

IBM / APC 7500va and 10000va UPS

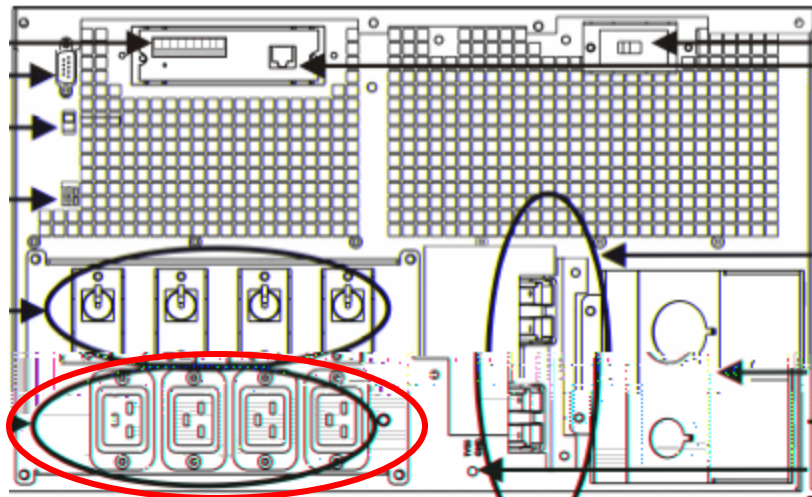
A guide for wiring and making it work with the IBM
BladeCenter H chassis



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The problem:

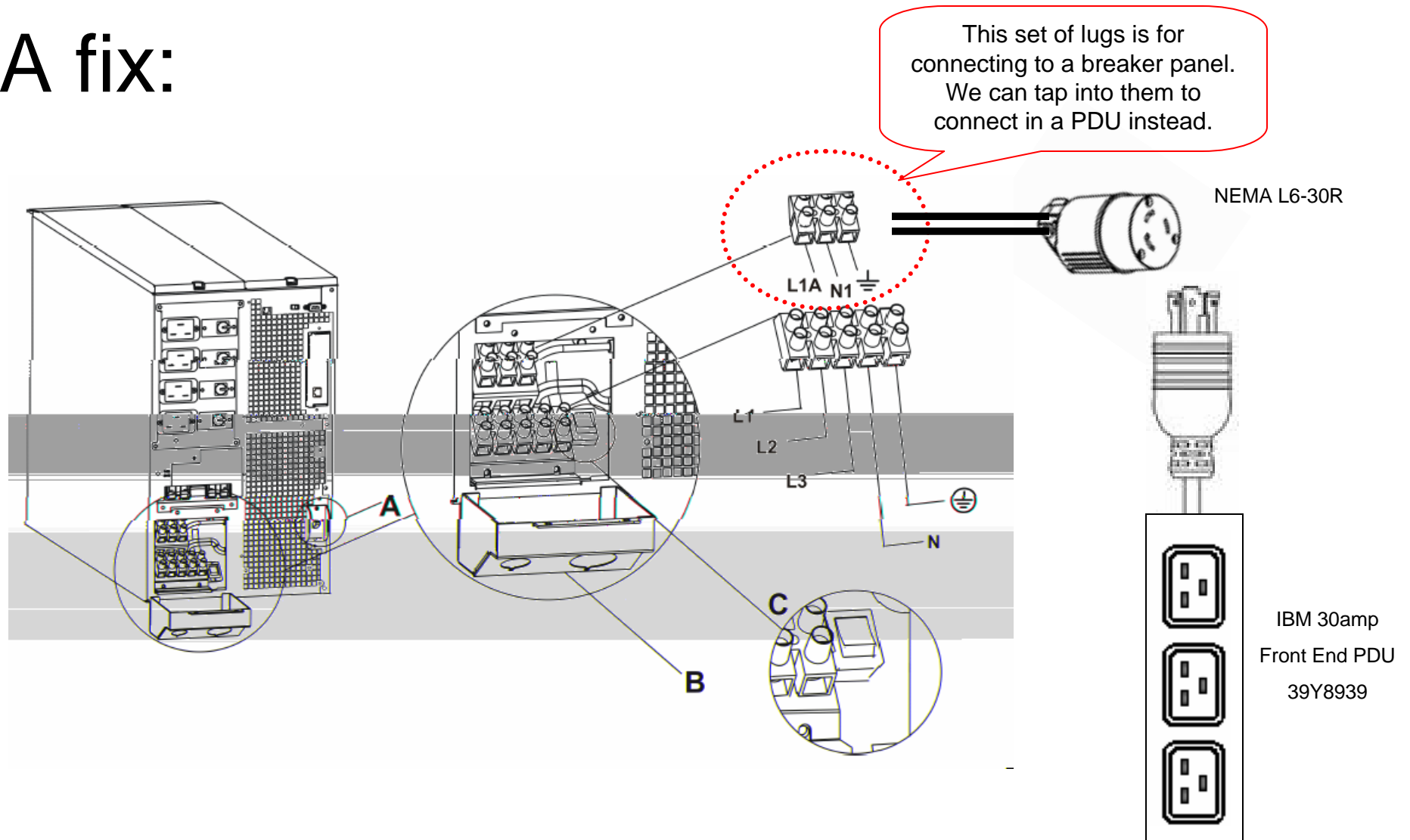
The IBM branded APC units have **four** C19 power connections



The IBM BladeCenter H requires **six** C19 power connections



A fix:

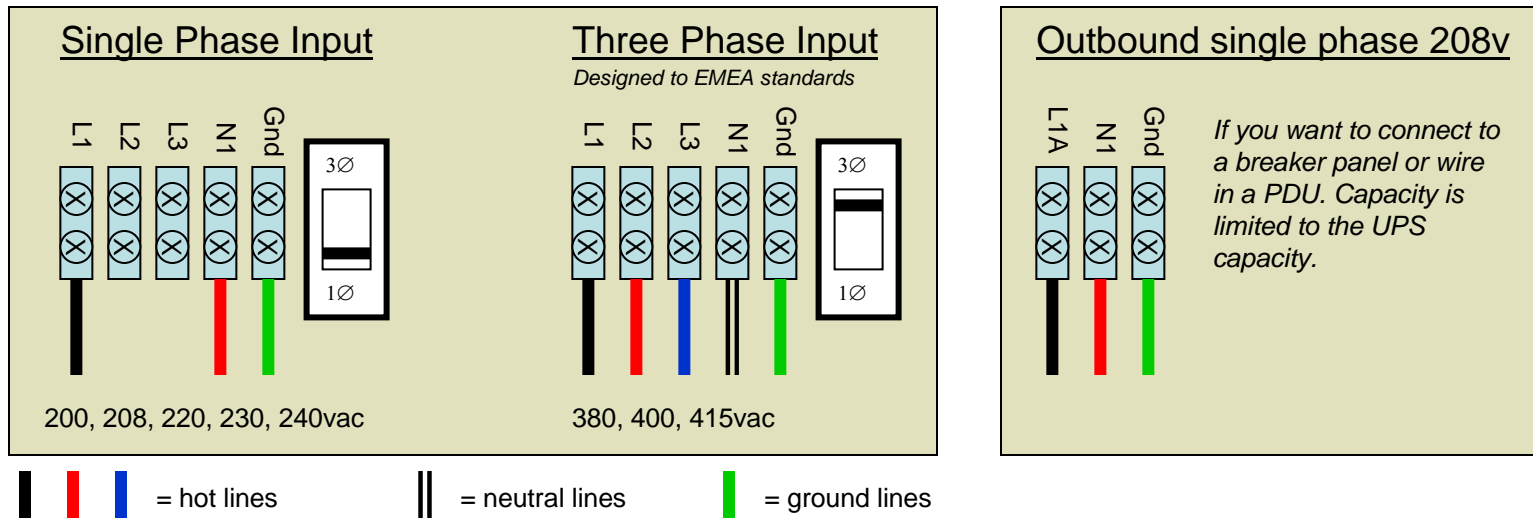


Some care must be taken in how you proceed. The IBM 30amp Front End PDU in this example has a breaker switch on it. This is important if we wire in just a plain L6-30R receptacle, otherwise we are relying on the UPS master breaker in the event of an overload.

It is important to have a licensed local electrician do this work, as your local electrical codes may require an armored flex conduit out to a gang box, or any of several variations to that theme.

APC 7500 & APC 10000 UPS power connection to building power

There is some confusion as to the proper way to wire up these units due to the way the wire connectors are labeled, particularly on the single phase side. To simplify, here are drawings showing the proper connectivity, regardless of how the connectors on the unit may read.



The 7500 will require 38amps (actual) in the single phase configuration, which in turn requires 50amp breakers and a 50amp plug/receptacle if not wiring directly to building power. There is a NEMA L6-50 which works well, in addition to a couple of waterproof options to include a NEMA and an IEC 309 option (360P6W/360R6W).

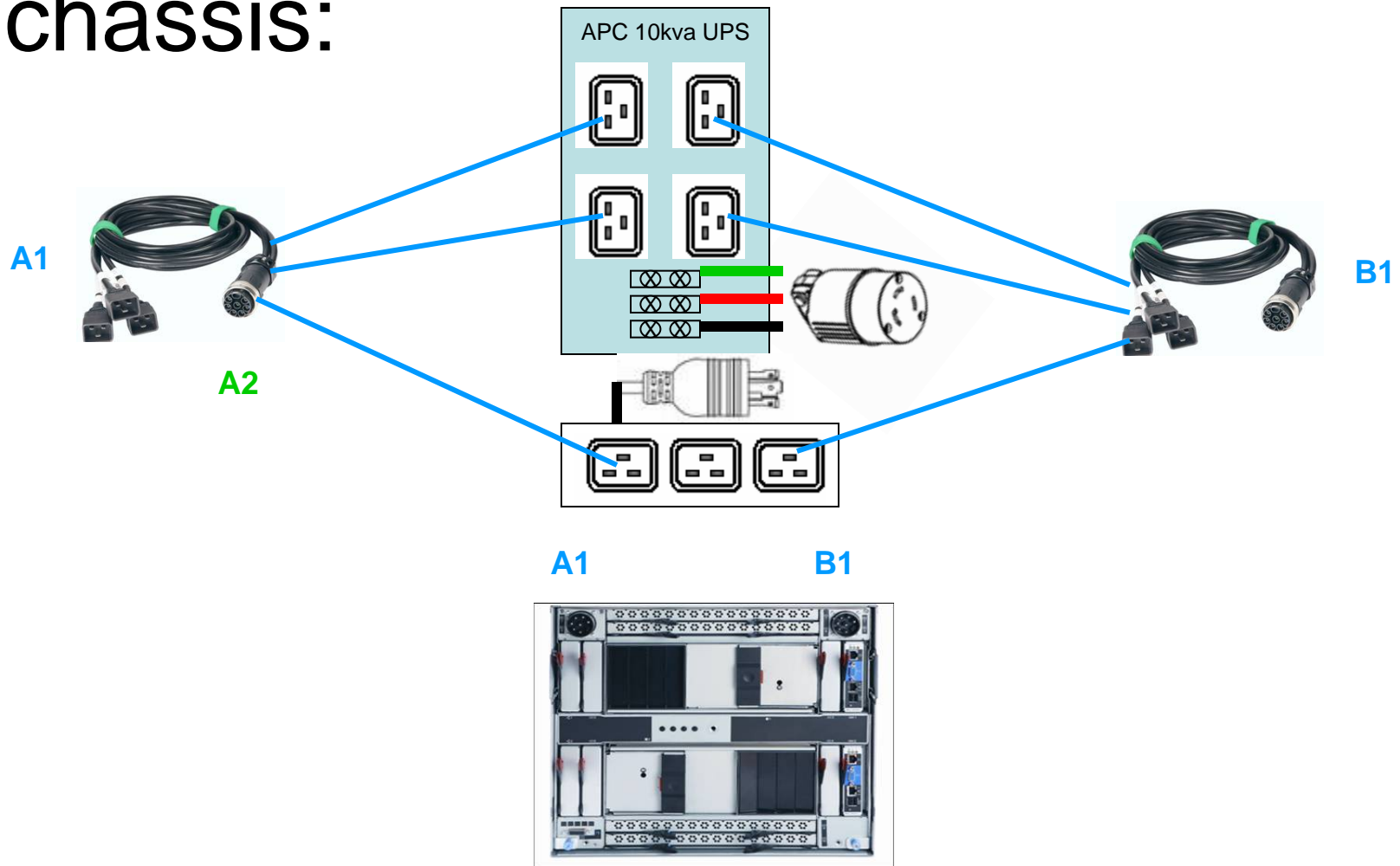
The 10000 will require 50amps (actual) in the single phase configuration, which in turn requires at least 63amp breakers and plug/receptacle if not wiring directly to building power. There is an IEC 309 waterproof option for this (363P6W/363R6W). There may be other options as well.

All of this detail is also contained within IBM's online documentation at

<http://www-304.ibm.com/jct01004c/systems/support/supportsite.wss/docdisplay?Indocid=MIGR-58641&brandind=5000008>

on PDF pages 9 & 10 (document numbered pages 5 & 6)

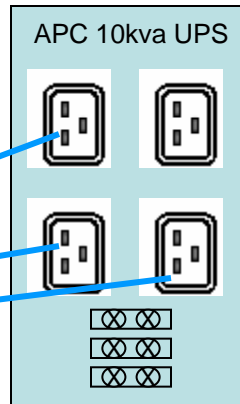
1 chassis:



This is far from best practices, as it only provides a single circuit to the BladeCenter H chassis. However, it is functional and is far better than no power protection.

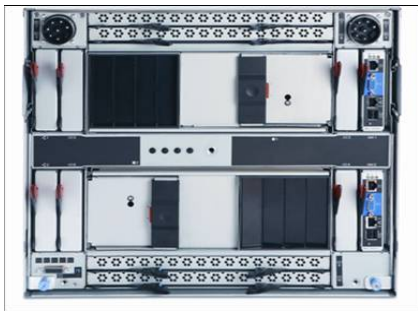
1 chassis: *Redundant option*

A1

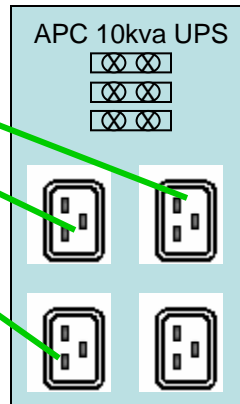


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A2



A2



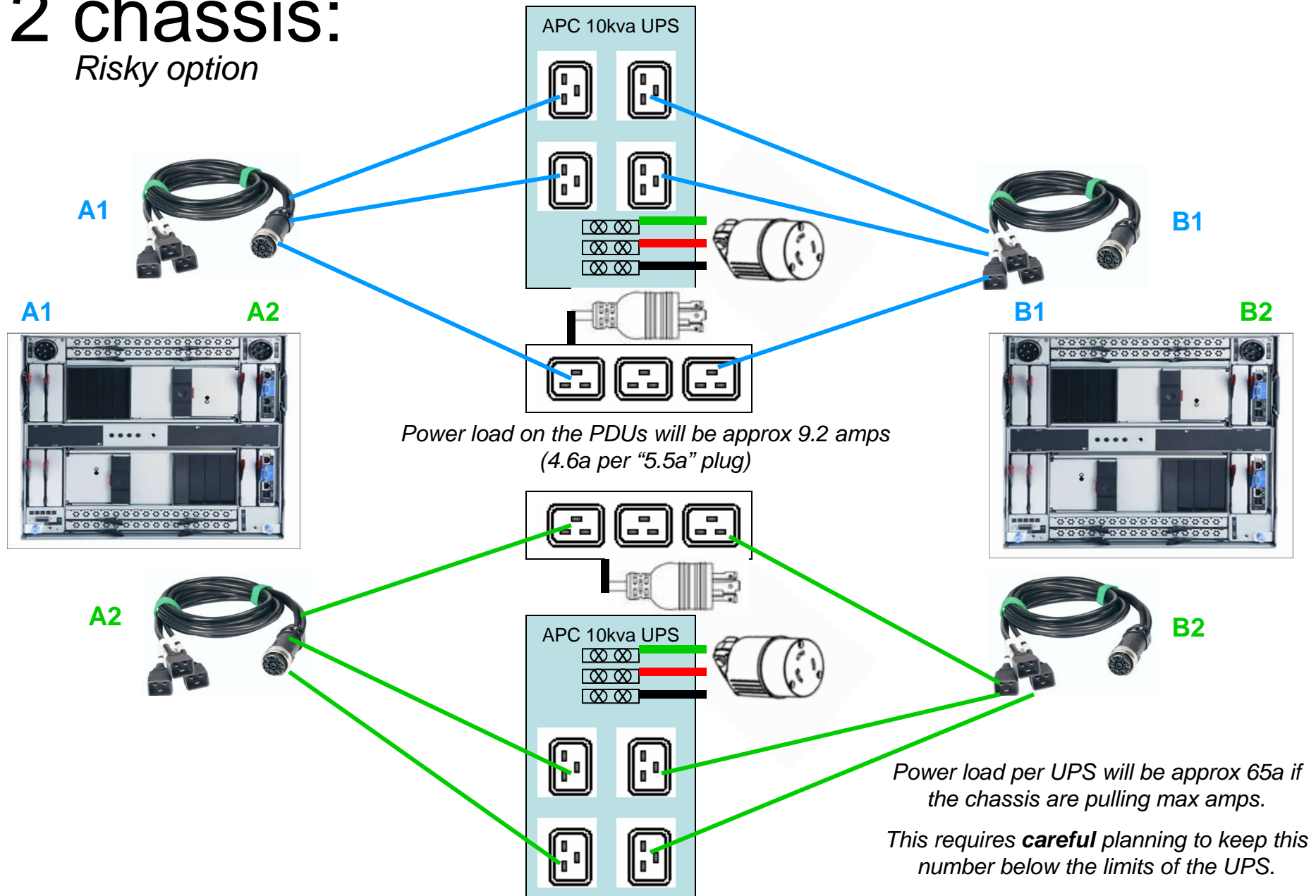
Power load per UPS will be approx 33a if the chassis is pulling max amps, such as in a power circuit failure situation.

Either of the UPS models will support this with some power to spare for other equipment.

This provides redundant circuits to the chassis.

2 chassis:

Risky option



This provides redundant circuits to both chassis, with some level of risk.