



SUBJECT:- Large single phase units.

MODELS EFFECTED:- CWS088H, CWS100H, CDS110H, GC30RCF & GC48RCF

GENERAL:- Cable requirements for large single phase units with Softstarter fitted.
(Cable sizing chart attached.)

On these large single phase units the electricity supply and installation is critical due to the higher compressor start current and the voltage drop. In all states the large single phase units, greater than 7kW (Wall Split & Ducted) require 4mm² supply cable to meet the regulations and the GC48RCF 14kW requires 6mm². If the cable run exceeds 20m then the cable will have to be upsized to 6mm² and 10mm² respectively. (Refer local regulations).

Generally the power supply for single phase units is to the indoor unit with exception being for the WS0/CWS100H and DS/GC48RCF which requires power to be supplied to the outdoor unit.

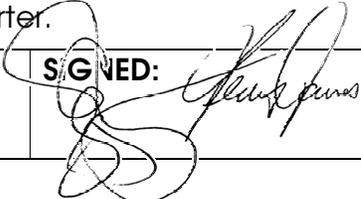
Simple test on commissioning of large single phase unit:-

Test the supply voltage at the condensing unit with the unit idle. Then test again with the unit running. If the difference is 10 volts or greater then there is a cable or supply problem which need to be corrected or troublesome operation will follow. The problem will be in one of the following three.

1. The power supply itself. You will encounter resistance from the power supplier to repair this, as it's an expensive exercise for them. However they will only act if a complaint is lodged. Always bring these problems to their attention. (Ensure the installation has a softstarter installed first).
2. The cables to the meter box. (Especially on older sites).
3. The cable to the air conditioner.

Softstarters.

Softstarters do not reduce the cable size requirement or fix low voltage supply problems. Our new softstarters now have low voltage cut out. If the voltage is below 210 volts no attempt to start will occur. If the voltage drops to 190 volts during a startup the start will be aborted. If the voltage drops to 190 volts during operation the compressor will be shut down by the softstarter.

ISSUED BY: Greg Bugno	SIGNED: 	DATE: 12/03/02	PAGE: 1 of 1
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