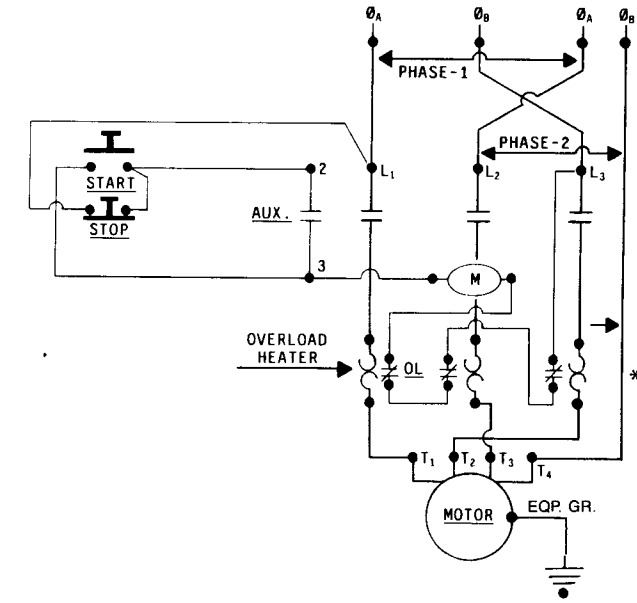
TWO-PHASE ALTERNATING-CURRENT MOTORS (4 WIRE)

INDUCTION TYPE SQUIRREL-CAGE AND WOUND ROTOR AMPERES					
HP	115V	230V	460V	575V	2300V
1/2	4	2	1	0.8	—
3/4	4.8	2.4	1.2	1.0	—
1	6.4	3.2	1.6	1.3	—
1-1/2	9	4.5	2.3	1.8	—
2	11.8	5.9	3	2.4	—
3	—	8.3	4.2	3.3	—
5	—	13.2	6.6	5.3	—
7-1/2	—	19	9	8	—
10	—	24	12	10	—
15	—	36	18	14	—
20	—	47	23	19	—
25	—	59	29	24	—
30	—	69	35	28	—
40	—	90	45	36	—
50	—	113	56	45	—
60	—	133	67	53	14
75	—	166	83	66	18
100	—	218	109	87	23
125	—	270	135	108	28
150	—	312	156	125	32
200	—	416	208	167	43

FOR 90 AND 80 PERCENT POWER FACTOR THE ABOVE FIGURES SHOULD BE MULTIPLIED BY 1.1 AND 1.25 RESPECTIVELY.

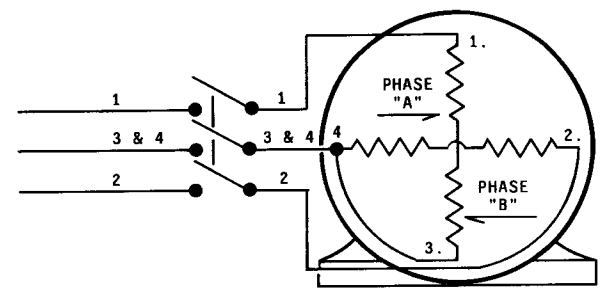
Reprinted with permission from NFPA 70-1996, the *National Electrical Code*®, copyright 1995, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the referenced subject which is represented only by the Standard in its entirety.

**TWO-PHASE, FOUR WIRE
STANDARD THREE PHASE STARTER**



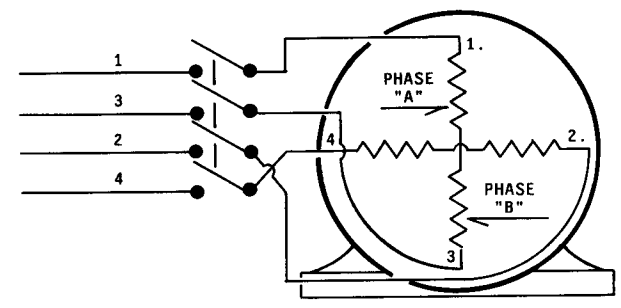
* NO HEATER OR HEATER OVERLOAD RELAY NECESSARY FOR T₄

TWO-PHASE MOTORS



TWO PHASE --- THREE WIRE

TO REVERSE THE DIRECTION OF A TWO PHASE, THREE WIRE MOTOR INTERCHANGE THE TWO OUTSIDE MOTOR LEADS, 1 AND 2.



TWO PHASE ---- FOUR WIRE

TO REVERSE THE DIRECTION OF A TWO PHASE, FOUR WIRE MOTOR INTERCHANGE THE LEADS IN ONE PHASE.