

WhitePaper

High-Power Kitchen Counters ver. 1.0

“all the power your kitchen needs for big parties”

Most kitchen counters are not designed to host multiple power-hungry equipments simultaneously. Unfortunately, such exceptional situations do occur in real life, just think of parties requiring the dishwasher, multiple grills, a BBQ and two or three fryers to be used concurrently. That is why Van Welleman Villas® -by default- equips kitchens with direct-coupled outlets providing you with an almost unlimited power potential (e.g. 3 grills, 3 fryers and 2 water boilers simultaneously !). With Van Welleman Villas® you don't need to worry about the fusebox ... just focus on your party.

Most kitchens share the common problem that they are designed for daily use. As such, traditional residential kitchens perform poorly in exceptional situations such as reunions, family meetings or larger parties. These events mostly require significant amounts of power-hungry equipments running simultaneously.

So, every now-and-then we get confronted with the need for massive power availability. Typically you need multiple grills, ovens, dish heaters, fryers etc. ... together with an overloaded dishwasher barely keeping up with the demand. Blowing fuses and/or insufficient outlets sound familiar?

Not a problem for Van Welleman Villas' High-Power Kitchen Counters. In fact, all of our kitchens are equipped -by default- with electrically oversized counters counting at least six 220V outlets. Each of them being independently powered and connected directly to the mains rack.

On top of this, the outlets on the counter have their own 30mA differential protection. In other words, providing massive power provisioning with exceptional safety.

The following measures increase electrical safety, fire safety, and user friendliness as well:

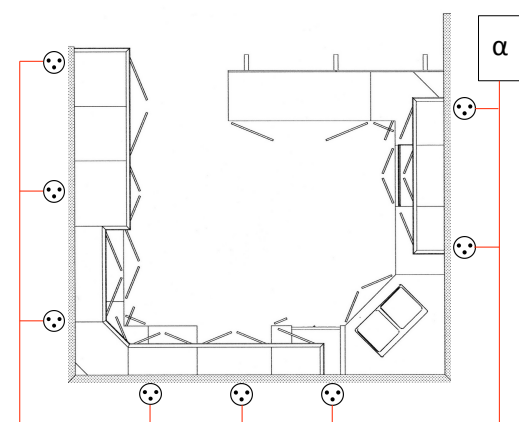
- All outlets are connected directly to the main rack.
- All outlets have a 30mA differential protection.
- All outlets have Siemens spark detection.
- All cables use redundant paths.
- All high-power devices are connected using industrial 32A plugs (with custom modification of the equipments).
- Power is load-balanced (distributed) over the 3 phases.
- All high-power devices are connected using heavy, fire-proof silicon (!) wire with soldered (!) contacts.

With these high-power kitchen counters Van Welleman Villas® provides the customer with ultimate in electrical and fire safety, not mentioning the positive impact on your mental comfort ...

Don't worry about power, just plug-in the devices, our electrical system will power them in all safety.

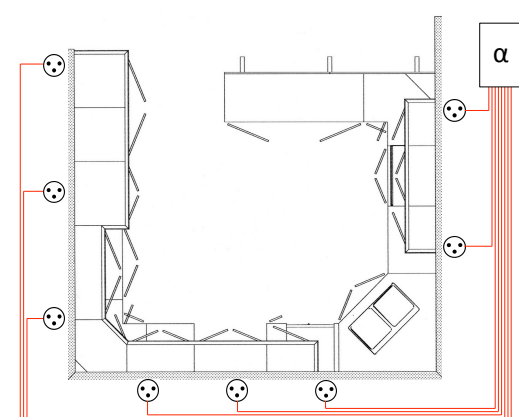
Traditional kitchen counter

On a traditional counter all outlets are connected to each-other.



Direct connected kitchen counter

On a high-power counter all outlets are connected directly to the mains closet (e.g. fuse box).



Mains socket for power-devices

Industrial sockets (32 Amp) are provided for all power-demanding devices. The factory-default plugs on the devices are replaced by industrial alternatives. All contacts are soldered for enhanced safety (spark prevention).



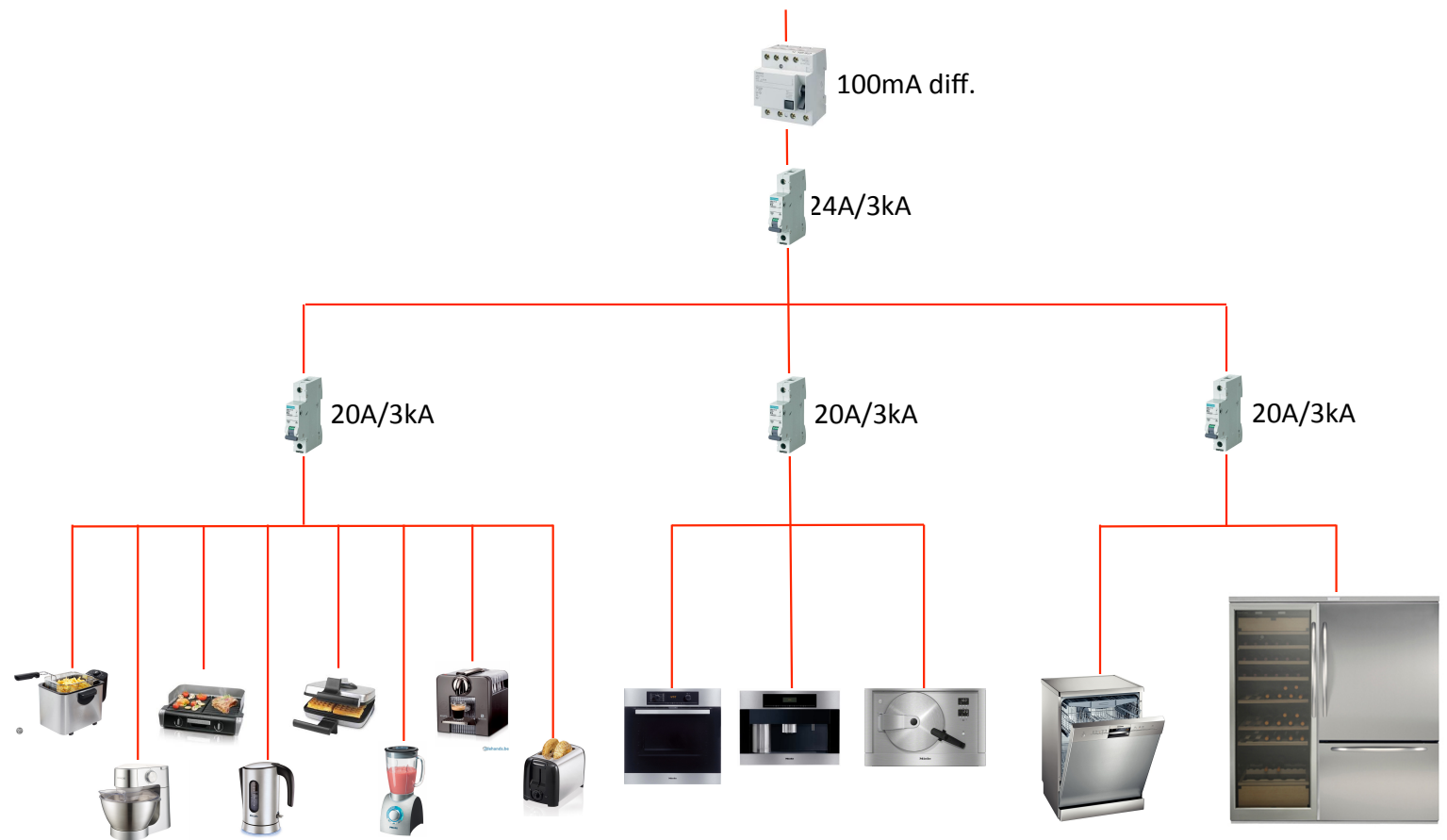


fig 1. Traditional kitchen-counter cabling.

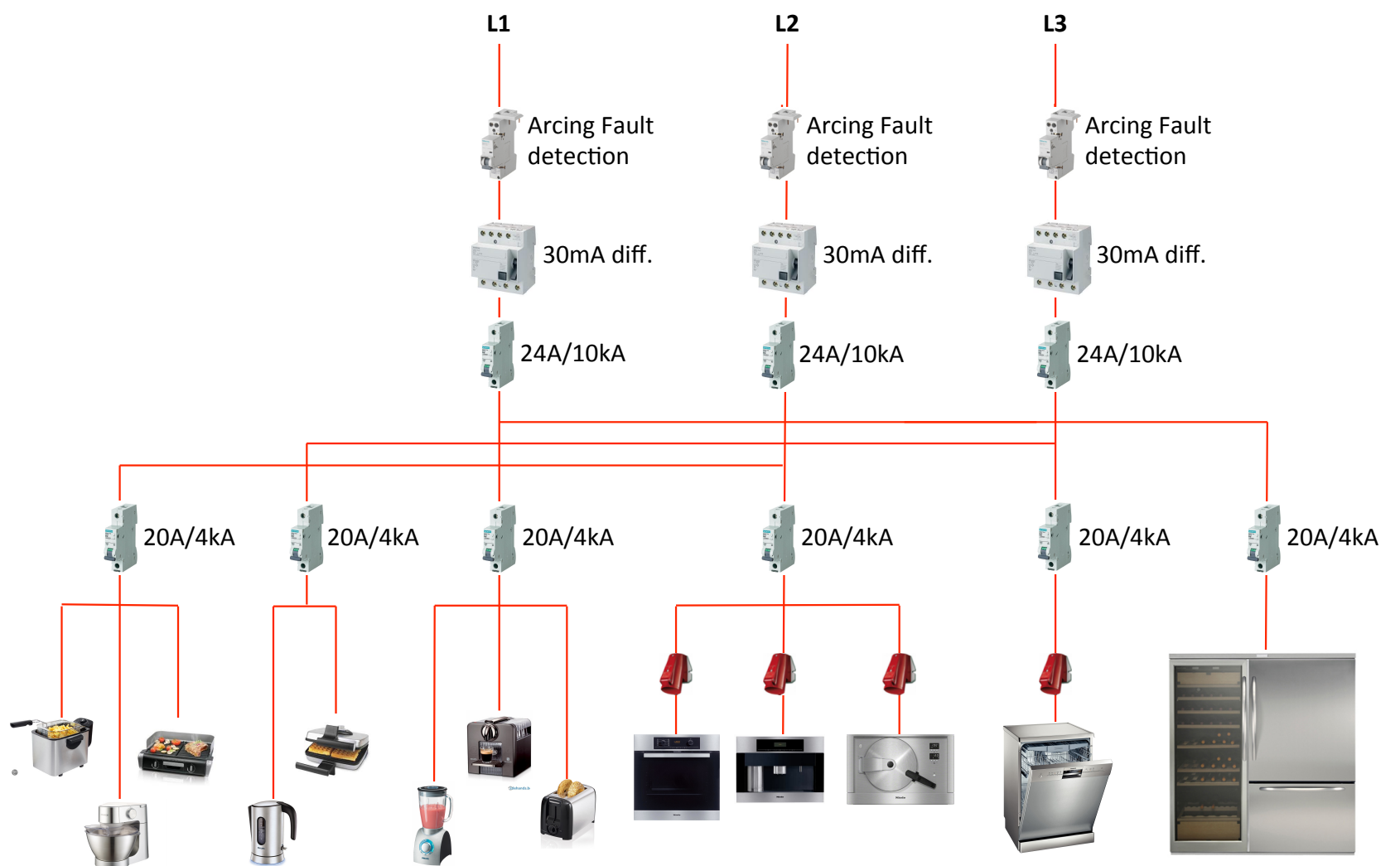


fig 2. High-power load-balanced kitchen counter cabling.
(* Amp value related to provider)