ISSUE 02

PLUG IN TO EV

PACKED FULL OF 'NEED-TO-KNOW' INFO AND PRODUCTS

YOUR GUIDE TO EV PRODUCTS & SOLUTIONS

CEF YOUR ELECTRICAL EXPERTS

Your electric vehicle charging guide
cef.co.uk/plugintoev

THE ELECTRIC VEHICLE MARKET IN THE UK IS GROWING, AND IT'S GROWING FAST!

Improved battery life and more flexible hybrid options are making electric vehicles [EV] more accessible to drivers, while the launch of electric vehicles from the likes of Audi, Jaguar Land Rover, Mercedes-Benz and Tesla are making them desirable, not just an ethical choice.

In January 2020, more than 4,000[1] new pure electric vehicles were registered in the UK, bringing the total number of zero-emission electric vehicles on UK roads to 100,000[1] – an increase of more than 200% compared to 2019.

Add to the mix, new registrations for plug-in hybrid vehicles, and the total number of electric vehicles on UK roads is more than 273,000[1].

Yet for EV adoption to really take off, there must be an infrastructure in the UK to support it. EV charging stations have to be widely available in order for EV ownership to be a convenient, as well as an economically viable and environmentally friendly choice.

ELECTRIC VEHICLES NEED TO KNOW

- EV sales set to grow massively by 2030
- Lower carbon emissions
- Cheaper to run
- Reduced or no Vehicle Excise Duty on low-emission vehicles
- Grants available to purchase electric vehicles
- Grants available to install EV charging stations

CONTENTS

For more information visit cef.co.uk/plugintoev

[1]Source: zap-map.com/pure-ev-sales-reach-key-milestone-as-electric-car-market-soars/
[2]Source: zap-map.com/statistics/#charger-type

THE EV OPPORTUNITY

Currently, the UK is one of Europe's largest markets for ultra-low emission vehicles and while the number of electric vehicles on the road is growing at a remarkable rate, so is the demand for a reliable charging network up and down the country.

The number of EVs is expected to increase significantly over the next three years and it is forecast that there could be as many as 36 million[3] electric vehicles on UK roads by 2040 – double the number predicted just a year ago.

Although the number of public EV charging locations in the UK outnumbers petrol stations[4], research by the AA shows six out of ten[5] drivers see the lack of charging stations as a stumbling block to buying an electric vehicle.

Why should you upskill?

EV charging point installation presents a huge new business opportunity for electricians as a result of government incentives, grants and policies. The increased demand means the opportunity for electricians within the EV market is one of the most lucrative in the electrical industry.

With every new EV registration, the demand for charging stations increases – each new EV purchased requires easy access to a charging station, not just at home or at work but in public spaces – and installation must always be carried out by a qualified electrician.

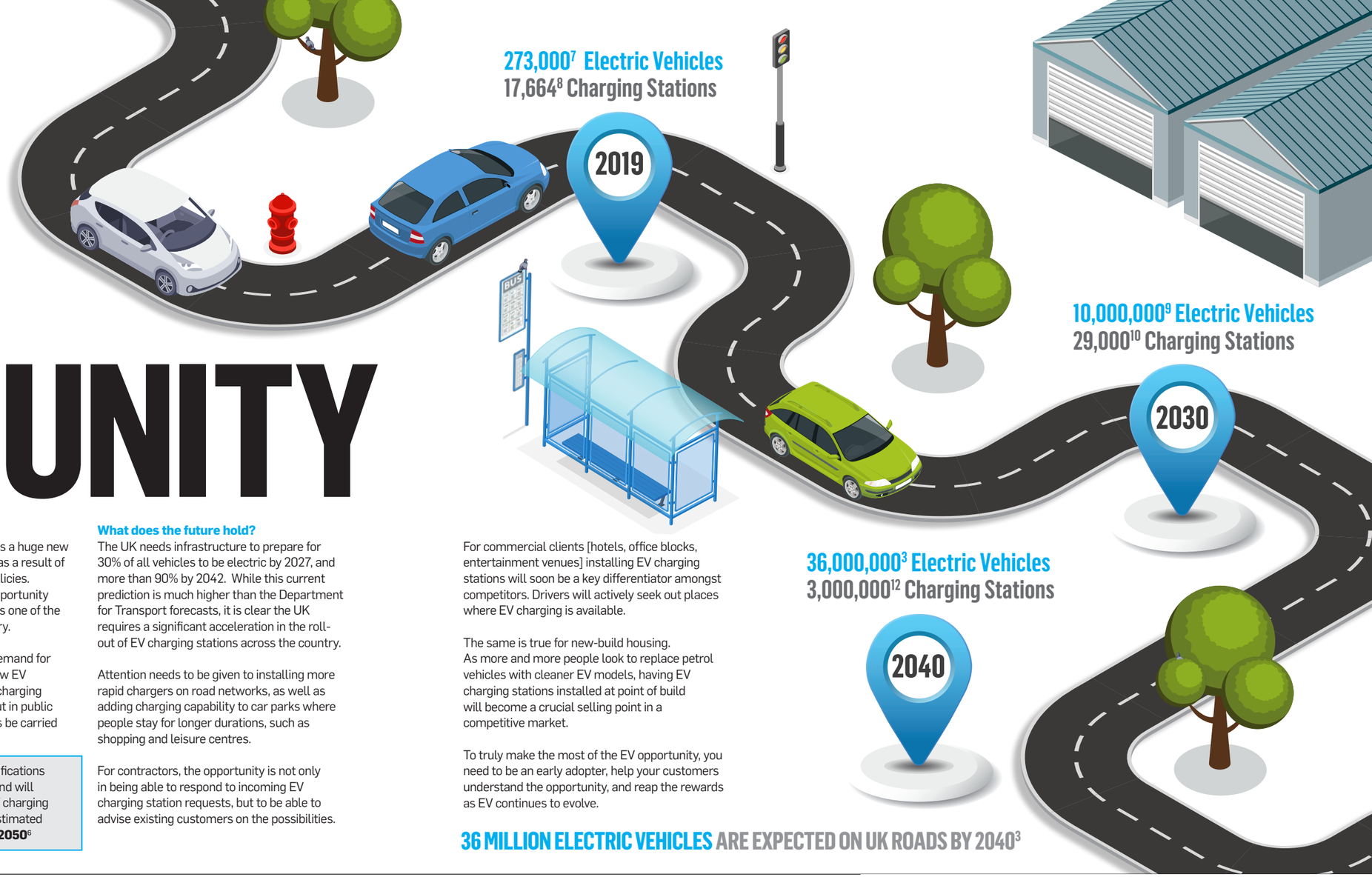
Electricians with the skills and qualifications to take advantage of this high demand will be tasked with the installation of EV charging stations to keep up with a market estimated to be **worth up to £7.6 trillion by 2050**[6]

What does the future hold?

The UK needs infrastructure to prepare for 30% of all vehicles to be electric by 2027, and more than 90% by 2042. While this current prediction is much higher than the Department for Transport forecasts, it is clear the UK requires a significant acceleration in the roll-out of EV charging stations across the country.

Attention needs to be given to installing more rapid chargers on road networks, as well as adding charging capability to car parks where people stay for longer durations, such as shopping and leisure centres.

For contractors, the opportunity is not only in being able to respond to incoming EV charging station requests, but to be able to advise existing customers on the possibilities.



For commercial clients [hotels, office blocks, entertainment venues] installing EV charging stations will soon be a key differentiator amongst competitors. Drivers will actively seek out places where EV charging is available.

The same is true for new-build housing. As more and more people look to replace petrol vehicles with cleaner EV models, having EV charging stations installed at point of build will become a crucial selling point in a competitive market.

To truly make the most of the EV opportunity, you need to be an early adopter, help your customers understand the opportunity, and reap the rewards as EV continues to evolve.

36 MILLION ELECTRIC VEHICLES ARE EXPECTED ON UK ROADS BY 2040[3]

[3] Source: carbonbrief.org/rise-uk-electric-vehicles-national-grid-doubles-2040-forecast
[4] Source: uk.nissannews.com/en-GB/releases/release-c2df391cdf0dd0c30a0575ffb50231f8-uk-ev-charging-stations-surpass-number-of-fuel-stations#
[5] Source: uk.motorl.com/news/365913/range-anxiety-concern-company-car/
[6] Source: autocar.co.uk/car-news/new-cars/new-build-homes-and-street-lighting-targeted-ev-charger-expansion
[7] Source: zap-map.com/pure-ev-sales-reach-key-milestone-as-electric-car-market-soars/
[8] Source: zap-map.com/statistics/#charger-type
[9] Source: energy-uk.org.uk/files/docs/The_Future_of_Energy/2019/FutureofEnergy_ReportSection_Chapter4_04.19.pdf
[10] Source: theccc.org.uk/publication/plugging-gap-assessment-future-demand-britains-electric-vehicle-public-charging-network/
[11] Source: fes.nationalgrid.com/media/1409/fes-2019.pdf
[12] Source: theccc.org.uk/publication/plugging-gap-assessment-future-demand-britains-electric-vehicle-public-charging-network/

THREE DIFFERENT TYPES OF EV CHARGING

Home Charging

Charging at home is often the most convenient and cost effective way to recharge EV, accounting for 80% of all charging done by EV drivers. Government grants are available for the installation of a home EV charger, but the installer must be OLEV registered to claim.

Most electric vehicles can be charged at home using a standard EV wallbox which should be fitted by a qualified electrician.

A wallbox is safer and quicker than using a domestic socket, as it communicates directly with the car and charging times are reduced by 30 - 60%, depending on the vehicle. 3 kW or 7 kW EV chargers are standard for the vast majority of installations.

Workplace Charging

An increasing number of businesses are installing EV charging units for employees and visitors with electric vehicles.

Workplace charging stations help make electric vehicles viable for business users with longer commutes and must be installed in the company's car park or off-street parking.

While EV charging stations are similar to home based units, power ratings tend to be higher with more 7 kW and 22 kW units installed.

Business units are often double socket, allowing them to charge two vehicles at the same time. When combined with home charging, workplace charging can double the daily electric range of a vehicle, making use for longer distances viable.

Public Charging

In the UK, there are a growing number of public EV charging stations, with some offering national coverage and others only found in specific regions. The major UK wide networks include BP Chargemaster [Polar], Pod Point and Charge Your Car.

When it comes to public charging for longer journeys, rapid charging is recommended.

This can provide up to 80% of charge in as little as 20 minutes, making it the quickest means of EV charging in the UK.

Public EV charging stations are mostly installed and found at motorway service stations or close to major roads. The most common rapid chargers used are 50 kW DC.

Source of information: Zap Map: zap-map.com/charge-points/connectors-speeds/

As your electrical experts, we are dedicated to providing you with the knowledge, resources and products needed to take advantage of the growing demand for electric vehicle charging stations.

We offer a complete end to end solution which means we can provide the training for you to get started as well as a complete range of electric vehicle charging products and accessories whenever and wherever you need them.

Our comprehensive range covers the entire installation process, so whether you're looking to install commercial charging stations, rapid charging stations or residential charging stations we have everything you need both in-store and online at cef.co.uk to help you get EV ready:

Custom design
Bespoke single and three phase distribution units designed to your customers' exact requirements.

Installation
A complete array of installation products from leading suppliers including EV Proteus and EV MCG.

Electrical protection
18th Edition 1st amendment compliant O-PEN from Matt:e providing protection against the dangers of an open PEN conductor on a three phase TN-C-S [PME] supply.

Fault detection
The latest testing and maintenance equipment for detection of DC fault in your EV installations.

Choose CEF for your EV charging solutions and benefit from:
- Full range of EV charging products and accessories from leading brands
- Assurance that all suppliers have passed our due diligence process
- Stock solutions available for next day delivery on orders placed before 8pm
- Bespoke solutions
- Click & Collect service
- NICEIC Electric Vehicle Charging training
- Guidance on buying an EV charger, accessories and test equipment
- Access to knowledge articles, installation guides, industry news and special offers via our dedicated EV charging website **cef.co.uk/plugintoev**
- Dedicated email address for EV charging advice and enquiries **plugintoev@cef.co.uk**
- Dedicated technical phone helpline

Working on a large project, in need of a national agreement or require regional support?
Our National Accounts and Projects teams can help you with tailor made solutions for your business.

For contractors working on larger projects or companies who require a national agreement or regional support, our National Accounts and Projects teams can provide you with the products, expertise, technical know-how and pricing consistency for any project whatever and wherever it may be.

Ask in-store for more details.

OLEV GRANTS

EV CHARGING AT HOME AND WORK

To boost the uptake of electric vehicles in the UK, the Office for Low Emission Vehicles [OLEV] is offering both commercial and domestic customers grants to help with the costs of installing EV charging stations at home and in the workplace.

Here's what you need to know about the eligibility for each scheme and how you can help your customers get the financial support they are entitled to.

Electric Vehicle Homecharge Scheme [EVHS]

Homeowners can benefit from significant savings on EV charging stations via the EVHS.

The grant provides up to £350 off the cost of purchasing and installing a homecharging point.

Most electric and hybrid plug-in cars are eligible, a full list can be found at:
gov.uk/plug-in-car-van-grants

Customers can claim one charge point per eligible vehicle, with a maximum of two charging stations per household. Again, off-street parking must be available for the installation to take place.

Both the charging point and the installer must be OLEV approved.

The grant is available to those who have purchased an electric or plug-in hybrid vehicle since 1st October 2016. To receive the grant, the date of installation must not be more than four months ahead of delivery or registration date. All installations on or after 1st April, 2020 will be eligible for the new rates.

An additional grant of up to £300 is available to Scottish EV drivers via the Energy Savings Trust Scotland.

Where an installer can prove that there is a pre-existing arrangement with the customer, that was agreed prior to 12th March, 2020, the installation shall still be eligible for a grant rebate of £500. This provision shall apply until the 31st May.

You can find out more about both grants online by visiting the OLEV website:
gov.uk/government/organisations/office-for-low-emission-vehicles

CUSTOMERS CAN CLAIM ONE CHARGING STATION PER ELIGIBLE VEHICLE, WITH A MAXIMUM OF TWO CHARGING STATIONS PER HOUSEHOLD

Workplace Charging Scheme [WCS]

Businesses can save up to £10,000 on the cost of installing EV charging stations through the WCS.

The WCS offers a 75% reduction in the cost of purchasing and installing a new workplace charging station [single socket]. There is a £350 cap per socket.

A maximum of 40 individual charging stations can be claimed by a single business.

To qualify, businesses must have sufficient off-street parking available and charging stations need to be installed by an OLEV accredited installer.

Becoming an accredited installer is a two stage process:

1. Gain accreditation via particular manufacturers to install their products
2. Apply to OLEV to become an approved installer

Recipients of the grant don't need to have electric vehicles as part of their fleet, but they do need to be able to show an existing or future need for EV charging within the business. However, businesses can't claim retrospectively, so make sure your clients know about the opportunity before work begins.

BUSINESSES CAN **SAVE UP TO £10K**
on the cost of installing EV charging stations

75%
reduction in the cost of purchasing and installing a new workplace charging station

TWENTY
individual charging stations can be claimed by a single business

£350 CAP PER SOCKET

Recipients of the grant **don't** need to have electric vehicles as part of their fleet...

... but they **do need** to be able to show an existing or future need for EV charging within the business

Both the charging station and the installer must be **OLEV approved**

IET CODE OF PRACTICE

ARE YOU UP TO SPEED?

2622-8533

ONLY £69.95

0% VAT

The IET Code of Practice 4th Edition provides an overview of EV charging equipment and has been updated in line with recent changes to BS 7671 [IET Wiring Regulations]. It reflects some major developments in this area including vehicle to grid, smart integration and inductive charging. Therefore, before any installation, make sure you're up to speed with the new requirements.

Essential reading for those procuring, installing, managing or otherwise working on EV charging stations, the IET Code of Practice considers pre-installation and the physical and electrical requirements in accordance with the 18th Edition of the IET wiring regulations.

The Code of Practice is aimed at installers, competent electricians, procurers who specify EV installation work, design engineers [those who manufacture EV charging equipment and vehicles], and the electricity supply companies. It is also used to communicate EV electrical safety to the public. Therefore, it is vital that you are aware of the detail within the latest regulations.

Electric vehicles may be the future, but there are some risks to be aware of:

- Incorrect charging could overload a plug and cable
- Wrongly installed EV charging equipment could cause electrical fires
- A fault in the electrical supply could make a car live while on charge
- Death or injury could be caused by misuse of adapters and extension leads

With these in mind, the Code of Practice has been fully updated to reflect the 18th Edition of the IET Wiring Regulations, including the new requirements around the use of PME [Protective Multiple Earthing]. It also references all relevant European and international standards.

Important changes since the 3rd Edition include:

- Use of open-PEN detection devices
- Issues with TT systems, including recommended separation distances underground
- Improved risk assessment forms
- Phase unbalance in three-phase systems, including a table and rule-of-thumb which can be used to avoid complex calculations

WITH 80% OF CARS SOLD IN 2030 FORECAST TO HAVE ELECTRIC OR HYBRID POWER OF SOME SORT, BEING UP TO DATE HAS NEVER BEEN MORE ESSENTIAL

AMENDMENT TO BS 7671 IET WIRING REGULATIONS

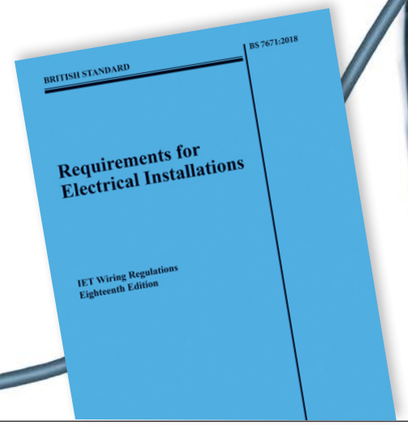
The Institution of Engineering and Technology's [IET] Wiring Guidelines BS 7671:2018 has been amended to support the roll-out of electric vehicle charging infrastructure across the UK.

Effective February 2020, the update follows advances in technology that were unavailable when BS 7671:2018 was first published.

Consisting of a stand-alone update to Section 722 Electric Vehicle [EV] Charging Installations, the change has been designed to reduce the cost for both consumers and installers, while simultaneously making the installation of charging points quicker and easier – a necessity if the UK Government is to achieve it's target of emitting virtually zero carbon by 2050.

Having the correct guidance to hand for the installation of practical and safe charging points will be vital for EV installers in helping the UK create one of the largest electric vehicle charging networks in Europe.

You can view Amendment 1 of BS 7671:2018 for free here:
https://electrical.theiet.org/bs-7671/updates-to-18th-edition/



2378-9218

ONLY £77.43

0% VAT

TRAINING

ELECTRIC VEHICLE CHARGING COURSES

Before an electrician is able to install EV charging stations, they'll need to become an accredited installer with one [or more] EV charger manufacturers.

At CEF we can arrange electric vehicle charging training for you, via the NICEIC, City and Guilds or through our suppliers.

PUT SIMPLY, EV CHARGING IS NO LONGER A FUTURE TREND. IT IS HERE TO STAY. SO DON'T MISS OUT ON THIS HUGE OPPORTUNITY AND MAKE IT AN INTEGRAL PART OF THE SERVICE YOUR BUSINESS OFFERS

NICEIC TRAINING

The NICEIC's electric vehicle charging course covers the installation of electric vehicle charging stations in compliance with BS 7671, the Electrical Safety Quality and Continuity Regulations and the new IET Code of Practice.

Course outline

- Introduction to electrical vehicle charging
- History of electric vehicles
- Government legislation and incentives
- BS 7671 - supply requirements, installation requirements, protection requirements
- The IET Code of Practice
- Product demonstration
- Exam [followed by Q&A]

Who should attend?

The course lasts one day and is aimed at contractors looking to expand their business to include the installation of EV charging stations.

Entry requirements

There are no formal entry requirements to attend this course, however candidates should have a basic knowledge and understanding of electrical science and the principles of electrical installation work.

To check dates, availability and book a course visit your local CEF store.

CITY & GUILDS TRAINING

The City and Guilds training course aims to provide expert guidance to electricians wishing to gain knowledge and understanding on electric vehicle charging equipment installation.

Course outline

- Introduction to electric vehicles
- EV characteristics, charging requirements and safety considerations
- Overview of EV charging
- Modes of EV charging, requirements and restrictions
- Requirements for electrical installation
- Electrical supply, earthing, planning permission, explosive atmospheres, protection, labelling, control and risk assessment
- Domestic and commercial installations
- Practical domestic and commercial installations
- Inspection, test and certification
- Commissioning and DNO paperwork
- Risk assessment, pre and post installation check lists
- System test, fault finding and examination
- C&G 2919-01, 60 mins multi-choice exam and 180 mins practical assessment [both open book IET CoP to EV charging]

Who should attend?

This course lasts 2 days and is aimed at practicing electricians interested in understanding how to install the range of equipment and systems available. It covers the specialised installation requirements of electric vehicle charging equipment in public, private and commercial locations and includes exclusive guidance on electrical requirements.

Entry requirements

There are no formal entry requirements to attend this course, however it is recommended you are up to date with your 18th Edition wiring regulations.

For more information on EV charging training or to book a course, contact your local CEF store.

WHY CEF?

SHOPPING MADE EASY

IN-STORE
Over 390 stores nationwide open 6 days a week
Monday - Friday
7:30am - 5:30pm
Saturday
8:30am - 12:00pm

ONLINE
Choose from over 35,000 products in stock at **cef.co.uk**

CATALOGUE
Find your 8 digit order code – order in-store, online or over the phone

CALL US
We have over 390 stores nationwide so there's always a store near you

EASY WAYS TO PAY...
Whether online or in-store you can pay via

- **CASH** In-store
- **CARD** In-store and online
- **PAYPAL** Online
- **BANK TRANSFER** Subject to account type

OPEN A TRADE ACCOUNT TODAY [IN-STORE OR ONLINE] AND BENEFIT FROM:

- Credit facilities [subject to credit checks]
- Monthly statements
- VAT approved itemised invoices
- Online account management
- Make payments online
- View previous orders

DELIVERY MADE EASY

CHOOSE FROM OVER 35,000 PRODUCTS AND HAVE THEM DELIVERED WHERE AND WHEN YOU NEED THEM

Delivery options to suit you

Same day delivery
If the product you want is in stock at your local store, we'll arrange with you how and where you want it delivered. Simply check the stock online and call your nearest store.

Next day local delivery
We're ready and waiting to deliver your orders where and when you need them. Simply order online before 8pm Monday – Friday and we'll deliver the next working day. All orders over £50 are delivered free of charge.

Click and Collect
If a product is in-store, buy it online and it will be ready for you to collect when you need it.

Can't find it in-store? Our Click and Collect service guarantees delivery of any product on our website to your chosen store the very next working day. Simply order in-store or online [before 8pm] and collect at a time that suits you.

GET YOUR PRODUCTS WHEN AND WHERE YOU NEED THEM

cef.co.uk is the fastest, most convenient way to purchase electrical products.

With more than 35,000 products in stock and available for next day delivery from our brand new 151,000 ft² warehouse, you can be assured you will find everything you need to get the job done.

Online shopping made easy:

- Fast and easy navigation
- Detailed product information including datasheets
- Great deals
- Guest checkout
- Product pricing and stock availability
- Next day delivery for orders placed before 8:00pm
- Multiple secure payment options
- Customer product reviews
- CEF / NICEIC Technical Hub
- Store locator
- Online chat

ROLEC

ROLECEV

Rolec EV is the largest independent EV charge point manufacturer in the UK.

Having specialised for over 10 years in the design, manufacture and supply of Europe's largest and most diverse range of electric vehicle charging solutions. Rolec EV has manufactured and supplied over 150,000 EV charging stations to date.

Rolec EV manufactures high quality, cost effective EV charging units and is an OLEV government grant funding approved manufacturer. Rolec EV has a product portfolio which encompasses the most comprehensive EV charging range in Europe, with all EV charging stations compatible with all EVs and PHEVs.

Become a Rolec EV / OLEV approved installer

Rolec EV sponsor NICEIC, City & Guilds and EAL training courses to help provide electrical contractors with the accreditation they need to access grant funding for both domestic and commercial EV charging point installations.

Contractors who complete the training will become OLEV approved. Upon completion, they can then register with Rolec to become Rolec approved.

Ask in-store for more information.

YOUR KEY TO EV CHARGING

- Convenient EV Charging for residential situations
- EV Charging suitable for public locations
- Ideal EV business solution for employees and visitors
- MODE 2 — Auto On / Off with charge rate controlled by the car and current level limited by the supply circuit
- MODE 3 — Faster charging than Mode 2 with dedicated controls and advanced communication with the vehicle
- TYPE 1 — Up to 7 kW AC [single phase only]
- TYPE 2 — Up to 43 kW AC rapid or 22 kW AC fast charging [single phase or 3 phase for faster charging]
- APP COMMS — Monitoring and charging control via Smart Device
- 8M — Added convenience; just park and plug in with tethered lead
- IP65 — Ingress protection against particles [1st digit] and liquids [2nd digit]
- OLEV — Qualifies for grant funding when installed by a professional accredited installer
- WCS — Qualifies for grant funding when professionally installed in workplace locations

WALLPOD: EV READY

ROLECEV

TYPE 1 | TYPE 2 | MODE 2 | IP65

- Can be easily upgraded to Mode 3 fast charging
- Outdoor socket is also ideal for home maintenance, charging mobility scooters, electric bikes, etc.
- Built-in overload and fault current protection [Type A RCBO]
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 367 mm[H] x 179 mm[W] x 142 mm[D]
- BS EN 60335-1

Code	kW Rating	Current Rating	Output	1+
1402-3339	3 kW	13A	Domestic Socket	£94.50
Tethered Upgrade Kits				
1597-9240	3.6 kW	16A	Type 1 Socket	£329.95
1597-9243	7.2 kW	32A	Type 1 Socket	£365.00
Socket Upgrade Kits				
1597-9252	3.6 kW	16A	Type 2 Socket	£249.95
1597-9255	7.2 kW	32A	Type 2 Socket	£249.95

1402-3339

ONLY £94.50 +VAT

7.2 kW [32A] EV WALLPOD

ROLECEV

MODE 3 | TYPE 2 | IP65

- Entry level unit designed for domestic and commercial locations
- LED charging status indicator
- Built-in overload and fault current protection [Type A RCBO]
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 367 mm[H] x 179 mm[W] x 142 mm[D]
- IEC 61851-1

1402-3417

ONLY £383.25 +VAT

7.2 kW [32A] HOMESMART EV WALLPODS

ROLECEV

MODE 3 | TYPE 1 | TYPE 2 | APP COMMS | 5M | IP65 | OLEV

- Simple interactive EV charging solution for the home with tethered lead for added convenience
- App controlled charging and smart analytics
- Built-in overload and fault current protection [Type A RCBO]
- Class 1 MID compliant kWh meter and LED charging status indicator
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 415.5 mm[H] x 179 mm[W] x 142 mm[D]
- IEC 61851-1

Available on the App Store | GET IT ON Google Play

Code	Output
2575-9366	Type 1 Tethered Lead
2575-9372	Type 2 Tethered Lead

ONLY £525.00 +VAT

7.2 kW [32A] HOMESMART EV WALLPOD

ROLECEV

MODE 3 | TYPE 2 | APP COMMS | IP65 | OLEV

- Simple interactive charging solution for the home with a neat socket to connect EV charging lead
- App controlled charging and smart analytics
- Built-in overload and fault current protection [Type A RCBO]
- Built-in Class 1 MID compliant kWh meter and LED charging status indicator
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 367 mm[H] x 179 mm[W] x 142 mm[D]
- IEC 61851-1

Available on the App Store | GET IT ON Google Play

2575-9378

ONLY £449.95 +VAT

7.2 kW [32A] SECURICHARGE EV WALL UNITS

ROLECEV

MODE 3 | TYPE 2 | IP54 | WCS

- Heavy-duty, vandal resistant wall mounted charging unit, designed specifically for public and exposed locations
- LED charging status indicator
- Built-in overload and fault current protection [Type A RCBO]
- Key switch control and secure hatchlock facility
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 500 mm[H] x 200 mm[W] x 125 mm[D]
- IEC 62196

*WCS [Workplace Charging Scheme] fundable units come complete with a MID approved GPRS meter, allowing the remote collection of meter readings

Code	Output	1+
Standard Units		
2077-4374	Type 2 Socket	£631.95
2077-4386	2 x Type 2 Sockets	£939.95
WCS Fundable Units*		
2575-9798	Type 2 Socket	£949.95
2575-9804	2 x Type 2 Sockets	£1365.00

FROM £631.95 +VAT

CHARGING LEADS

ROLECEV

TYPE 1 | TYPE 2 | IP54

- Current rating: 32A
- IEC 62196

FROM £127.95 +VAT

Code	Output	Length	1+
1402-3948	Type 2 to Type 1	5 m	£127.95
2248-7539	Type 2 to Type 1	10 m	£156.95
1402-3930	Type 2 to Type 2	5 m	£135.95
2248-7536	Type 2 to Type 2	10 m	£168.95

7.2 kW [32A] BASICCHARGE EV PEDESTALS

ROLECEV

MODE 3 | TYPE 2 | IP65 | WCS

- Best selling tried and tested pedestal is extremely versatile and very affordable
- Photocell controlled integrated LED amenity lighting and secure hatchlock facility
- Built-in overload and fault current protection [Type A RCBO]
- LED charging status indicator
- Mounted: Surface or root
- UV Stabilised, fire retardant, corrosion and impact resistant design
- Dimensions: 1,130 mm[H] x 205 mm[W] x 205 mm[D]
- IEC 61851-1

1402-3186

*WCS [Workplace Charging Scheme] fundable units come complete with a MID approved GPRS meter, allowing the remote collection of meter readings

Code	Output	1+
Standard Units		
2077-4230	Type 2 Socket	£568.95
2077-4242	2 x Type 2 Sockets	£817.95
WCS Fundable Units*		
2575-9810	Type 2 Socket	£969.95
2575-9816	2 x Type 2 Sockets	£1,475.00
Base for Root Mounting		
1402-3186		£23.95

FROM £568.95 +VAT

7.2 kW [32A] AUTOCHARGE EV PEDESTAL

ROLECEV

MODE 3 | TYPE 2 | IP54 | WCS

- Robust, heavy-duty pedestal designed specifically for commercial and public environments
- 2 x Charging sockets with security hatchlock facility
- Can be upgraded to accommodate various pay-to-charge solutions
- Built-in overload and fault current protection [Type A RCBO] components behind lockable door
- LED charging status indicator
- Mounted: Surface or root
- UV Stabilised, corrosion and impact resistant design
- Dimensions: 1,275 mm[H] x 332 mm[W] x 270 mm[D]
- IEC 61851-1

2077-4479

*WCS [Workplace Charging Scheme] fundable units come complete with a MID approved GPRS meter, allowing the remote collection of meter readings

Code	Output	1+
Standard Unit		
2077-4317	2 x Type 2 Sockets	£1,149.95
WCS Fundable Unit*		
2575-9840	2 x Type 2 Sockets	£1,795.00
Base for Root Mounting		
2077-4479		£53.50

FROM £1,149.95 +VAT

7.2 kW [32A] QUANTUM EV PEDESTAL

ROLECEV

MODE 3 | TYPE 2 | IP66 | WCS

- Versatile, heavy-duty pedestal designed specifically for commercial and public environments
- Photocell controlled integrated LED amenity lighting and secure hatchlock facility
- Can be upgraded to accommodate various pay-to-charge solutions
- Built-in overload and fault current protection [Type A RCBO]
- LED charging status indicator
- Mounted: Surface or root
- UV Stabilised, corrosion and impact resistant design
- Dimensions: 1,440 mm[H] x 382.5 mm[W] x 262.5 mm[D]
- IEC 61851-1

2453-4625

*WCS [Workplace Charging Scheme] fundable units come complete with a MID approved GPRS meter, allowing the remote collection of meter readings

Code	Output	1+
Standard Unit		
2453-4619	2 x Type 2 Sockets	£1,135.00
WCS Fundable Unit*		
2575-9828	2 x Type 2 Sockets	£1,749.95
Base for Root Mounting		
2453-4625		£52.50

FROM £1,135.00 +VAT

SCHNEIDER ELECTRIC

Schneider Electric

YOUR KEY TO EV CHARGING

- Convenient EV Charging for residential situations
- EV Charging suitable for public locations
- Ideal EV business solution for employees and visitors
- MODE 2 — Auto On / Off with charge rate controlled by the car and current level limited by the supply circuit
- MODE 3 — Faster charging than Mode 2 with dedicated controls and advanced communication with the vehicle
- TYPE 1 — Up to 7 kW AC [single phase only]
- TYPE 2 — Up to 43 kW AC rapid or 22 kW AC fast charging [single phase or 3 phase for faster charging]
- APP COMMS — Monitoring and charging control via Smart Device
- 8M — Added convenience; just park and plug in with tethered lead
- IP65 — Ingress protection against particles [1st digit] and liquids [2nd digit]
- OLEV — Qualifies for grant funding when installed by a professional accredited installer
- WCS — Qualifies for grant funding when professionally installed in workplace locations

Schneider Electric, a worldwide expert in energy management, offer a variety of solutions for charging electric vehicles with EVlink and energy management software.

Their solutions for both residential and commercial charging includes EVlink smart wall boxes, EVlink parking for fast charging. The EVlink charging stations are suitable for daily use and are compatible with a wide range of electric vehicles. EVlink is a solution which incorporates energy management, minimises installation costs and provides flexibility, protection, reliability and efficiency.

From installation to maintenance, EVlink charging stations incorporate Schneider Electric expertise to provide the best solution possible to you with the added benefit of OLEV approved manufacturer status.

Ask in-store for more information.

7.4 kW [32A] EVlink WALLBOX

Schneider Electric

MODE 3 | TYPE 1 | TYPE 2 | 4M | IP54

- Plug and charge convenience with one-touch Start / Stop
- Environmentally friendly options for controlling energy consumption with delayed start allowing for off-peak only charging
- Key locking to prevent unauthorised charging
- Dimensions: 480 mm[H] x 330 mm[W] x 170 mm[D]
- IEC 62196-2

Code	Output	1+
2255-0254	Type 1 Tethered Lead	£499.95
2255-0257	Type 2 Tethered Lead	£495.00

FROM £495.00 +VAT

7.4 kW [32A] EVlink SMART WALLBOX

Schneider Electric

MODE 3 | TYPE 2 | IP54 | OLEV

- Plug and charge convenience with one-touch Start / Stop
- Environmentally friendly options for controlling energy consumption with delayed start allowing for off-peak only charging
- Easy commissioning with a laptop connected to the embedded webserver
- Key locking to prevent cable theft and unauthorised charging
- Dimensions: 480 mm[H] x 330 mm[W] x 170 mm[D]
- Output: Type 2 socket
- OCPP 1.6 compliant
- IEC 62196-2

2255-0269

ONLY £785.00 +VAT

7.4 kW [32A] EVlink SMART WALLBOX

Schneider Electric

MODE 3 | TYPE 2 | IP54 | OLEV

- Plug and charge convenience with one-touch Start / Stop
- Environmentally friendly options for controlling energy consumption with delayed start allowing for off-peak only charging
- User authentication via authorised badges compatible with the station's RFID badge
- Easy commissioning with a laptop connected to the embedded webserver
- Key locking to prevent cable theft and unauthorised charging
- Dimensions: 480 mm[H] x 330 mm[W] x 170 mm[D]
- Output: Type 2 socket
- OCPP 1.6 compliant
- IEC 62196-2

Includes:
- 10 x RFID Badges

2255-0272

ONLY £979.95 +VAT

7 kW EVlink PARKING FLOOR CHARGING STATION

Schneider Electric

MODE 3 | TYPE 2 | IP54 | WCS

- Ideal solution in all parking environments: Offices, hotels, supermarkets and fleets
- Visual charging details with record function [30 day history]
- Adaptable charging station power demand to match your electrical distribution
- Configure your charging station via EVlink embedded web server
- Charging cable to remain securely plugged in to the charging station
- Dimensions: 1146 mm[H] x 413 mm[W] x 220 mm[D]
- Output: 2x Type 2 sockets
- OCPP 1.6 compliant
- IEC 61851-1

2255-0248

ONLY £2,349.95 +VAT

CHARGING LEADS

Schneider Electric

TYPE 1 | TYPE 2 | IP44

- Current rating: 32A
- IEC 62196

Code	Output	Length
2255-0263	Type 2 to Type 1	5 m
2255-0266	Type 2 to Type 2	5 m

ONLY £369.95 +VAT

EVBOX

3 YEARS WARRANTY

EVBox is a leading global manufacturer of electric vehicle charging stations and charging management software.

With an installed base of over 100,000 charging stations across more than 60 countries worldwide, EVBox drives sustainable mobility, by bringing durable electric vehicle charging solutions to the world. In 2018, EVBox acquired ultra-fast charging station manufacturer EVTronic, adding 700 previously installed fast charging stations to its European network. EVBox offer both residential and commercial electric vehicle charging solutions. All products are OLEV approved and have a minimum 3 year warranty.

Training

EVBox offer free technical and commercial training at their HQ and on-site, as well as [local] technical support to all of their installation partners.

Upon successful completion of the training, companies will be officially certified as an EVBox Installation Partner. What's more, their free online training will enable installers to become an approved EVBox OLEV installer.

Ask in-store for more information.

YOUR KEY TO EV CHARGING

- Convenient EV Charging for residential situations
- EV Charging suitable for public locations
- Ideal EV business solution for employees and visitors
- MODE 2 — Auto On / Off with charge rate controlled by the car and current level limited by the supply circuit
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- APP COMMS — Monitoring and charging control via Smart Device
- 4M — Added convenience; just park and plug in with tethered lead
- IP65 — Ingress protection against particles [1st digit] and liquids [2nd digit]
- OLEV — Qualifies for grant funding when installed by a professional accredited installer
- WCS — Qualifies for grant funding when professionally installed in workplace locations

7.4 kW [32A] EVBox ELVI

EVBOX

MODE 3 | TYPE 2 | 4M | IP55 | OLEV

- Ideal residential solution is easy to use, install, and upgrade with modular future proofing features
- Track and invoice charging sessions for multi-unit dwellings
- UMTS Modem allows for cellular communication
- Autostart with LED charging status indication
- Mounted: Wall or pole [sold separately]
- Dimensions: 328 mm[H] x 186 mm[W] x 161 mm[D]
- IEC 61851-1

Available on the App Store | GET IT ON Google Play

Code	Description	Finish	1+
2593-2154	Wi-Fi, kWh Meter	Black	£739.95
2593-2157	Wi-Fi, kWh Meter	White	£739.95
2593-2190	Wi-Fi, kWh Meter & UMTS	Black	£799.95
2593-2193	Wi-Fi, kWh Meter & UMTS	White	£799.95

FROM £739.95 +VAT

EVBox ELVI

EVBOX

MODE 3 | TYPE 2 | IP55 | OLEV | WCS

- Ideal residential solution is easy to use, install, and upgrade with modular future proofing features
- 4 Adjustable kW ratings dependant on supply circuit: 3.7, 7.4, 11 and 22 kW
- Track and invoice charging sessions for multi-unit dwellings
- UMTS Modem allows for cellular communication
- Autostart with LED charging status indication
- Mounted: Wall or pole [sold separately]
- Dimensions: 328 mm[H] x 186 mm[W] x 219 mm[D]
- IEC 61851-1

Available on the App Store | GET IT ON Google Play

Code	Description	Finish	1+
2593-2220	Wi-Fi, kWh Meter	Black	£739.95
2593-2223	Wi-Fi, kWh Meter	White	£739.95
2593-2226	Wi-Fi, kWh Meter & UMTS	Black	£799.95
2593-2229	Wi-Fi, kWh Meter & UMTS	White	£799.95

FROM £739.95 +VAT

32A EVBox BUSINESSLINE

EVBOX

MODE 3 | TYPE 2 | APP COMMS | IP54 | WCS

- Charges 2 cars simultaneously
- Equipped with intelligent software designed to suit workplace needs
- Back office software facilitates data gathering from a single Hub unit
- Up to 19 Satellite units can be connected to a single Hub unit via data cable
- Autostart with LED charging status indication
- Remote monitoring and invoice charging
- Mounted: Wall or pole [sold separately]
- Dimensions: 600 mm[H] x 255 mm[W] x 410 mm[D]
- IEC 61851-1

Available on the App Store | GET IT ON Google Play

Code	kW Rating	Finish	1+
Hub			
2595-3874	7.4 kW	Grey	£1,865.00
2595-3871	7.4 kW	White	£1,865.00
2595-3886	22 kW	Grey	£2,095.00
2595-3883	22 kW	White	£2,095.00
Satellite			
2595-3868	7.4 kW	Grey	£1,825.00
2595-3865	7.4 kW	White	£1,825.00
2595-3880	22 kW	Grey	£2,065.00
2595-3877	22 kW	White	£2,065.00

FROM £1,825.00 +VAT

ACCESSORIES

CHARGING LEADS

TYPE 1 | TYPE 2 | IP65

- Current rating: 32A
- IEC 62196

Code	Output	Length
2593-2280	Type 2 to Type 1	4 m
2593-2274	Type 2 to Type 2	4 m

ONLY £169.95 +VAT

SIGNS

- Highlight location of EV charging spaces
- Clear, recognisable weather durable sign

2593-2286

2593-2289

Code	Size	1+
2593-2286	400 mm x 600 mm	£74.95
2593-2289	400 mm x 800 mm	£109.95

FROM £74.95 +VAT

CABLE DOCKING STATION

- Durable polycarbonate material
- Safely holds Type 1 or Type 2 cables
- Dimensions: 190 mm[H] x 120 mm[W] x 90 mm[D]

2593-2262

ONLY £49.95 +VAT

ELVI FLOOR MOUNTED POLE

- For floor mounting ELVI charging stations
- Height: 1.4 m

2624-0416

ONLY £319.95 +VAT

BUSINESSLINE FLOOR MOUNTED POLE

- For floor mounting BusinessLine charging stations
- Height: 1.4 m

2593-2268

ONLY £139.95 +VAT

BUSINESSLINE WALL MOUNTED POLE

- For wall mounting BusinessLine charging stations
- Height: 500 mm

2593-2271

ONLY £229.95 +VAT

BUSINESSLINE ROOT MOUNTED POLE

- For root mounting BusinessLine charging stations
- Height: 1.9 m

2593-2265

ONLY £139.95 +VAT

MATT:E 18TH EDITION 1ST AMENDMENT COMPLIANT

matt:e
Caring about your World

2622-8533

A COMPLIANT ALTERNATIVE TO EARTH ELECTRODES

Why do I need to install earth electrodes?

PME [TN-C-S] is the most common form of earthing provided at new installations and utilises a single conductor for the neutral and earthing functions [PEN] with an earth terminal derived from the neutral cable.

The danger arises if there is an open PEN conductor within the network. This can lead to an electric shock if any metallic parts, including gas pipework and any bonded appliance were touched by a person in simultaneous contact with general mass of earth. Unfortunately, MCBs and RCDs currently used do not detect this fault and do not offer any protection.

In accordance with the IET Wiring Regulations [18th Edition] BS 7671, a PME earthing facility shall not be used as means of earthing for the protective conductor contact of a charging station located outdoors or that might reasonably be expected to be used to charge a vehicle located outdoors.

Unless one of the following methods is used

The charge station forms part of a three phase installation where all of the demand, including the charge station/s, is balanced over all of the available phases. The problem of proving that the three phase supplies have been and will remain balanced is almost impossible.

The EV charging installation includes an earth electrode of sufficient resistance to ensure the rise of earth potential will be limited to a maximum of 70V during a broken neutral event. The problem of placing earth electrodes to obtain the minimum separation distances and to provide the correct resistance values can be very difficult to achieve.

Protection against electric shock is provided by a device which disconnects the charging station/s from the supply live conductors and the protective earth within five seconds in the event of a broken neutral.

The solution

Matt:e has developed a range of compliant solutions for both single and three phase infrastructures which enable the installation of electric vehicle charging stations without Earth Electrodes.

Matt:e's O-PEN device is able to detect load imbalances under all conditions including open PEN on three phase PME infrastructures and safely isolates the incoming supply or electrical loads. This helps prevent the risk of electric shock if dangerous touch voltages occur above 70V in line with BS 7671. Utilising the O-PEN technology on your EV installations saves time and costs during installation but more importantly offers a safer alternative to earth electrodes.

Key features

- Standardises installation
- No more scanning for buried services
- Minimises civil works
- Prevents danger posed by driving earth electrodes into the ground
- Allows charging stations to be mounted directly onto metalclad structures
- Safer earth connection as connected directly onto PME supply
- Guarantee that the earth resistances values are maintained all year round
- Designed and manufactured in Great Britain

MATT:E SOLUTIONS

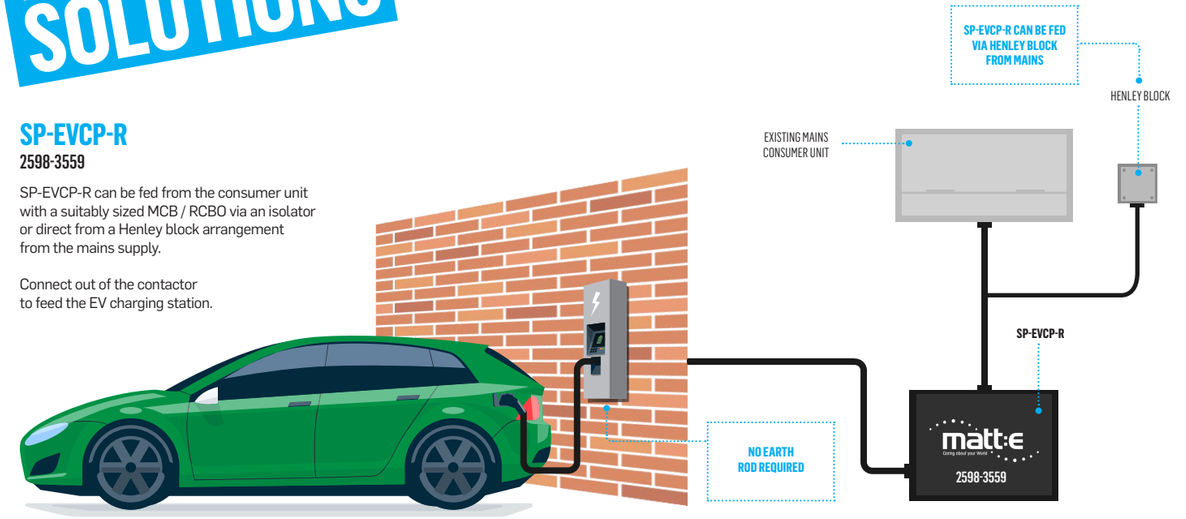
matt:e
Caring about your World

SP-EVCP-R

2598-3559

SP-EVCP-R can be fed from the consumer unit with a suitably sized MCB / RCBO via an isolator or direct from a Henley block arrangement from the mains supply.

Connect out of the contactor to feed the EV charging station.

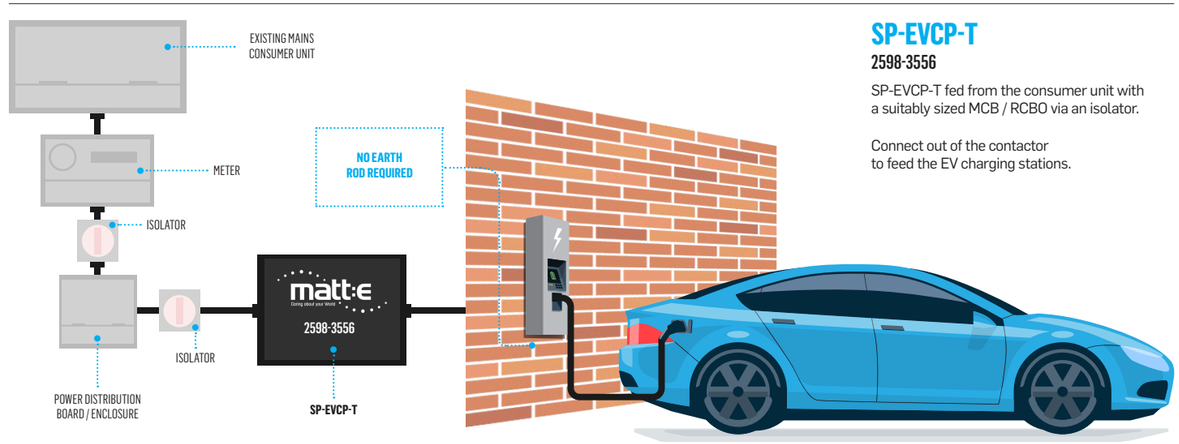


SP-EVCP-T

2598-3556

SP-EVCP-T fed from the consumer unit with a suitably sized MCB / RCBO via an isolator.

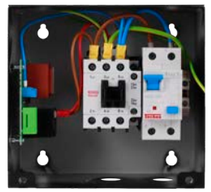
Connect out of the contactor to feed the EV charging stations.



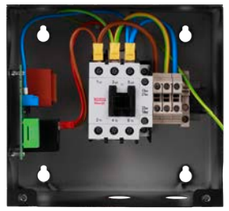
EV DOMESTIC CONNECTION CENTRE SINGLE PHASE – 32A

- Built-in Matt:e technology
- Suitable for 1 x 32A load
- No earth electrodes required
- Simple wire in, wire out connection
- Standard mild steel IP4X enclosure
- Dimensions: 169 mm[H] x 182 mm[W] x 111 mm[D]
- Warranty: 3 Years
- Designed and built in the UK

2598-3559



2598-3556



Code	Includes	1+
2598-3556	-	£104.95
2598-3559	Type A RCBO	£134.95

FROM £104.95 +VAT

EV CONNECTION CENTRE SINGLE PHASE OUTPUT – 3 PHASE SUPPLY

- Built-in O-PEN technology
- Built-in 5 pole mains isolator with manually resettable shunt trip
- Phase loss protection
- Simple wire in, wire out connection
- No earth electrodes required
- Standard mild steel IP4X enclosure
- Dimensions: 380 mm[H] x 300 mm[W] x 140 mm[D]
- Warranty: 3 Years
- Designed and built in the UK

INCLUDES:
- 3 x 32A 30 MA C Curve RCBOs – Type A [10kA]

2598-3547

ONLY £459.95 +VAT

EV CONNECTION CENTRE SINGLE PHASE OUTPUT – 3 PHASE SUPPLY

- Built-in O-PEN technology
- Built-in 5 pole mains isolator with manually resettable shunt trip
- Phase loss protection
- Simple wire in, wire out connection
- No earth electrodes required
- Standard mild steel IP4X enclosure
- Dimensions: 380 mm[H] x 300 mm[W] x 140 mm[D]
- Warranty: 3 Years
- Designed and built in the UK

INCLUDES:
- 3 x 32A C Curve MCBs [10kA]

2598-3550

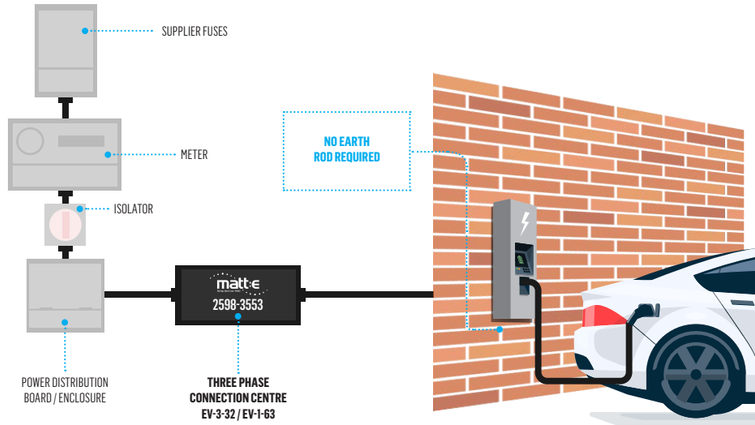
ONLY £459.95 +VAT

EV CONNECTION CENTRE 3 PHASE – 63A CONNECTOR

- Built-in O-PEN technology
- Built-in 5 pole mains isolator with manually resettable shunt trip
- Phase loss protection
- Simple wire in, wire out connection
- No earth electrodes required
- Standard mild steel IP4X enclosure
- Dimensions: 380 mm[H] x 300 mm[W] x 140 mm[D]
- Warranty: 3 Years
- Designed and built in the UK

2598-3553

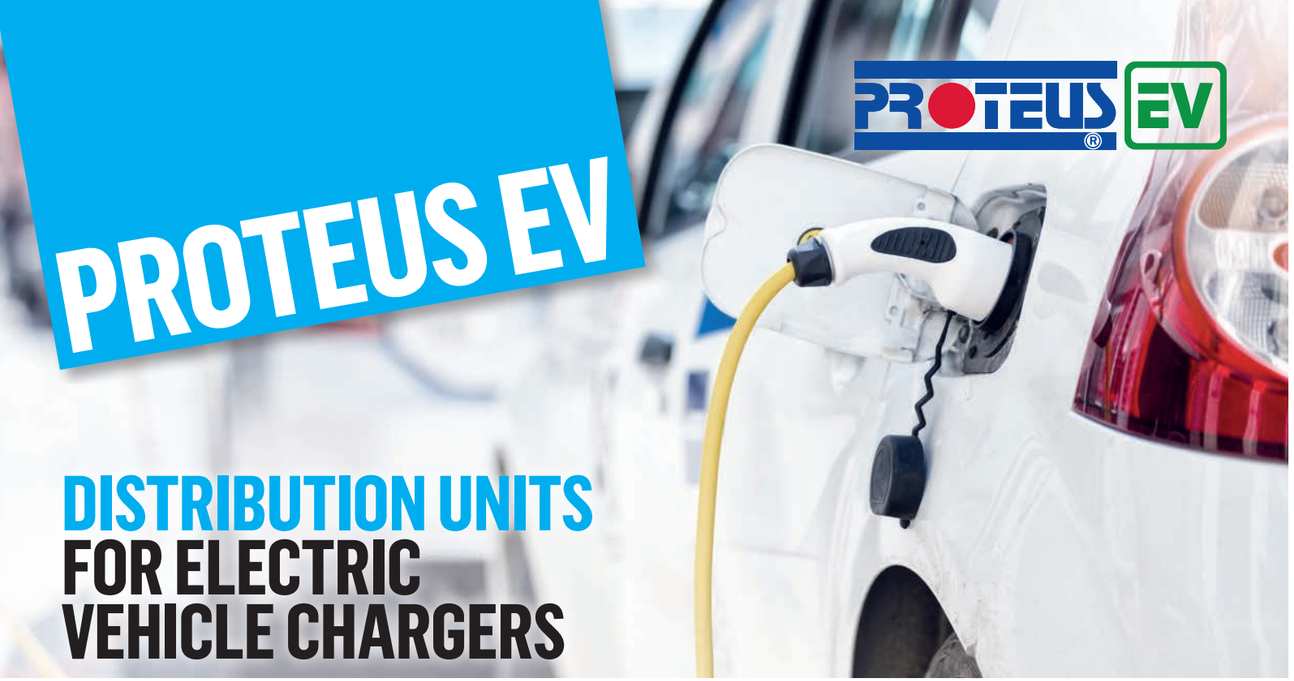
ONLY £459.95 +VAT



THREE PHASE O-PEN CONNECTION CENTRES

2598-3547
2598-3550
2598-3553

EV-3-32 / EV-1-63 fed from the supplier fuses via an isolator. Connect out of the contactor to feed the EV charging station.



PROTEUS EV

DISTRIBUTION UNITS FOR ELECTRIC VEHICLE CHARGERS

Proteus offer a large range of custom designed single and three phase distribution units for EV chargers.

Ensure your customers' exact requirements are met with a completely bespoke solution.

EV charging stations require various forms of switchgear to distribute power and to offer short circuit, overcurrent and earth leakage protection.

Proteus can offer EV charging switchgear solutions for a variety of installations from charging at home, the workplace, public access and commercial applications.

Proteus Switchgear offer pre-built solutions including MCCBs, MCBs, RCDs, RCBOs to suit various applications. Whether the installation requires slow, fast or rapid chargers, Proteus can offer a standard or bespoke solution to supply and protect your EV charging stations.

PROTEUS OFFER A WIDE RANGE OF STANDARD AND BESPOKE PRODUCTS TO PROVIDE POWER AND PROTECTION FOR A VARIETY OF EV CHARGERS

DESIGNED TO YOUR SPECIFICATION

Proteus utilise the latest drawing software and provide board layout drawings at both quotation and construction stages.

BE INVOLVED

You're welcome to visit the Proteus factory to see your board being built and discuss build requirements.

ON-SITE SURVEY

The Proteus team are happy to visit your site to establish your switchgear requirements.

TESTING & COMPLIANCE

All products tested to relevant British and European Standards.

SELECTION CHART

- All boards are 230 / 400V AC fitted with a switch disconnector or MCB as the incoming device
- kW ratings - Single phase 230V 3.6 kW - 16A, 7.2 kW - 32A. three phase 400V 11 kW - 16A, 22 kW - 32A
- RCD requirements should be checked with the charge point manufacturer
- BS 7671 clause 722.531.2.1.1 requires RCD's to disconnect all live conductors
- RCBO's have Type A filtering and switched live, unswitched neutral. Check with the charge point manufacturer that it is fitted with an incoming devices that switches the neutral.

SINGLE PHASE INSTALLATION

No. of SP EV Charger Circuits	kW Rating	Protection Device	RCD Type	Code	Page
1	7.2 kW	MCB / RCD	A	2562-2500	32
1	7.2 kW	MCB / RCD	B	2562-2503	32
3	7.2 kW	RCBO	A	2595-2152	32
3	7.2 kW	MCB / RCD	A	2595-2155	32
6	7.2 kW	RCBO	A	2595-2164	32
6	7.2 kW	MCB / RCD	A	2595-2167	32

COMBINED SINGLE AND THREE PHASE INSTALLATION

No. of SP EV Charger Circuits	kW Rating	Protection Device	No. of TP EV Charger Circuits	kW Rating	Protection Device	RCD Type	Code	Page
3	7.2 kW	RCBO	1	22	MCB / RCD	A	2595-2158	32
3	7.2 kW	MCB / RCD	1	22	MCB / RCD	A	2595-2161	32
3	7.2 kW	RCBO	2	22	MCB / RCD	A	2595-2170	32
3	7.2 kW	MCB / RCD	2	22	MCB / RCD	A	2595-2173	33
6	7.2 kW	RCBO	2	22	MCB / RCD	A	2595-2176	32
6	7.2 kW	MCB / RCD	2	22	MCB / RCD	A	2595-2179	33
9	7.2 kW	RCBO	3	22	MCB / RCD	A	2595-2182	33
9	7.2 kW	MCB / RCD	3	22	MCB / RCD	A	2595-2185	33

THREE PHASE INSTALLATION

No. of TP EV Charger Circuits	kW Rating	Protection Device	RCD Type	Code	Page
1	11 kW	ISO / RCD	A	2595-2128	33
1	11 kW	ISO / RCD	B	2595-2131	33
1	11 kW	MCB / RCD	A	2595-2134	33
1	11 kW	MCB / RCD	B	2595-2137	33
1	22 kW	ISO / RCD	A	2595-2140	33
1	22 kW	ISO / RCD	B	2595-2143	33
1	22 kW	MCB / RCD	A	2595-2146	33
1	22 kW	MCB / RCD	B	2595-2149	33

SP+N DISTRIBUTION BOARDS – RCD INCOMER

- Non-combustible metalclad distribution board
- Multiple knockouts for cable entry
- IP30

INCLUDES:

- 63A 30 mA 2 Pole RCD
- 40A B Curve MCB [6 kA]
- Blanks

FROM £57.95 +VAT

Code	No. of Ways	Height	Width	Depth	1+
Type A RCD [2 Module]					
2562-2500	2	235 mm	115 mm	110 mm	£57.95
Type B RCD [4 Module]					
2562-2503	4	235 mm	184 mm	110 mm	£219.95

100A TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Devices prewired
- Dimensions: 269 mm[H] x 326 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 100A 4 Pole isolator
- 40A 30 mA C Curve SP RCBO [Type A]

FROM £219.95 +VAT

Code	Single Pole RCBOs	1+
Suitable For 3 x 7.2 kW SP EV Chargers		
2595-2152	3 x 40A	£219.95
Suitable For 6 x 7.2 kW SP EV Chargers		
2595-2164	6 x 40A	£299.95

100A TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Devices prewired
- Dimensions: 528 mm[H] x 326 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 100A 4 Pole isolator
- 40A 30 mA C Curve SP RCBOs [Type A]
- 40A C Curve SP MCBs [10 kA]
- 40A C Curve TP MCBs [10 kA]
- 40A 30 mA 2 Pole RCDs [Type A]
- 40A 30 mA 4 Pole RCDs [Type A]

FROM £359.95 +VAT

Code	Single Pole RCBOs	Single Pole MCBs	3 Pole MCBs	2 Pole RCDs	4 Pole RCDs	1+
Suitable For 3 x 7.2 kW SP EV Chargers						
2595-2155	-	3 x 40A	-	3 x 40A	-	£359.95
Suitable For 3 x 7.2 kW SP and 1 x 22 kW TP EV Chargers						
2595-2158	3 x 40A	-	1 x 40A	-	1 x 40A	£439.95
Suitable For 6 x 7.2 kW SP EV Chargers						
2595-2167	-	6 x 40A	-	6 x 40A	-	£494.95
Suitable For 3 x 7.2 kW SP and 1 x 22 kW TP EV Chargers						
2595-2161	-	3 x 40A	1 x 40A	3 x 40A	1 x 40A	£489.95

125A TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Devices prewired
- Dimensions: 655 mm[H] x 410 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 125A 4 Pole isolator
- 40A 30 mA C Curve SP RCBOs [Type A]
- 40A C Curve TP MCBs [10 kA]
- 40A 30 mA 4 Pole RCDs [Type A]

FROM £619.95 +VAT

Code	Single Pole RCBOs	3 Pole MCBs	4 Pole RCDs	1+
Suitable For 3 x 7.2 kW SP and 2 x 22 kW TP EV Chargers				
2595-2170	3 x 40A	2 x 40A	2 x 40A	£619.95
Suitable For 6 x 7.2 kW SP and 2 x 22 kW TP EV Chargers				
2595-2176	6 x 40A	2 x 40A	2 x 40A	£724.95

200A TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Devices prewired
- Dimensions: 1,045 mm[H] x 410 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 200A 4 Pole isolator
- 40A 30 mA C Curve SP RCBOs [Type A]
- 40A C Curve TP MCBs [10 kA]
- 40A 30 mA 4 Pole RCDs [Type A]

ONLY £1,229.95 +VAT

Code	Single Pole RCBOs	3 Pole MCBs	4 Pole RCDs	1+
Suitable For 9 x 7.2 kW SP and 3 x 22 kW TP EV Chargers				
2595-2182	9 x 40A	3 x 40A	3 x 40A	£1,229.95

200A TP+N POPULATED DISTRIBUTION BOARD – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Devices prewired
- Dimensions: 1,380 mm[H] x 410 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 200A 4 Pole isolator
- 40A C Curve SP MCBs [10 kA]
- 40A C Curve TP MCBs [10 kA]
- 40A 30 mA 2 Pole RCDs [Type A]
- 40A 30 mA 4 Pole RCDs [Type A]

ONLY £1,489.95 +VAT

Code	Single Pole MCBs	3 Pole MCBs	2 Pole RCDs	4 Pole RCDs	1+
Suitable For 9 x 7.2 kW SP and 3 x 22 kW TP EV Chargers					
2595-2185	9 x 40A	3 x 40A	9 x 40A	3 x 40A	£1,489.95

125A TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Removable top gland plate
- Dimensions: 885 mm[H] x 410 mm[W] x 110 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 125A 4 Pole isolator
- 40A 30 mA C Curve SP RBCOs [Type A]
- 40A C Curve TP MCBs [10 kA]
- 40A 30 mA 2 Pole RCDs [Type A]
- 40A 30 mA 4 Pole RCDs [Type A]

FROM £689.95 +VAT

Code	Single Pole MCBs	3 Pole MCBs	2 Pole RCDs	4 Pole RCDs	1+
Suitable For 3 x 7.2 kW SP and 2 x 22 kW TP EV Chargers					
2595-2173	3 x 40A	2 x 40A	3 x 40A	2 x 40A	£689.95
Suitable For 6 x 7.2 kW SP and 2 x 22 kW TP EV Chargers					
2595-2179	6 x 40A	2 x 40A	6 x 40A	2 x 40A	£819.95

TP+N POPULATED DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad distribution board
- Multiple knockouts for cable entry
- Devices prewired
- Dimensions: 385 mm[H] x 205 mm[W] x 112 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- 4 Pole isolator
- 30 mA 4 Pole RCD

FROM £194.95 +VAT

Code	4 Pole Isolator	4 Pole RCDs	RCD Type	1+
Suitable For 11 kW TP EV Charger				
2595-2128	25A	25A	A	£194.95
2595-2131	25A	63A	B	£329.95
Suitable For 22 kW TP EV Charger				
2595-2140	40A	40A	A	£194.95
2595-2143	40A	63A	B	£329.95

TP+N POPULATED DISTRIBUTION BOARD – MCB INCOMER

- Non-combustible metalclad distribution board
- Multiple knockouts for cable entry
- Devices prewired
- Dimensions: 385 mm[H] x 205 mm[W] x 112 mm[D]
- IP3X
- BS EN 61439-3

INCLUDES:

- C Curve 4 Pole MCB [10 kA]
- 30 mA 4 Pole RCD

FROM £214.95 +VAT

Code	4 Pole RCDs	RCD Type	4 Pole MCBs	1+
Suitable For 11 kW TP EV Charger				
2595-2134	25A	A	20A	£214.95
2595-2137	63A	B	20A	£349.95
Suitable For 22 kW TP EV Charger				
2595-2146	40A	A	40A	£214.95
2595-2149	63A	B	40A	£349.95

63A 30 mA TYPE B RCDs

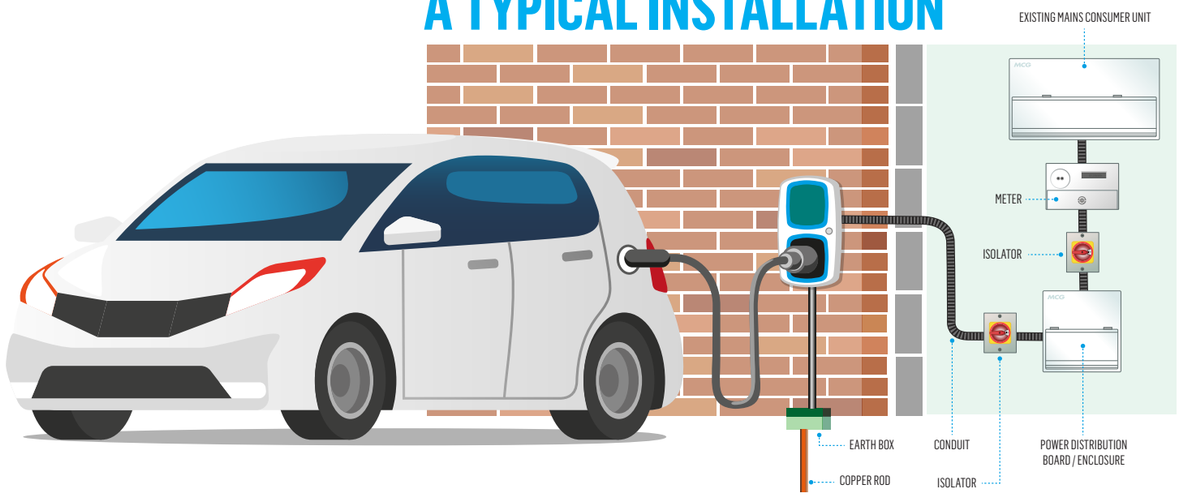
- Bi-directional - can be supplied from either end
- Positive contact indication
- Test button
- Short circuit capacity: 10 kA
- Terminal capacity: 35 mm²
- Mounted: DIN Rail
- BS EN 61008

FROM £173.50 +VAT

Code	No. of Modules	No. of Poles	1+
2562-6871	4	2	£173.50
2574-4120	4	4	£189.95

MCG-EV

PRODUCTS TO SUPPORT A TYPICAL INSTALLATION



For more than 30 years, MCG have provided a wide range of high quality products designed to satisfy the demands of the contractor market.

Included in this range are a number of EV charge point installation accessories ranging from single phase and three phase distribution boards, circuit protection to adaptable boxes, metal clad enclosures, switch fuses, electricity meters and surface mount isolation.

In addition, their electrical surge protection devices feature the latest innovative technology, and with a two year warranty on their EV range of installation products you can be safe in the knowledge that the products are built to last, to get the job done.

Ask in-store for more information.

MCG-EV INSTALLATION PRODUCTS OFFER QUALITY, RELIABILITY AND INNOVATION SO WHY NOT MAKE MCG EV INSTALLATION PRODUCTS YOUR FIRST CHOICE, PRODUCTS YOU CAN TRUST

PLASTIC EMPTY ENCLOSURES

- Dimensions: 100 mm[L] x 100 mm[W] x 50 mm[D]
- IP66

INCLUDES:
- Screws

Code	Colour
2094-6730	Black
1868-7337	Grey

ONLY £2.85 +VAT

PLASTIC EMPTY ENCLOSURE

- Dimensions: 376 mm[L] x 300 mm[W] x 120 mm[D]
- IP66

INCLUDES:
- Screws

Code	Description	1+
1868-7364	Enclosure	£34.50
1868-7400	Steel Mounting Plate	£13.35

ONLY £34.50 +VAT

PLASTIC DIN RAIL ENCLOSURES

- Manufactured from tough, flame retardant ABS
- Snap closing top hinged tinted front window
- Will fit a range of modular devices
- IP65
- BS EN 60529

INCLUDES:
- DIN rail

FROM £14.25 +VAT

Code	No. of Modules	Height	Width	Depth	1+
1868-7415	5	158 mm	118 mm	92 mm	£14.25
1868-7418	8	158 mm	200 mm	92 mm	£20.50

METALCLAD DIN RAIL ENCLOSURE

- Non-combustible metalclad enclosure
- Multiple knockouts for cable entry
- Snap closing top hinged lid
- Will fit a range of modular devices
- Dimensions: 220 mm[H] x 145 mm[W] x 104 mm[D]
- IP65
- BS EN 61439-3

INCLUDES:
- DIN rail
- Earth and neutral bars

2275-1353
ONLY £24.50 +VAT

METALCLAD DIN RAIL ENCLOSURES

- Non-combustible metalclad enclosure
- Multiple knockouts for cable entry
- Raised keyholes for easy installation
- IP20
- BS EN 61439-3

FROM £10.95 +VAT

INCLUDES:
- DIN rail
- Earth bar

Code	No. of Modules	Height	Width	Depth	1+
2191-0537	2	146 mm	82 mm	82 mm	£10.95
2191-0534	2	225 mm	82 mm	82 mm	£13.25
2191-0543	4	175 mm	113 mm	84 mm	£16.25
2191-0540	4	225 mm	115 mm	84 mm	£20.50

SP+N MAINS ISOLATOR SWITCH FUSE

- Robust metal body
- Complete with flap lid
- M20 and M25 knockouts top and bottom
- 5 Terminal earth bar
- Current rating: 63 / 80 / 100A
- Dimensions: 225 mm[H] x 115 mm[W] x 65 mm[D]
- IP20
- BS EN 61439-3

2302-9522
ONLY £43.95 +VAT

INCLUDES:
- 100A 2 Pole isolator
- 63A HRC ME Fuse
- 80A HRC ME Fuse
- 100A HRC ME Fuse

METALCLAD CONSUMER UNITS – MAINS INCOMER

- Non-combustible metalclad consumer units
- Knockouts: M25, M32 and M40
- IP40
- BS EN 61439-3

FROM £23.50 +VAT

INCLUDES:
- 100A 2 Pole isolator

Code	No. of Ways	Height	Width	Depth	1+
2073-7342	2	234 mm	125 mm	112 mm	£23.50
2073-7348	4	234 mm	160 mm	112 mm	£28.50
2073-7366	6	234 mm	197 mm	112 mm	£30.50

METALCLAD CONSUMER UNITS – RCD INCOMER

- Non-combustible metalclad consumer units
- Multiple knockouts for cable entry
- Raised keyholes for easy installation
- IP20
- BS EN 61439-3

FROM £44.95 +VAT

INCLUDES:
- 100A 30 mA 2 Pole RCD [Type A]

Code	No. of Ways	Height	Width	Depth	1+
2579-4616	2	235 mm	125 mm	110 mm	£44.95
2579-4619	4	235 mm	161 mm	110 mm	£48.50
2579-4622	6	235 mm	197 mm	110 mm	£49.95
2579-4625	8	235 mm	233 mm	110 mm	£55.95

125A TP+N DISTRIBUTION BOARDS – MAINS INCOMER

- Non-combustible metalclad enclosure
- Reversible door and removable gland plates top and bottom for ease of installation
- Can be converted to single phase using TPN-1PKIT [1488-7186]
- IP40
- BS EN 61439-3

INCLUDES:
- 125A 4 Pole isolator
- Labelling kit
- Accessory pack

Code	No. of Ways	Height	Width	Depth	1+
1993-9285	4	458 mm	405 mm	103 mm	£112.25
1993-9288	6	510 mm	405 mm	103 mm	£127.50
1993-9291	8	565 mm	405 mm	103 mm	£132.50
2072-6833	12	674 mm	405 mm	103 mm	£163.25
2234-1229	14	728 mm	405 mm	103 mm	£178.50
2234-1232	16	780 mm	405 mm	103 mm	£204.95

FROM £112.25 +VAT

100A SINGLE PHASE ELECTRICITY METER

- Designed to accurately measure and display active energy consumption [kWh] in a compact surface mounted enclosure
- Large easy to read LCD can be configured to auto cycle any of the available registers or remain static
- Optical part for configuration or meter reading
- Voltage rating: 230V
- Highly reliable and capable of withstanding high voltage events and overcurrent without failure
- Resistant to tampering with reverse energy fraud detection and sealing for life
- MID Certified
- Dimensions: 91 mm[H] x 125 mm[W] x 40 mm[D]
- EN 50470-13

2027-1052
ONLY £29.50 +VAT

METAL BLANKING PIECES

- Pack of 4

2195-5240
ONLY £2.95 +VAT

20A ENCLOSED ROTARY ISOLATORS

- Flame retardant ABS plastic
- Easy access and switch removal
- Current rating: AC21 [resistive loads]
- Padlockable switch
- Cable entry: 20 mm[Ø] knockouts
- Mounted: Surface
- Dimensions: 125 mm[H] x 100 mm[W] x 74 mm[D]
- IP65
- BS EN 60947-3

FROM £13.75 +VAT

Code	No. of Poles	1+
0576-1585	3	£13.75
0576-1588	4	£14.75

TRIPLE POLE MCBs

- Fault tripping indicator window
- Mounted: DIN rail
- BS EN 60898-1

ONLY £12.80 +VAT

Code	Current Rating
B Curve 10 kA	
2123-6989	32A
2123-7025	40A
C Curve 10 kA	
2123-6992	32A
2123-7028	40A

SINGLE POLE MCBs

- Fault tripping indicator window
- Mounted: DIN rail
- BS EN 60898-1

Code	Current Rating	1+	12+
B Curve 6 kA			
2123-6968	32A	£2.15	£2.05
2123-7001	40A	£2.15	£2.05
B Curve 10 kA			
2123-6965	32A	£4.85	£4.55
2123-6998	40A	£4.85	£4.55
C Curve 6 kA			
2123-6974	32A	£2.15	£2.05
2123-7007	40A	£2.15	£2.05
C Curve 10 kA			
2123-6971	32A	£4.85	£4.55
2123-7004	40A	£4.85	£4.55

FROM £2.15 +VAT

30 mA TYPE A RCDs

- Short circuit capacity: 6 kA
- Test button
- Fault tripping indicator window
- Terminal capacity: 35 mm²
- Mounted: DIN rail
- BS EN 61008

Code	No. of Modules	No. of Poles	Current Rating	1+
2579-4559	2	2	63A	£32.95
2579-4574	2	2	80A	£23.95
2579-4493	2	2	100A	£37.95
2579-4607	4	4	63A	£29.95
2579-4613	4	4	80A	£33.95
2579-4589	4	4	100A	£37.95

FROM £23.95 +VAT

SINGLE MODULE COMPACT RCBOs – TYPE A

- Smaller size allows for easier installation and more wiring space inside the consumer unit
- Integrates residual and overcurrent protection in one device
- Sensitivity: 30 mA [10 kA]
- Test 'T' operating test button on the front panel
- Fault tripping indicator window
- Mounted: DIN rail
- Complete with 1 m neutral and earth cables
- BS EN 610009-1

Code	Current Rating
B Curve 10 kA – RCD Type A 30 mA	
2579-4601	32A
2579-4604	40A

ONLY £27.50 +VAT

63A 30 mA TYPE B RCDs

- Short circuit capacity: 10 kA
- Test button
- Fault tripping indicator window
- Suitable for smooth DC supply
- Terminal capacity: 35 mm²
- Mounted: DIN rail
- BS EN 61008

Code	No. of Modules	No. of Poles	1+
2577-8734	4	2	£151.95
2577-8737	4	4	£159.95

FROM £151.95 +VAT

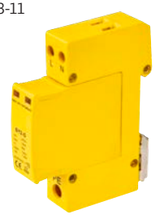
9.3 KW POLE CONTACTOR

- Maximum voltage rating: 660V
- Coil fitted as standard
- Coil voltage: 415V AC
- Current rating: 32A [AC-1] / 18A [AC3]
- Auxiliary contact: 1 NO
- Cage type cable terminals
- Mounted: DIN rail or screw panel / base mounting
- IEC 60947-4-1

0462-8569 ONLY £29.50 +VAT

SINGLE MODULE SURGE PROTECTION DEVICE

- Suitable for use with most brands of consumer units
- Protects against indirect lightning effects and transient surges
- Prolongs the life of appliances and sensitive electronic equipment
- Visual end of life indication
- Recommended backup MCB: 16 - 32A
- Warranty: 10 years
- BS EN 61643-11



Code	Type	Suitable For	No. of Poles
2433-7003	2 + 3	TN-S, TN-C-S and TT	2

2433-7003 ONLY £39.95 +VAT

SURGE PROTECTION DEVICES

- Suitable for use with most brands of commercial and industrial boards
- Protects against indirect lightning effects and transient surges
- Prolongs the life of appliances and sensitive electronic equipment
- Visual end of life indication and remote indication on [2433-7000]
- Recommended backup MCB: 32
- Warranty: 10 Years
- BS EN 61643-11

FROM £68.95 +VAT

Code	Type	Suitable For	No. of Poles	No. of Modules	1+
2433-6997	2 + 3	TN-S and TN-C-S	2	2	£68.95
2433-7000	2 + 3	TN-S and TN-C-S	4	4	£89.95

COPPERBOND EARTH ROD – 9.5 MM [3/8"] X 1,200 MM

- Unthreaded
- Molecularly bonded low carbon steel core with 99.9% pure electrolytic copper up to a thickness of 0.25 mm
- High tensile strength: At least 600N / mm²
- BS 7430 and BS 6651

0007-1707 ONLY £2.60 +VAT

EARTH ROD CLAMP – 9.5 MM [3/8"]

- Machine brassed earth rod clamp for use with [0007-1707]
- Standard 'B' type
- BS 7430 and BS 6651

0007-1557 ONLY £1.85 +VAT

EARTH ELECTRODE BOX

- Supplied with a printed warning label on the lid
- Compatible with 20 mm conduit
- BS 4607-5

0432-0079 ONLY £3.30 +VAT

CABLE

STEEL WIRE ARMOURED CABLE PVC

- XLPE Insulated steel wire armoured cable with PVC sheath
- Annealed stranded copper conductors
- BS 5467
- Earth cable required for compliant installation [sold separately]

H6942X 2 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3319	1.5 mm²	£0.70
0114-3328	2.5 mm²	£0.98
0114-3337	4.0 mm²	£1.32
0114-3346	6.0 mm²	£1.70
0114-3355	10.0 mm²	£2.27
0114-3364	16.0 mm²	£3.88
0138-6481	25.0 mm²	Visit cef.co.uk for latest prices
0138-6484	35.0 mm²	Visit cef.co.uk for latest prices

H6943X 3 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3373	1.5 mm²	£0.82
0114-3382	2.5 mm²	£1.11
0114-3391	4.0 mm²	£1.68
0114-3400	6.0 mm²	£2.19
0114-3409	10.0 mm²	£3.39
0114-3418	16.0 mm²	£5.30
0138-6493	25.0 mm²	Visit cef.co.uk for latest prices
0138-6496	35.0 mm²	Visit cef.co.uk for latest prices
0138-6499	50.0 mm²	Visit cef.co.uk for latest prices
0138-6502	70.0 mm²	Visit cef.co.uk for latest prices

H6944X 4 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3427	1.5 mm²	£1.00
0114-3436	2.5 mm²	£1.49
0114-3448	4.0 mm²	£2.09
0114-3457	6.0 mm²	£2.95
0114-3466	10.0 mm²	£4.61
0114-3475	16.0 mm²	£6.62
0138-6511	25.0 mm²	Visit cef.co.uk for latest prices
0138-6514	35.0 mm²	Visit cef.co.uk for latest prices
0138-6517	50.0 mm²	Visit cef.co.uk for latest prices
0138-6520	70.0 mm²	Visit cef.co.uk for latest prices
0138-6523	95.0 mm²	Visit cef.co.uk for latest prices

H6945X 5 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3484	1.5 mm²	£1.25
0114-3487	2.5 mm²	£1.84
0114-3490	4.0 mm²	£2.54
0114-3493	6.0 mm²	£3.48
0114-3496	10.0 mm²	£5.68
0114-3499	16.0 mm²	£8.61
0138-6469	25.0 mm²	Visit cef.co.uk for latest prices
0138-6472	35.0 mm²	Visit cef.co.uk for latest prices
1252-0654	50.0 mm²	Visit cef.co.uk for latest prices
1252-0657	70.0 mm²	Visit cef.co.uk for latest prices

6491X PVC SINGLE CORE EARTH CABLE

Code	Conductor	1+
Cut Length Per Metre		
0107-3257	16.0 mm²	£1.58
0024-5842	25.0 mm²	£2.63
0024-5857	35.0 mm²	£3.68
0024-5872	50.0 mm²	£4.96
0024-5887	70.0 mm²	£7.19
0024-5902	95.0 mm²	£9.29

STEEL WIRE ARMOURED CABLE LSOH

- XLPE Insulated steel wire armoured with LSOH sheath
- Specified where smoke and fumes from burning PVC creates a fire safety hazard
- Annealed stranded copper conductors
- BS 6724
- Earth cable required for compliant installation [sold separately]

H6942X LSOH 2 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3502	1.5 mm²	£0.92
0114-3505	2.5 mm²	£1.20
0114-3508	4.0 mm²	£1.55
0114-3511	6.0 mm²	£2.06
0114-3514	10.0 mm²	£2.99
0114-3517	16.0 mm²	£4.54
0138-6550	25.0 mm²	Visit cef.co.uk for latest prices
0138-6553	35.0 mm²	Visit cef.co.uk for latest prices

H6943X LSOH 3 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3520	1.5 mm²	£1.09
0114-3523	2.5 mm²	£1.48
0114-3526	4.0 mm²	£1.99
0114-3529	6.0 mm²	£2.67
0114-3532	10.0 mm²	£4.18
0114-3535	16.0 mm²	£6.05
0138-6562	25.0 mm²	Visit cef.co.uk for latest prices
0138-6565	35.0 mm²	Visit cef.co.uk for latest prices
0859-8184	50.0 mm²	Visit cef.co.uk for latest prices
0552-4144	70.0 mm²	Visit cef.co.uk for latest prices

H6944X LSOH 4 CORE

Code	Conductor	1+
Cut Length Per Metre		
0114-3538	1.5 mm²	£1.26
0114-3544	2.5 mm²	£1.77
0114-3547	4.0 mm²	£2.47
0114-3550	6.0 mm²	£3.53
0114-3553	10.0 mm²	£5.23
0114-3556	16.0 mm²	£7.71
0138-6586	25.0 mm²	Visit cef.co.uk for latest prices
0138-6589	35.0 mm²	Visit cef.co.uk for latest prices
0138-6592	50.0 mm²	Visit cef.co.uk for latest prices
0138-6595	70.0 mm²	Visit cef.co.uk for latest prices
0138-6598	95.0 mm²	Visit cef.co.uk for latest prices

H6945X LSOH 5 CABLE

Code	Conductor	1+
Cut Length Per Metre		
0131-4472	1.5 mm²	£1.53
0131-4475	2.5 mm²	£2.16
0131-4478	4.0 mm²	£2.99
0131-4481	6.0 mm²	£4.29
0131-4484	10.0 mm²	£6.34
0114-3559	16.0 mm²	£9.75
0138-6475	25.0 mm²	Visit cef.co.uk for latest prices
0138-6478	35.0 mm²	Visit cef.co.uk for latest prices
1252-0660	50.0 mm²	Visit cef.co.uk for latest prices
1252-0663	70.0 mm²	Visit cef.co.uk for latest prices

6491B LSOH SINGLE CORE EARTH CABLE

Code	Conductor	1+
Cut Length Per Metre		
0042-3550	25.0 mm²	£3.02
0024-5962	35.0 mm²	£4.94
0107-3416	50.0 mm²	£6.28
0107-3434	70.0 mm²	£8.70
0107-3449	95.0 mm²	£10.78

EASY WAYS TO PAY...

Whether online or in-store you can pay via

CASH
In-store

CARD
In-store and online

PAYPAL
Online

BANK TRANSFER
Subject to account type

TEST EQUIPMENT

The government's target to have a minimum of 20 million EV charging stations installed before 2030 provides electricians with an enormous opportunity to generate new business.

However, the ongoing test and maintenance of charging stations will be a difficult challenge for the industry, but those who get in early, with the right equipment for testing installations, will achieve significant competitive advantage.

The 18th Edition Wiring Regulations specify that it's a requirement for protective measures against DC fault current to be designed into all EV charge stations.

When an electric vehicle is being charged, if the DC fault current is greater than 6 mA, it could change the characteristics of a Type A RCD due to its core saturation. This could result in the Type A failing to trip and lack of detection of the DC fault leading to increased risk of electric shock and compromised safety.

The new wiring regulations approve two provisions of DC fault protection:

- Type B RCD, which is suitable for AC and DC fault protection
- Type A RCD and appropriate equipment that provides disconnection of the supply in case of DC fault current greater than 6 mA

Ask in-store or visit cef.co.uk/plugintoev for more information on EV test equipment.

EV STATION ADAPTOR – EV-500-UK

BEHA-AMPROBE

- Full range of safety and functional tests achievable through connection to a multifunction installation tester
- Signal outputs for oscilloscope connection
- Simulates vehicle connection and tests all Mode 3 EV stations
- Supplied with Type 2 connector for testing both tethered cables and socket outlets
- Check for hazardous touch voltage with PE pre-test
- Proximity pilot simulation selector states: Open circuit, 13A, 20A, 32A and 63A
- Control pilot simulation selector states: A, B, C and D
- Error simulation states: E and PE
- Measuring terminal socket outputs for connection of installation tester
- Socket output for connection of an external load to check the correct operation of the power meter
- LED voltage indication
- IP54
- Warranty: 1 Year

INCLUDES:

- Type 2 male plug connector
- Instruction manual
- Soft carry case

2607-3829

ONLY £499.95 +VAT

MULTIFUNCTION TESTER – MFT1741

Megger

- Data storage and Bluetooth® communication
- Simple colour coded test selection with large clear display
- Earth electrode testing
- Continuity and resistance test currents: 200 mA and 15 mA
- Insulation test voltages: 100, 250, 500 and 1,000V
- 2 and 3 Wire non-trip loop testing
- PSCC, PFC testing and Max. Zs measurement
- Full range of RCD tests including 3 phase, ramp and auto tests for Type AC, A, S and B RCDs
- Phase rotation and true RMS measurement
- Warranty: 1 Year [3 Years on registration]

INCLUDES

- 3 Wire lead set with probes and croc clips
- Switched probe
- Mains plug test lead
- Neck strap
- Calibration certificate
- AC Battery charger
- 6 x NiMH Rechargeable batteries
- Large soft pouch with extra storage

*If you require your MFT1741 to be upgraded to the MFT1741+ with the added function of 6mA DC RCD test this can be arranged with Megger service which will include a calibration certificate, for further information please contact your local sales or store representative

2315-1076

ONLY £895.00 +VAT

EV STATION ADAPTOR – A 1532

METREL

- Full range of safety and functional tests achievable through connection to a multifunction installation tester – sold separately [2594-2660]
- Simulates vehicle connection and tests all Mode 3 EV stations
- Supplied with Type 2 connector for testing both tethered cables and socket outlets
- Proximity pilot simulation selector states: Open circuit, 13A, 20A, 32A and 63A
- Control pilot simulation selector states: A, B, C, D and E
- Error simulation states: E
- Measuring terminal socket outputs for connection of 3 phase installation tester
- Socket output for connection to single phase installation tester
- LED voltage indication
- IP40
- Warranty: 1 Year

INCLUDES:

- Type 2 male plug connector
- Instruction manual
- Soft carry case

2594-2483

ONLY £369.95 +VAT

MULTIFUNCTION TESTER – MI3125BT

METREL

- Eurolink application: View test results on PC, tablet and smartphone
- Test Type B, DC sensitive RCDs – ideal for EV charger testing
- Insulation resistance, continuity, loop and line resistance
- Full range of RCD tests with clear pass / fail through red and green LEDs on either side of display
- True RMS and frequency [AC / DC]
- On / Off switchable auto start for RCD and loop test
- Insulation testing at 50 to 1,000V
- Phase sequence indicator
- Earth Resistance
- Warranty: 1 Year

INCLUDES:

- 3 Wire test lead set
- Shucko plug cable
- Croc clips and probes
- USB Cable
- Calibration certificate
- Software
- Instruction manual / CD
- Carry case / strap
- 6 x Batteries: Rechargeable NiMH AA

2594-2660

ONLY £495.00 +VAT

EV STATION TESTER – CHARGECHECK

ROLEC EV

- Full range of safety and functional tests achievable through connection to a multifunction installation tester
- Simulates vehicle connection and tests all Mode 3 EV stations
- Latching test button
- Supplied with Type 2 connector for testing both tethered cables and socket outlets
- Fitted with Type 1 socket for testing Type 1 tethered cables
- Socket output for connection to installation tester
- LED Polarity checker
- IP65
- Warranty: 1 Year

INCLUDES:

- 1 m Type 1 to Type 2 adaptor cable
- Carry bag

2077-4464

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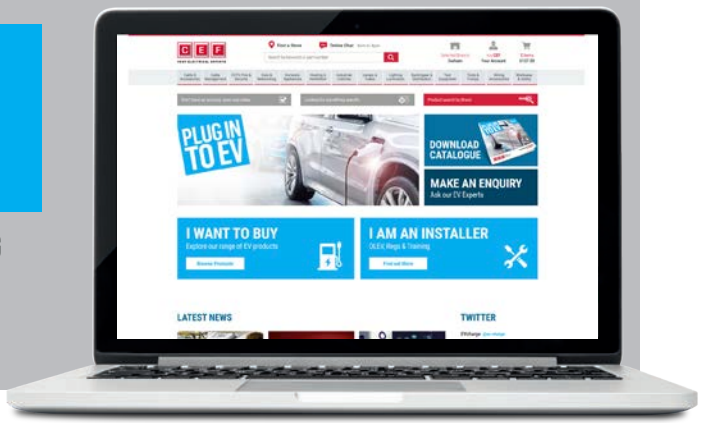

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Your electric vehicle charging guide
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