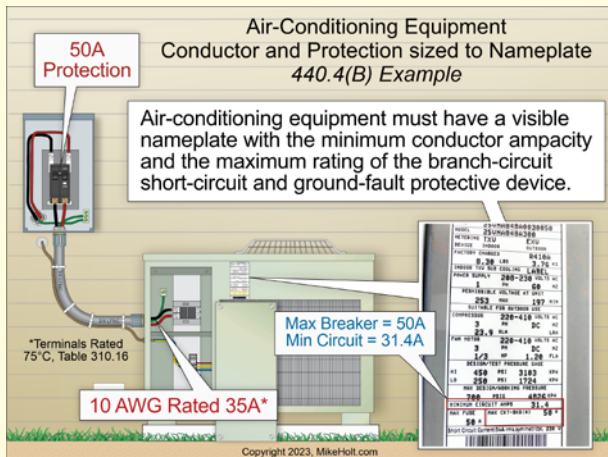


AIR-CONDITIONING EQUIPMENT

► Multimotor Equipment Example

Question: What size conductor and short-circuit and ground-fault protective device is required for a multimotor air-conditioning compressor? The nameplate minimum circuit ampacity is 31.40A, the maximum circuit breaker rating is 50A, where the equipment is rated for 75°C conductor. ►Figure 440-4

- (a) 10 AWG, 50A breaker (b) 10 AWG, 30A breaker
(c) 8 AWG, 50A breaker (d) 8 AWG, 20A breaker



►Figure 440-4

Solution:

Conductor: Since the terminals are rated 75°C, we can use 10 AWG rated 35A at 75°C [110.14(C)(1)(a)(3) and Table 310.16].

The circuit breaker protection for air-conditioning compressor equipment must have an ampere rating of not more than the 50A marked on the nameplate [440.4(B)]. Use a maximum 50A breaker in accordance with 240.6(A).

Answer: (a) 10 AWG, 50A breaker