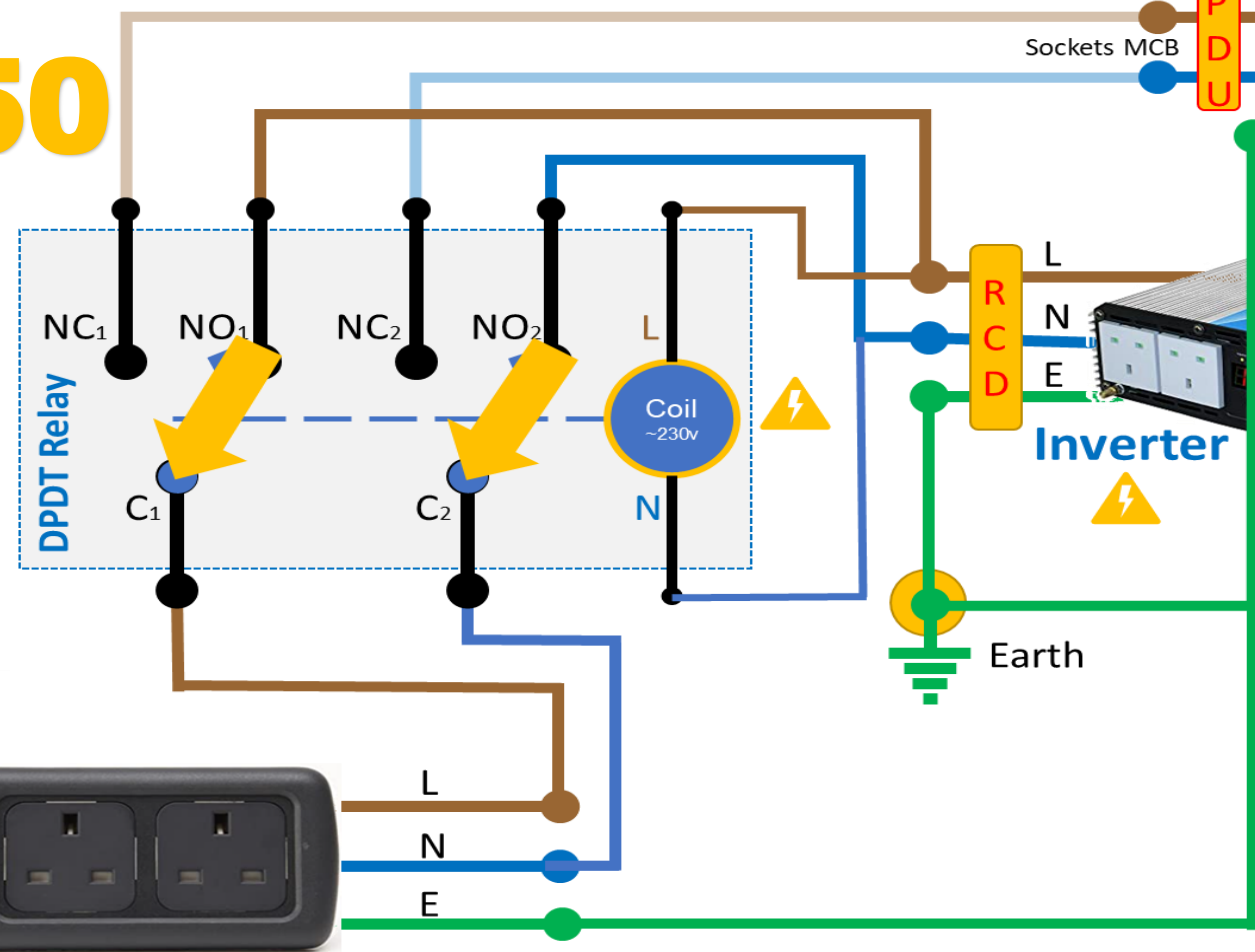


GAME CHANGER

Under £50



Allow 1-2 hours

Hook-up & INVERTER Auto-Changeover
Using your EXISTING SOCKETS





Caution & Disclaimer



The information in this video is simply explaining what I've done in my own campervan. I'm not endorsing carrying out any such work.

It's not intended as a complete guide and the products chosen were my personal choice and may not be suited to your application.

You should not embark on any modification without ensuring you or the person completing the job is **competently skilled to carry out the work**.

You should also undertake a full risk assessment before carrying out any modifications considering safety, insurance and warranty implications.

Anything you do with your van is entirely at your own risk.

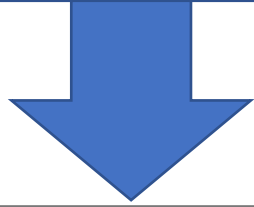
Assumptions:

- You've installed or are planning to install your Inverter and not yet done anything with the mains side - Check out the vlog "Fitting a 3kw Inverter to our Elddis CV20 Campervan with auto changeover" - if you haven't watched already (See Card or Link in description)
- You have a mains hook-up capability (sometimes called "Shore Power")
- You are interested in using your existing sockets rather than installing additional sockets specifically for the inverter setup.



Principal Options for Inverter Setups in Leisure Vehicles

Do you want to use your existing sockets when the inverter is switched on so you can use the appliances already plugged in?

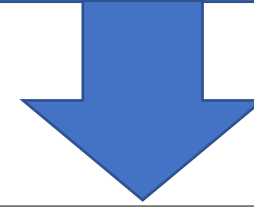


Using the Existing Sockets Options:

- **Install an automatic changeover relay (~£50)**
or
- **Install a manual changeover switch (~£30)**
or
- **Install a specialist solution (~£1000+++)**

Most convenient option as it all just works when you switch on the inverter without needing to change any sockets or unplug and move things.

Do you want to install separate sockets and plug specific things into the additional inverter outlets?



Using Separate Dedicated Sockets Options:

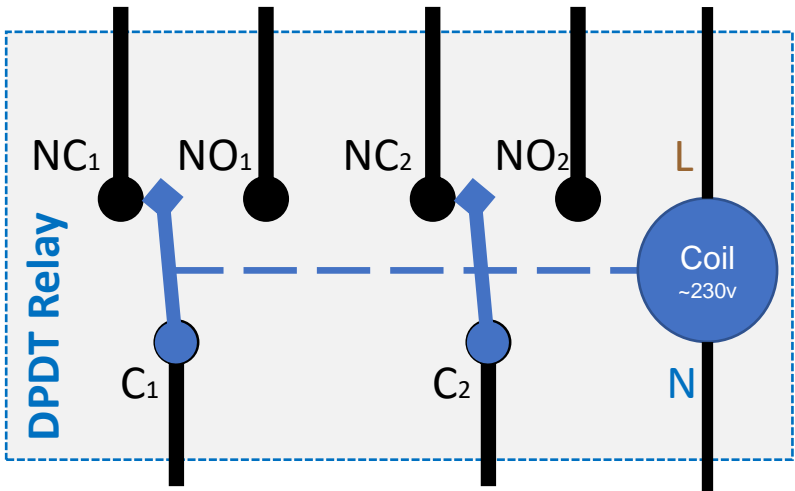
- **Install separate socket / sockets (~£30 - £100's)**
 - Requires Cable, Sockets, installation location, drilling holes etc.
- **Use the built in inverter sockets (£0)**
 - Zero incremental cost option.
 - Convenience of access may be an issue.

Useful if it's only specific things you wish to run on the inverter and/or if the inverter isn't capable of running everything plugged into the sockets.

Why?

It just works...

Introduction: About Relays



C=Common
NC=Normally Closed
NO=Normally Open



DANGER: 230V



Please ensure any work carried out on the mains electrical system is performed by a **competent person who is suitably skilled and qualified to work with mains electricity** as there is a risk of electrocution when dealing with high voltages.

Always ensure the power is disconnected and inverters are disconnected **AND** fully discharged prior to carrying out any work.

Parts I used

Finder Plug In Power Relay, 230V ac Coil, 16A Switching Current, DPDT



RS Stock No.: 292-8427 | Mfr. Part No.: 62.32.8.230.0040 | Brand: Finder



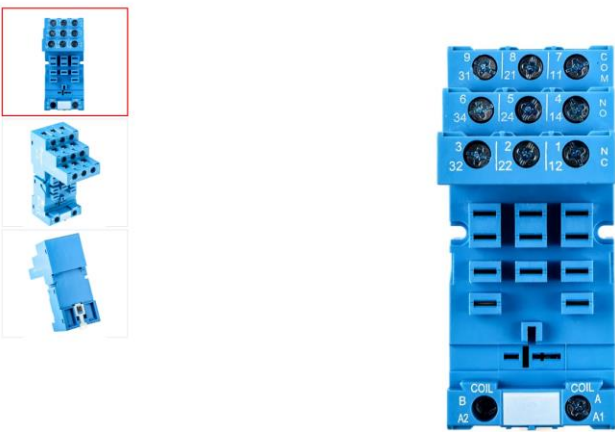
Price Each
£15.61
(exc. VAT)

£18.73
(inc. VAT)

Finder 92 Relay Socket for use with 62.32, 62.33 11 Pin, DIN Rail, 250V ac



RS Stock No.: 400-8402 | Mfr. Part No.: 92.03SMA | Brand: Finder



Price Each
£9.61
(exc. VAT)

£11.53
(inc. VAT)

Parts List:

- DPDT 230V ac Coil 16A relay - ~£19
RS Code: 292-8427
- Relay Socket (62.32) - ~£12
RS Code: 400-8402
- 230V, 16A 3 Core Cable – 3-5M - ~£5
- 16A Connector Block - £1

- Case for housing changeover - £8
120x120x90mm Waterproof ABS Clear Cover Electronic Project Box Enclosure
EBay Item: 403462501169

- Cable Glands - £2

Total cost: ~**£47.00**



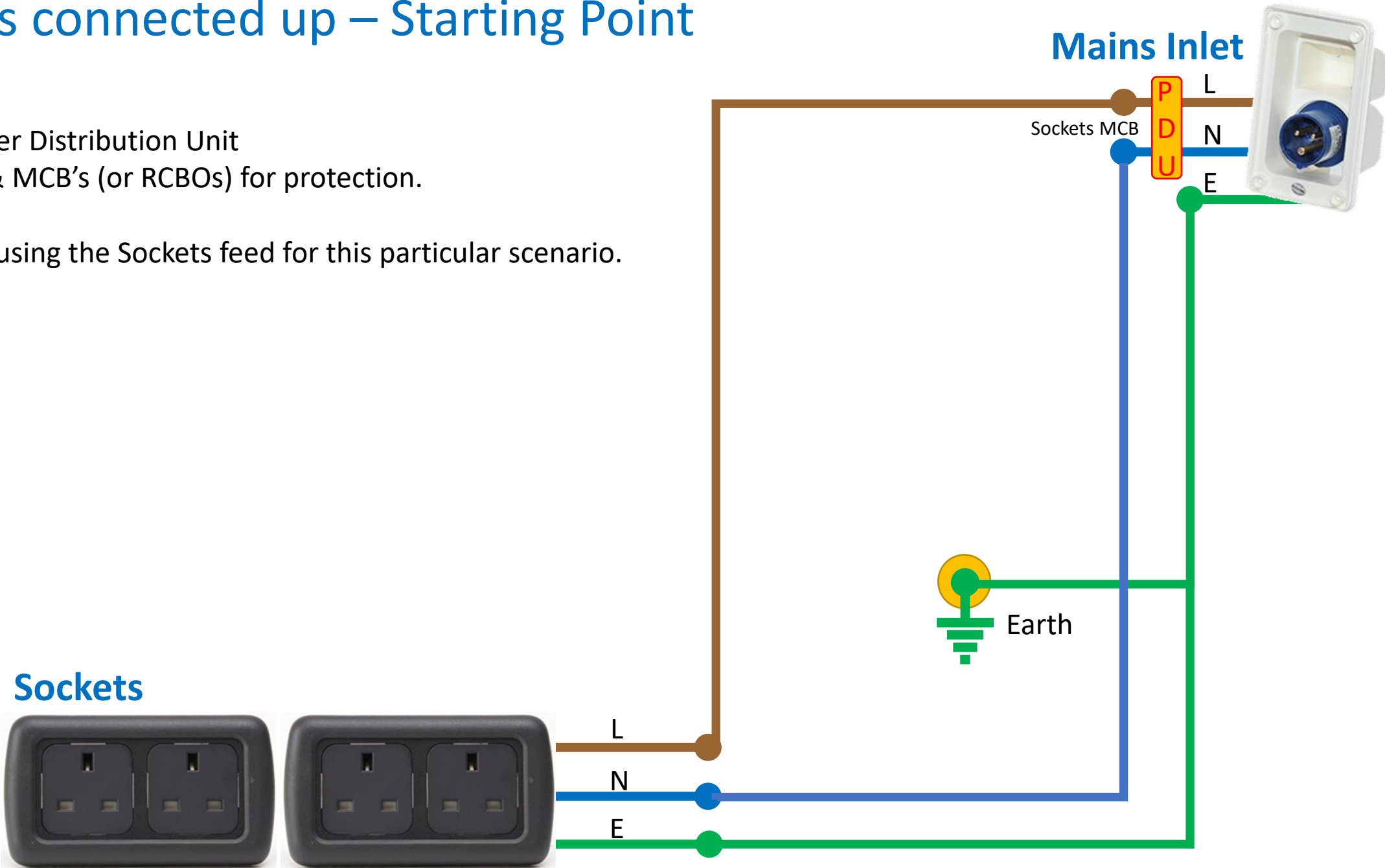
<https://uk.rs-online.com/>

Prices based on available UK based located products as of 3rd September 2022

How it's connected up – Starting Point

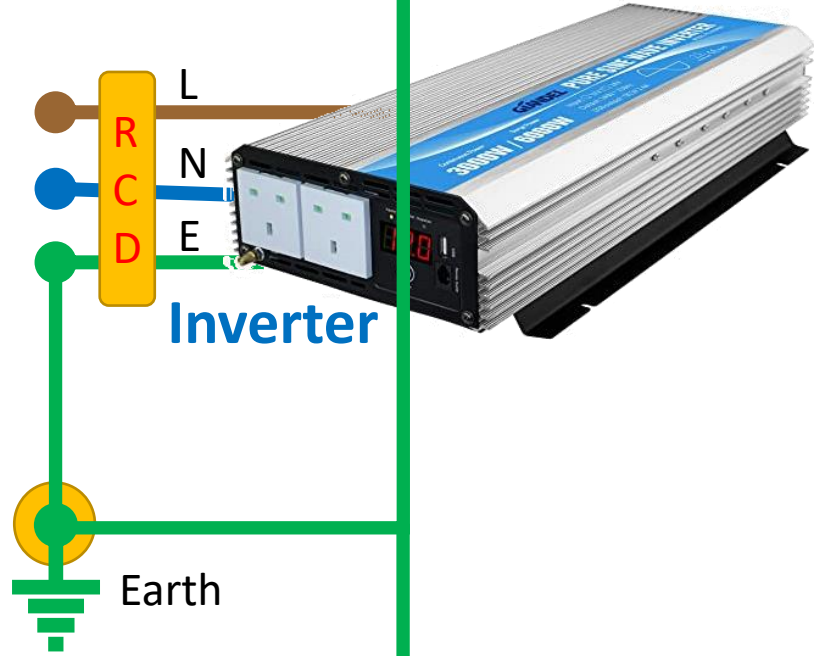
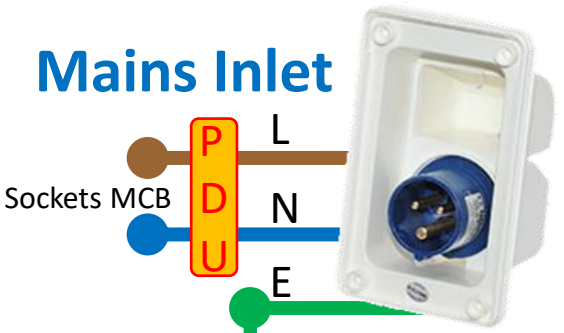
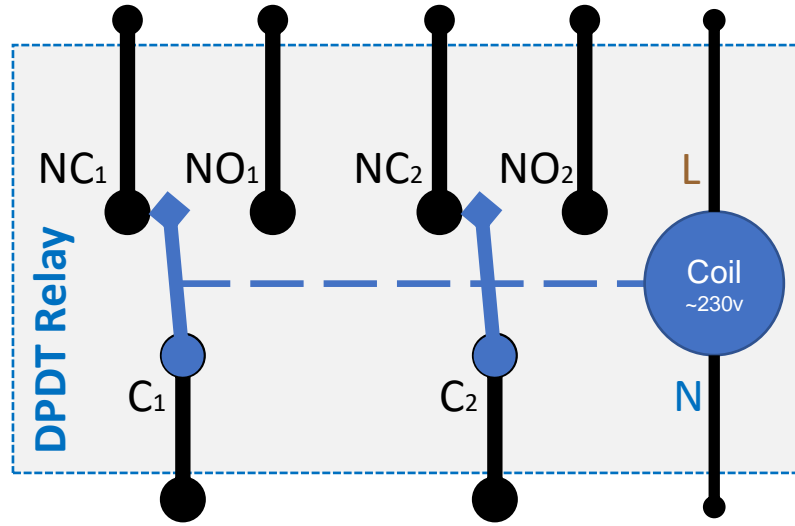
PDU = Power Distribution Unit
With RCD & MCB's (or RCBOs) for protection.

We will be using the Sockets feed for this particular scenario.



How it's connected up – Earthing

C=Common
NC=Normally Closed
NO=Normally Open



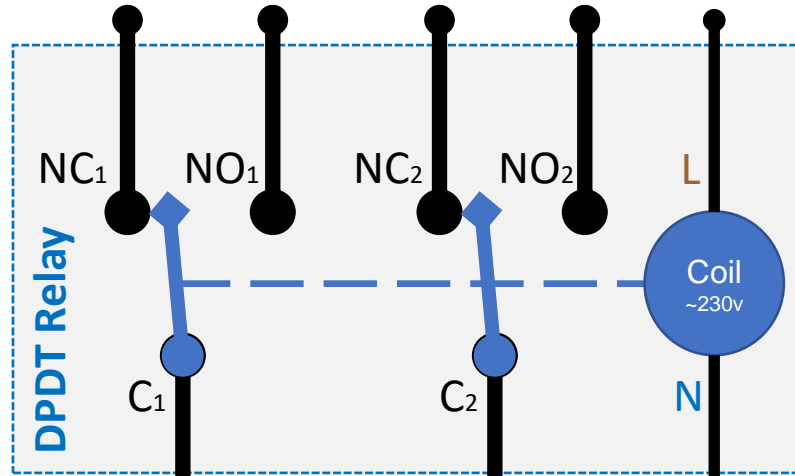
Sockets



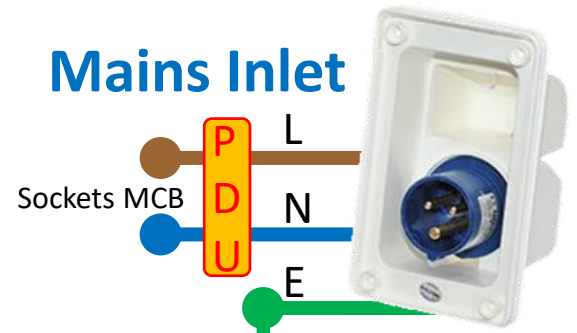
How it's connected up - Sockets

C=Common
NC=Normally Closed
NO=Normally Open

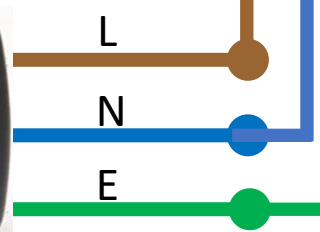
Sockets



Mains Inlet

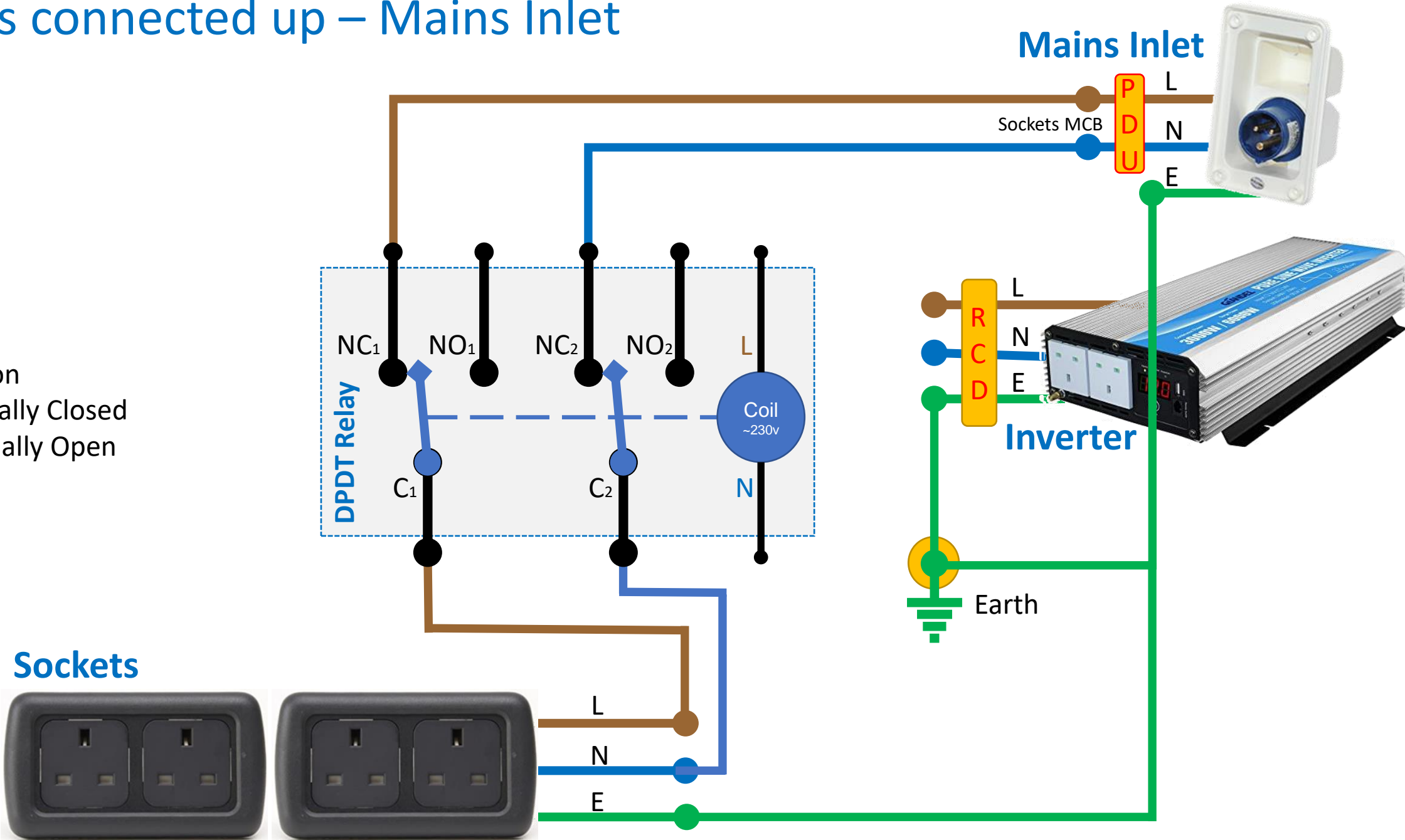


Inverter



How it's connected up – Mains Inlet

C=Common
NC=Normally Closed
NO=Normally Open

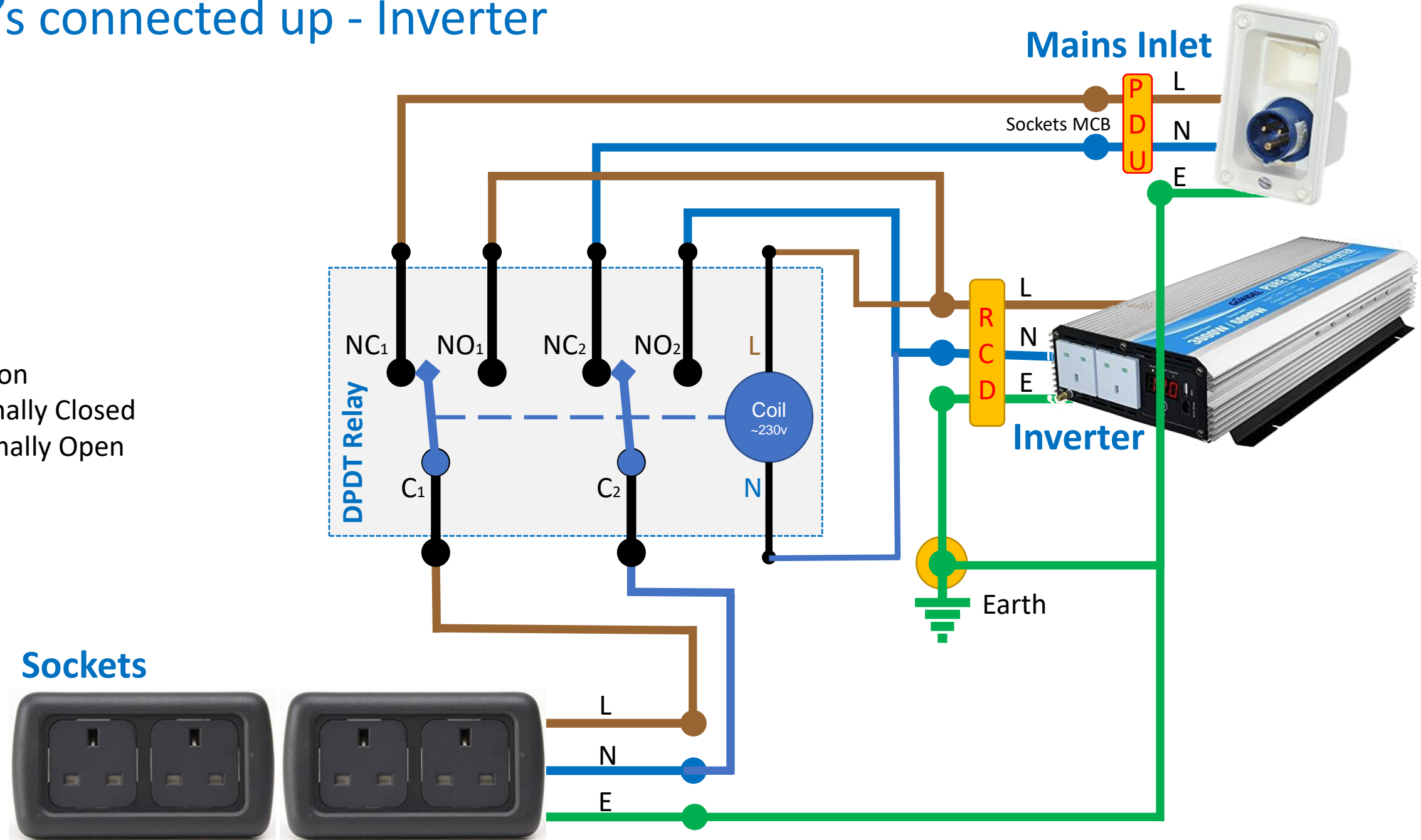


Sockets



How it's connected up - Inverter

C=Common
NC=Normally Closed
NO=Normally Open

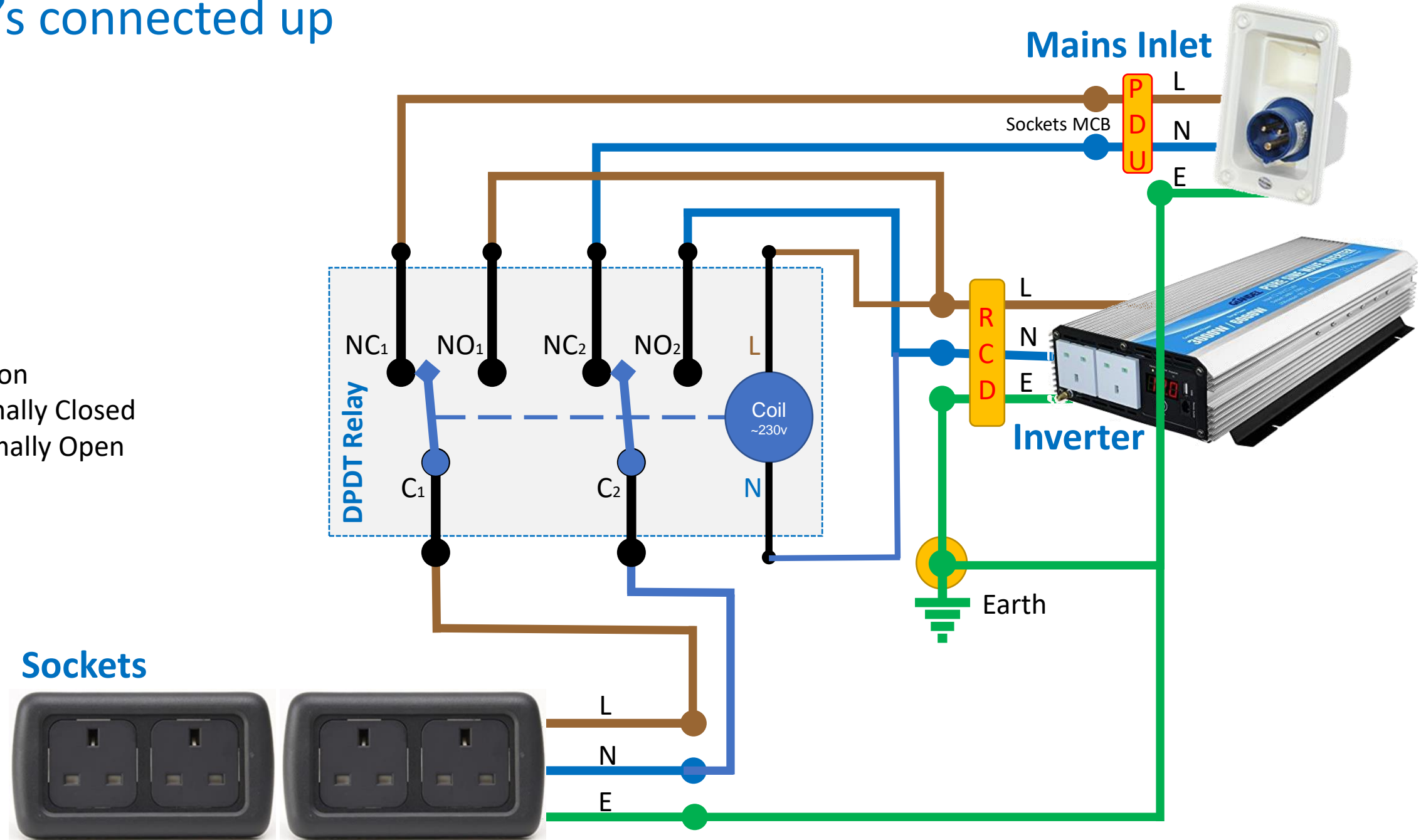


Sockets



How it's connected up

C=Common
NC=Normally Closed
NO=Normally Open

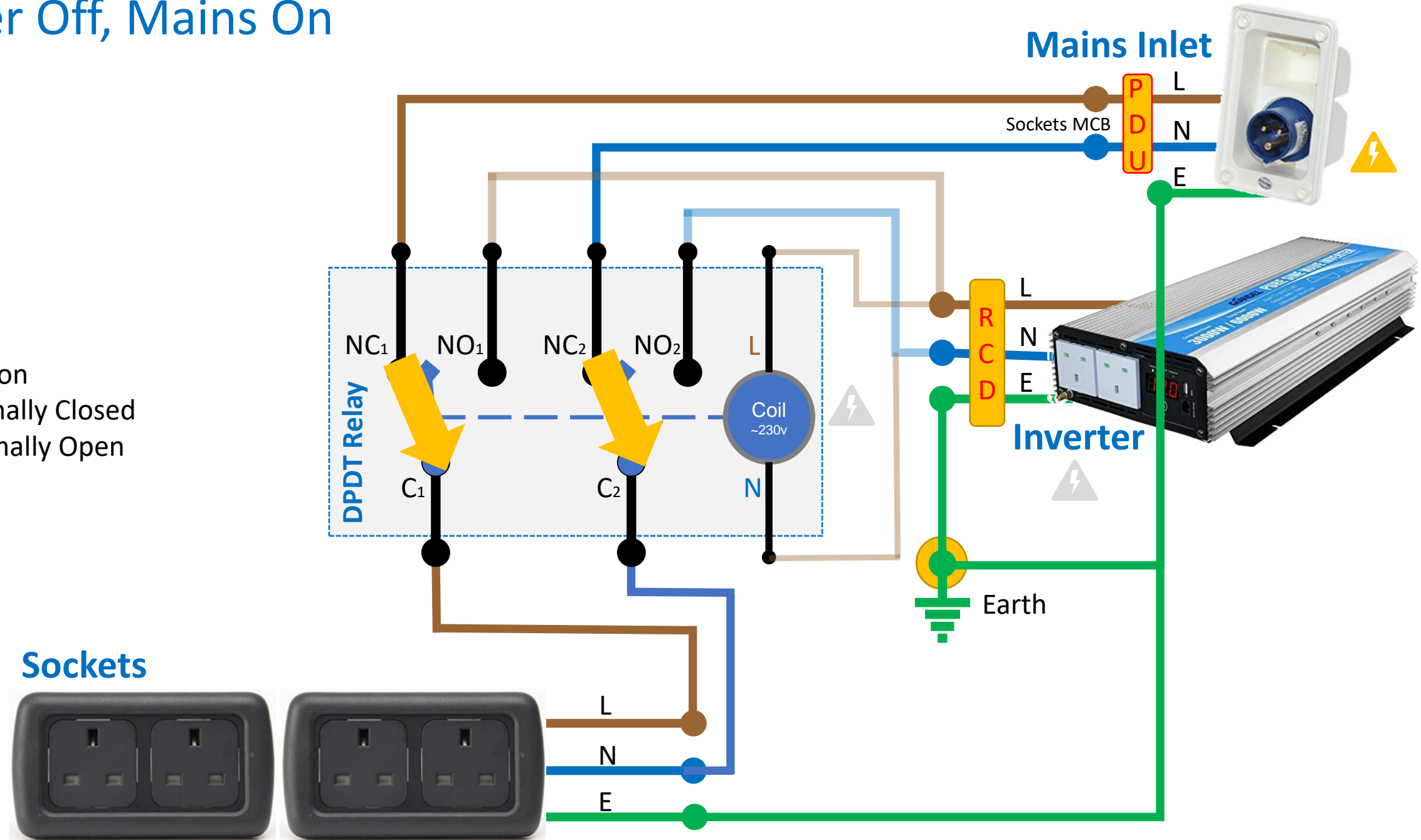


Sockets



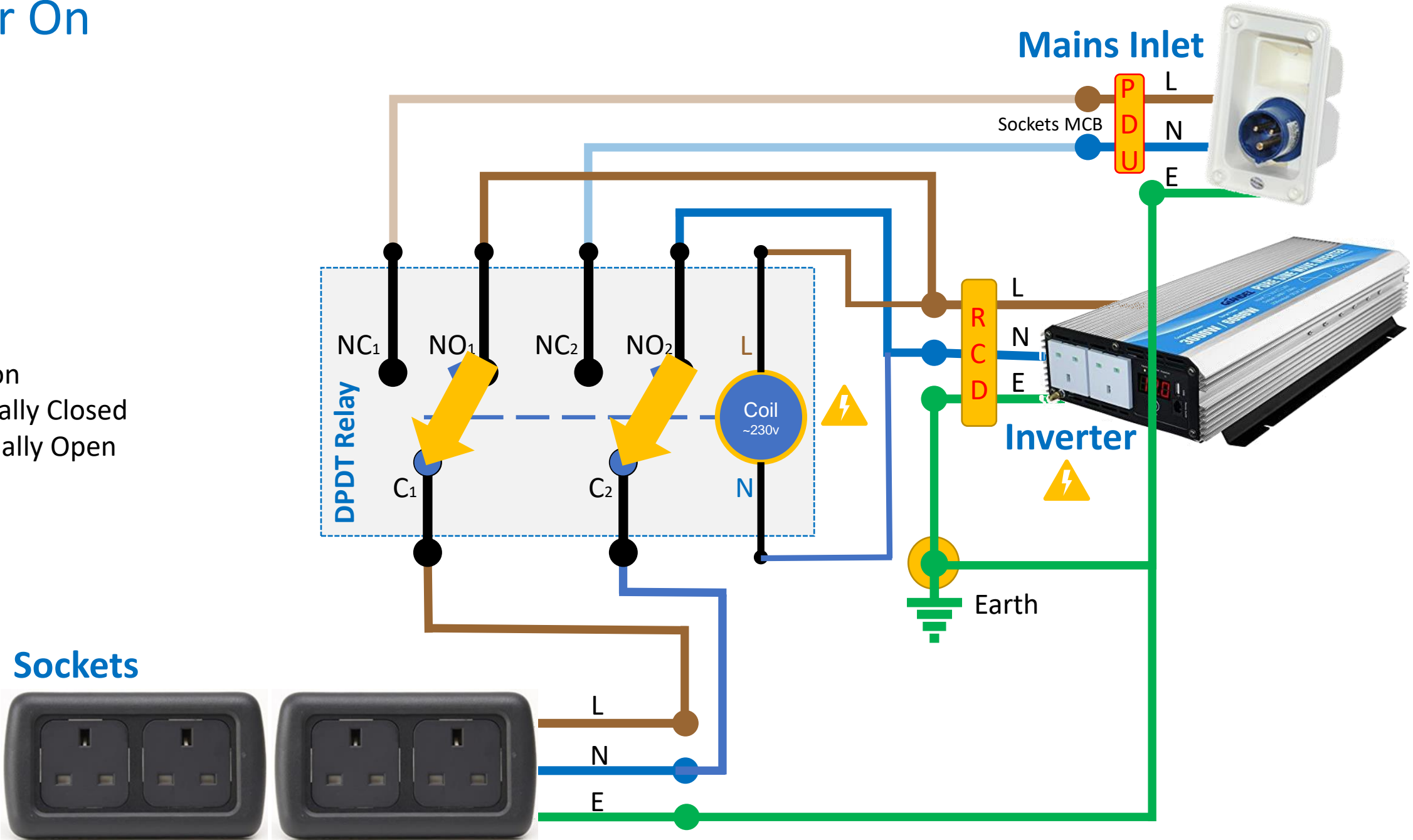
Inverter Off, Mains On

C=Common
NC=Normally Closed
NO=Normally Open



Inverter On

C=Common
NC=Normally Closed
NO=Normally Open





Existing Sockets

