# EnergyAce Compact CVO63 & CVO100 Installation Guide

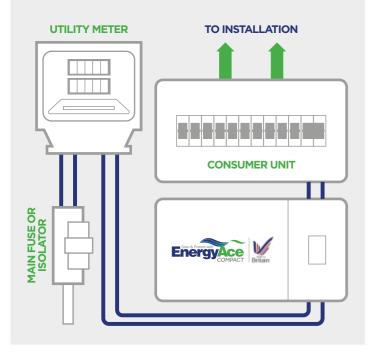


The Compact single-phase voltage optimisation system from EnergyAce is designed for use in residential properties and small commercial buildings. The 63 Amp unit is easily fitted by a competent electrical installer and simply requires two wires in and two wires out to make it fully operational. A process that only takes around one hour.

Another attractive feature of the EnergyAce Compact domestic voltage optimisation system is that, unlike smart meters, it does not require a complete change in behaviour and unlike solar and wind power it is not focused on renewable energy production, but rather on reducing energy consumption all day every day.

#### **Single-phase Installation**

EnergyAce Compact requires a 230V (nominal) single-phase supply, which is fed from the incoming mains to the home. The supply to the EnergyAce system must be fitted with suitably rated protection and isolation to allow maintenance (if required) and to conform to current regulations and standards.



#### **Technical Specification & Features**

Full Specification of CVO63 & CVO100

230v AC 1 Phase 50Hz

63A permanent operation CV063

**100A permanent operation CV0100** 

**Super low loss Toroidal technology 99.9% Efficient** 

Voltage output is set by the installer during installation

Choice of 4 voltage reduction settings (-10v, -15v, -20v, -25v)

**Overcurrent protection** 

**Integrated isolation** 

**Amendment 3 compliant** 

5 year warranty

Temperature range -10°C to 60°C

Dimensions CV063 – H215 x W340 x D115

Dimensions CV0100 - H280 x W410 x D150

Weight CV063 - 14.5kg

Weight CV0100 - 24kg

## **Our 10% Savings Guarantee**

EnergyAce guarantees a 10% saving on annual kWh electricity consumption.

If you do not achieve a saving of at least 10% on your electricity consumption, we will refund you the cost of the unit price.\*



#### **Application**

Previously many businesses may have found commercial, three-phase voltage optimisation too large and costly for their site and smaller, single-phase or domestic voltage optimisation systems not suitable for their three-phase supply. The EnergyAce Compact rage of three-phase and single phase voltage optimisation systems have been designed and engineered specifically to address these underlying extremes between small and large installations and to open up the benefits and savings of voltage optimisation to SMEs in all industries.





#### **SAVE AND PROTECT TODAY**

For additional information on saving energy through the EnergyAce Compact Energy Saving System, please contact us now on 01695 559785, email us on: post@pesgroupltd.co.uk or visit: www.energyace.co.uk

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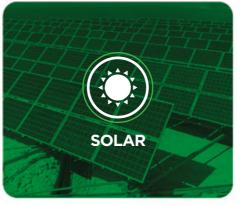
















Helping homes and business save money, protect appliances and reduce their carbon footprint



Save up to 20%

on your electricity bills and protect with EnergyAce







<sup>\*</sup>Terms & conditions apply see website for further details

# What is a Voltage Optimisation System?

#### The theory behind voltage optimisation is simple.

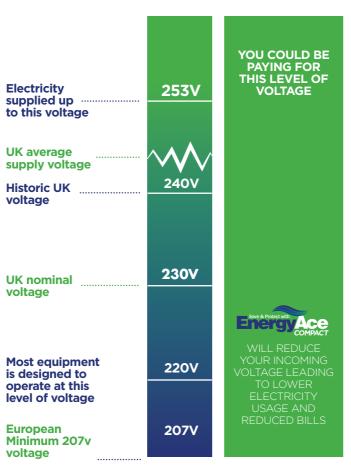
There is a difference between the voltage supplied to a building in the United Kingdom and what is required to operate electrical equipment.

On average the voltage in the United Kingdom is 242V and due to electrical equipment being manufactured to work anywhere in the European Union, this means that the optimum operating voltage required by electrical equipment to work most efficiently is around 220V.

This overvoltage is not only costing more than required, it can also shorten the life of electrical equipment.

The surplus voltage produces additional heat, noise and vibration in appliances, causing stress on components, especially to motors, electronic systems like computers and lighting which are more vulnerable to overvoltage and fail much sooner.

An EnergyAce voltage optimisation system makes sure that a building only consumes and pays for the voltage level that it really needs rather than the overvoltage supplied from the grid. It does this by optimising the incoming voltage by up to -25V. This lowers electricity consumption, reduces electricity bills and reduces the wear and tear on appliances and electrical equipment.



# **Benefits of EnergyAce Compact Voltage Optimiser**



- Reduces Electricity bills by Up To 20%
- Works on all circuits within a building all day every day
- Simple installation Usually around 1 hour with no need to change your electricity supplier
- Increases the life of all electrical equipment
- Can be installed alongside Solar PV and improves efficiency of heat pumps and Solar PV systems
- No maintenance required
- Guaranteed savings
- 5 year warranty

#### Who can benefit?

- Residential
- GP Surgeries
- Retail Outlets
- Coffee Shops & Cafés
- Hair Salons
- Gvm & Health Clubs
- Hotels
- Small Industrial Units
- Restaurants
- Office Facilities
- Launderettes Garden Centres

# What the Electricians say



Voltage optimisation is one of the key new business opportunities for electrical contractors. The range, types, and size of buildings that can benefit from the savings voltage optimisation can deliver, makes it a great opportunity for consumers and our members.



#### **About EnergyAce Compact Voltage Optimisation Systems**

EnergyAce is a patented Energy Saving system which incorporates the Compact range for use in homes and small commercial premises. EnergyAce is designed and manufactured exclusively by PES in the United Kingdom to deliver real measurable savings of up to 20% on electricity usage and is unique in both design and functionality.



#### **About Our Company**

We are a UK based manufacturer and solution provider who have developed a range of patented energy saving systems to save on electricity consumption and improve efficiency for industrial, commercial and domestic users world wide. Established in January 2002, EnergyAce are an award winning company delivering real measurable savings in many areas of commerce through the design of engineering led solutions.

## **EnergyAce and solar working together**

As there are now close to 1,000,000 solar installations in the UK, many properties will have already been fitted with a solar array, we have found that the installation of an EnergyAce Compact unit is a valuable addition. These are the key advantages:

- Reduced wear and tear on appliances, resulting in longer service life especially when using the power from the PV array which can be higher than the mains voltage
  - Easy to retrofit for solar PV systems as installation is the same
- Overall electrical consumption (kWh's) is reduced, both generated and imported electricity

#### **SOME OF OUR KEY CLIENTS**

























EnergyAce Compact Sytems















BBC





