ACiQ Condenser Amperage Chart

			Recommended Circuit	Recommended	Kit Recommended	
Condenser Model	MCA	MOCP	Protection	WITE AWG		
ACiQ-18Z-HH-M2B	20	25	20 Amps	10	MSK001	
ACiQ-18Z-HP230B	15	20	20 Amps	10	MSK001	
ACiQ-18ZPL-HP230B	20	25	20 Amps	10	MSK001	
ACiQ-24-HPB	20.5	35	30 Amps	10	MSK001	
ACiQ-24Z-HP230B	19	30	30 Amps	10	MSK001	
ACiQ-24ZPL-HP230B	25	35	30 Amps	10	MSK001	
ACiQ-27Z-HH-M3B	25	40	30 Amps	10	MSK001	
ACiQ-36-HPB	41	50	50 Amps	6	None Currently	
ACiQ-36Z-HH-M4B	40	60	40 Amps	8	None Currently	
ACiQ-36Z-HP230B	28	35	30 Amps	10	MSK001	
ACiQ-48-HPB	42	50	50 Amps	6	None Currently	
ACiQ-48Z-HH-M5B	42	50	50 Amps	6	None Currently	

Wire Size	Temperature Rating of Conductor					
(AWG)	60°C	75°C	90°C			
14	15 Amps	20 Amps	25 Amps			
12	20 Amps	25 Amps	30 Amps			
10	30 Amps	35 Amps	40 Amps			
8	40 Amps	50 Amps	55 Amps			
6	55 Amps	65 Amps	75 Amps			

The above information is from the 2023 version of
the NFPA-70 Table 310.16

Units Highlighted Cannot Use 10 AWG

Important Notes

Recommended Wire AWG is based off of the system's Minimum Circuit Ampacity. It assumes the wire being used is copper wire run in non-metallic cabling with a maximum of three current-carrying conductors and an ambient temperature of 86 °F. Table 310.16 of the 2023 NFPA-70 was referenced for data.

Please reference Table 310.15(C)(1) of the 2023 NFPA-70 if there are more than three current-carrying conductors in the cable or raceway. This will be unlikely for this application.

Please reference Table 310.15(B)(1)(1) of the 2023 NFPA-70 for ambient temperatures other than 86 °F.

When using non-metallic cabling (i.e. a plastic whip) you must use the 60°C table for amperage in accordance with Article 334.80 of the 2023 NFPA-70.

Wires must be sized by the minimum temperature rating of any conductor in the circuit. For example even if a wire rated at 75°C is used it cannot be assumed that the 75°C table can be used for amperage. If the breaker, disconnect lugs, or any part of the circuit is rated at 60°C than that table must be used.

If you cannot find any marking on a wire or termination stating the temperature rating you must assume it is the lowest rating, which is 60°C.

WARNING

Always check your local jurisdiction's laws before attempting to do electrical work. The law in your local jurisdiction my be different than what is presented here. Only allow a licensed professional to perform electrical work on equipment.



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