Input Power Wiring Diagrams (Option A)

The diagrams on pages 42 through 45 are printed on the back panels of the mainframes. For your convenience, they are depicted here along with additional information.

For information on input wiring for 30 AMP mainframes, contact D-M-E.

Standard input wiring for mainframes, unless specified otherwise at time of order, is 240 VAC, three- phase, 4-wire, 50/60 Hz. (OPTION A). If it becomes necessary to change to another configuration, refer to the appropriate diagram and information on the following pages:

Page 42: (OPTION A) 208-240 VAC, 3-phase, 4-wire

Page 43: (OPTION B) 380-415 VAC, 3-phase, 5-wire

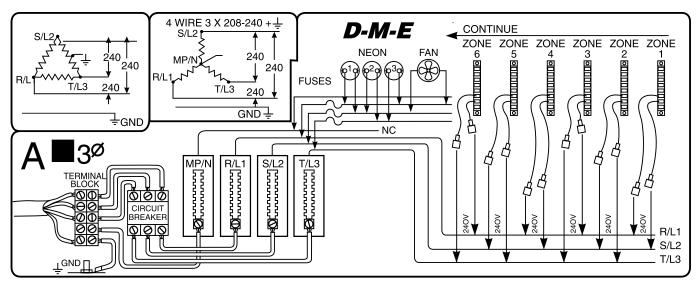
Page 44: (OPTION C) 240 VAC, 2-phase, 4-wire

Page 45: **(OPTION D)** 208-240 VAC, single phase, 3-wire 120 VAC, 2-phase, 4-wire

NOTE: For mold power and thermocouple connector wiring information, see pages 23-25.

OPTION A **(Standard)**

208 - 240 VAC, Three-Phase, 4-Wire Delta or "Y" Power Distribution System

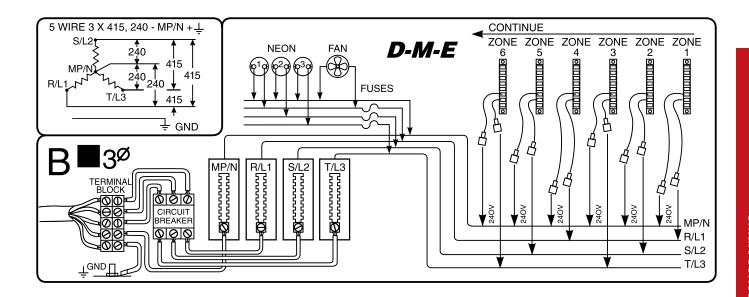


As shown above, each module is powered from one of the three phases. Zone (1), for example, is powered from Phase 1, which is supplied by R/L1 and S/L2. Zone (2) is powered by Phase 2, which is supplied by S/L2 and T/L3. Zone (3) is powered by Phase 3, which is supplied by R/L1 and T/L3.

NOTE: At this point, the sequence repeats itself. For example, Zone (4) is connected the same as Zone (1) to R/L1 and S/L2 and Zone (5) is connected the same as Zone (2) to S/L2 and T/L3 and Zone (6) is connected the same as Zone (3) to R/L1 and T/L3. Zone (7) is then connected to the same phase as Zone (1) and (4), etc. This method of connection assures the greatest likelihood of line balance.

Input Power Wiring Diagrams (Option B)

380 - 415 VAC, Three-Phase, 5-Wire "Y" Power Distribution System



CAUTION NOTE: The voltages from line-to-line in this system are 380 to 415 volts. Severe damage to module and mainframe could result if this type of AC input system is connected to a mainframe wired as OPTION A. This type of power distribution is not found or is very uncommon in the United States but is the most common system found in many other countries worldwide.

WARNING: If export of this system is intended, make sure that wiring is reconfigured for the country where it is to be used.

Please note that the 380-415 Volt Power Distribution System is the same as the "Y" connection shown in OPTION A except for the voltage levels and the use of the MP/N to develop the 240 volt from the 380-415 volt system. Notice that <u>all</u> modules have one line connected to MP/N and the other side connected to one of the three phase lines.

Example: Zone (1) is connected to Phase 1, which is supplied by R/L1 and MP/N.

Zone (2) is connected to Phase 2, which is supplied by S/L2 and MP/N.

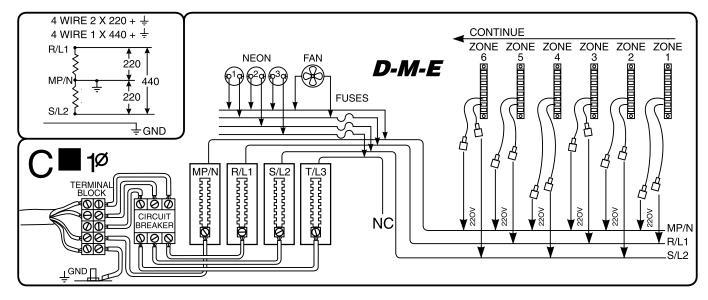
Zone (3) is connected to Phase 3, which is supplied by T/L3 and MP/N.

Zone (4) starts the sequence over again. It is connected to Phase 1 R/L1

and MP/N, etc.

Input Power Wiring Diagrams (Option C)

240 VAC, "Two-Phase", 4-Wire



The 240 volt single-phase connection only uses two power lines plus ground.

CAUTION: Only power conductors should be connected through the circuit breaker. Never make ground connections through a circuit breaker. Notice that the output of the circuit breaker is connected to terminal strips R/L1 and S/L2. Also notice that ground is common with MP/N in this system. All zones in this system have to be connected to MP/N and either R/L1 or S/L2. Line balance is achieved by alternating between R/L1 and S/L2.

Example: Zone (1) is connected to MP/N and R/L1.

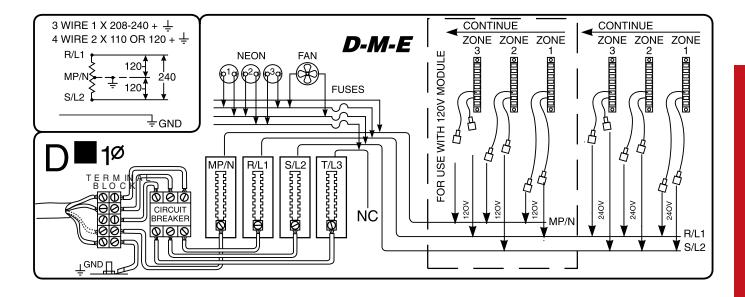
Zone (2) is connected to MP/N and S/L2, etc.

Zone (3) starts the sequence over again. It is connected to MP/N and R

L2, same as zone (1).

Input Power Wiring Diagrams (Option D)

208 - 240 VAC, Single-Phase, 3-Wire or 120 VAC, Two-Phase, 4-Wire



Above diagram depicts two different wiring configurations. One is 208-240 volt, singlephase, 3-wire. Note that lines R/L1 and S/L2 are connected through the circuit breaker to the appropriate terminal strips. All zones will be connected between R/L1 and S/L2. MP/N is common with ground and is not connected through the circuit breaker.

In the 120 volt connection (zone connections shown within the dashed-line area), the 120 volts is developed between R/L1 and MP/N and S/L2 and MP/N. Again, ground and MP/N are not connected through the circuit breaker. Each zone in this system will be connected to MP/N and either R/L1 or S/L2. Line balance is achieved by alternating between R/L1 and S/L2.

Example: Zone (1) is connected to MP/N and R/L1.

Zone (2) is connected to MP/N and S/L2, etc.

Zone (3) starts the sequence over again. It is connected to MP/N and R/L2,

same as zone (1).