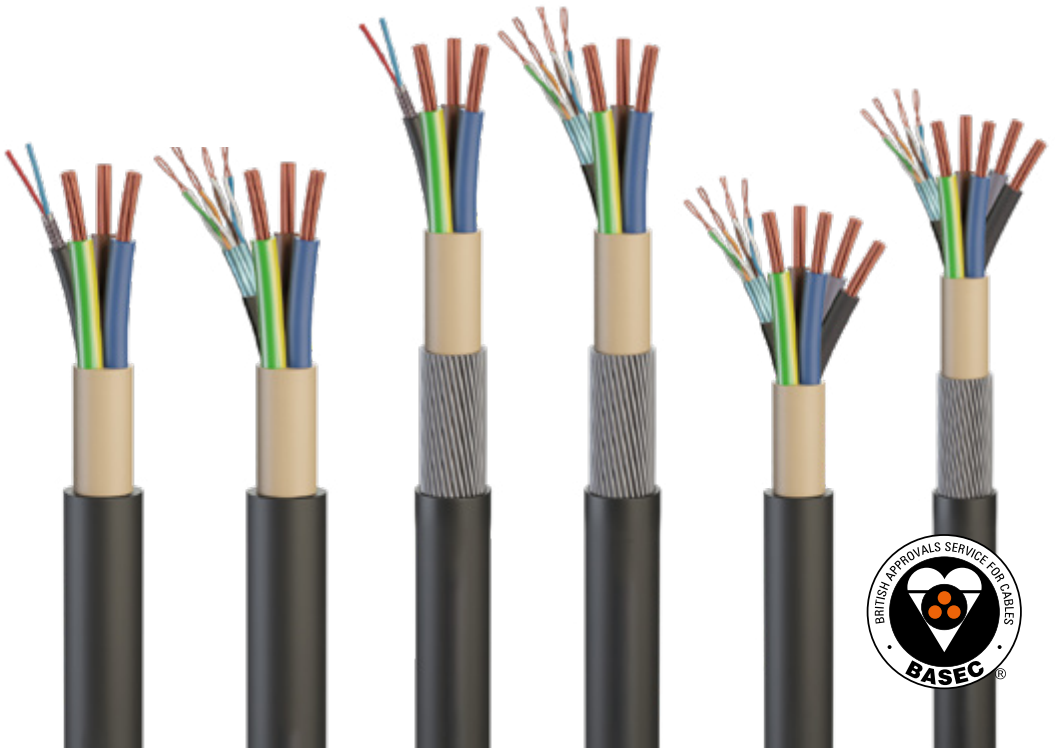




EV-ULTRA CABLES

An innovative cable designed and manufactured for electric vehicle charge points. Incorporates power conductors and data within the same cable making it neater, faster, and easier to install.



ARE YOU READY?

EV Chargers to be installed in every new build.

The UK Government and other bodies have identified that significant investment is required with regards to the infrastructure of electric vehicle charge points.

New legislation is being discussed which would make it mandatory for all newly built homes and offices in the

UK to incorporate the installation of a smart electric vehicle charger.

This legislation would create even more demand for the installation of electric vehicle chargers.

Be ready with our range of EV cables, the faster, neater and easier installation process.



TECHNICAL DETAILS



Technical Details

Running data and power in a single cable is a concern for many electricians, with most believing that segregation of power (Band II) and data (Band I) is always required.

It is however already common to find power and data inside one cable in many existing applications, an example is DALI networks which incorporate data within a 5 core power cable.

It is recommended that the screening of the data cable is terminated to earth.

What do the regulations say?

Voltage Band I is defined as levels of voltage which are too low to provide serious electric shocks; effectively this limits the band to extra-low voltage (ELV), including telecommunications, signalling, bell, control and alarm circuits.

Voltage Band II is defined as all voltages which are used in electrical installations not included in Band I. This means that all 230V supplies are included in Band II.

Proximity of electrical services (extract from 528.1) - Except where one of the following methods is adopted, neither a Band I nor a Band II circuit shall be contained in the same wiring system as a circuit of nominal voltage exceeding that of low voltage, and a Band I circuit shall not be contained in the same wiring system as a Band II circuit. (i) - Every cable or conductor is insulated for the highest voltage present. EV-Ultra® consists of power conductors and data cables that are rated to the same nominal voltage - therefore segregation of power and data is not required.

Proximity of communications cables (extract from 528.2) - Special considerations of electrical interference, both electromagnetic and electrostatic, may apply to telecommunication circuits, data transfer circuits and the like.

EV-Ultra® has been designed with these considerations in mind, it incorporates super screened, twisted pair data cables and is also constructed with a lay length that reduces interference. Laboratory and on-site installation tests have also been conducted and no interference or degradation of signal was recorded.

3 CORE + 2 CORE DATA CABLE



3 CORE + 2 CORE DATA CABLE

For single phase applications. Available in Tuff Sheath® and SWA.



Cable Construction

Conductor: Plain Annealed Copper Class 2 Stranded to BS EN 60228

Insulation: Thermosetting XLPE Type GP8 to BS 7655-1.3

Bedding: CarbonTek®

Steel Wire Armour: Galvanised steel wire armour (where applicable)

Sheathing: CarbonTek®

Data Cable: 2 core super screened data cable

Application

The cable is designed for use in the installation of electric vehicle charge points. The cable incorporates power conductor and a 2 core super screened data cable encapsulated in a double sheathed design for extra protection. Whilst designed for use in electric vehicle charge points, the cable is also suitable for other installations where power and a 2 core data/signal cable is required. These cables are designed to be installed in air, clipped to surface, on cable tray/ladder work and embedded in concrete. The cables can be laid direct in the ground providing that suitable mechanical protection is in place.

NOW USING

CARBONTEK®



TECHNICAL INFORMATION



UNDERSTANDING THE PRODUCT CODES

	CONDUCTOR SIZE	3 CORE	5 CORE	2 CORE DATA	4 PAIR CAT5 DATA	STEEL WIRE ARMOUR	CARBONTEK®
222-1595	4.0mm ²	✓		✓			✓
222-1598	4.0mm ²	✓		✓		✓	✓
222-1599	6.0mm ²	✓		✓			✓
222-1602	6.0mm ²	✓		✓		✓	✓

DIMENSIONAL DETAILS:

	NUMBER & NOMINAL CSA OF CONDUCTORS	NOMINAL OVERALL DIAMETER OF BEDDING	APPROX. OVERALL DIAMETER	APPROX. WEIGHT
222-1595	3 × 4.0mm ² + DATA	11.0mm	13.6mm	265kg/km
222-1598	3 × 4.0mm ² + DATA	11.0mm	15.0mm	480kg/km
222-1599	3 × 6.0mm ² + DATA	12.0mm	14.4mm	350kg/km
222-1602	3 × 6.0mm ² + DATA	12.0mm	16.8mm	625kg/km

ELECTRICAL PROPERTIES:

	4.0mm ²	6.0mm ²
Maximum current rating (A)	45	58
Voltage drop (mV/A/m)	12	7.9

Weight and dimensional information is provided as an approximate guide only.

Current carrying capacities based on ambient temperature of 30°C and conductor operating temperature of 90°C. Refer to BS7671 for further details including grouping factors and ambient temperatures other than 30°C



STANDARD CORE COLOURS
3 core

3 CORE + 4 PAIR DATA



3 CORE + 4 PAIR DATA

For single phase applications. Available in Tuff Sheath® and SWA.



Cable Construction

Conductor: Plain Annealed Copper Class 2 Stranded to BS EN 60228

Insulation: Thermosetting XLPE Type GP8 to BS 7655-1.3

Bedding: CarbonTek®

Steel Wire Armour: Galvanised steel wire armour (where applicable)

Sheathing: CarbonTek®

Data Cable: 4 pair super screened data cable

Application

The cable is designed for use in the installation of electric vehicle charge points. The cable incorporates power conductor and a 4 pair super screened data cable. encapsulated in a double sheathed design for extra protection. Whilst designed for use in electric vehicle charge points, the cable is also suitable for other installations where power and a 4 pair data/signal cable is required. These cables are designed to be installed in air, clipped to surface, on cable tray/ladder work and embedded in concrete. The cables can be laid direct in the ground providing that suitable mechanical protection is in place.



STANDARD CORE COLOURS
3 core

TECHNICAL INFORMATION



UNDERSTANDING THE PRODUCT CODES:

	CONDUCTOR SIZE	3 CORE	5 CORE	2 CORE DATA	4 PAIR CAT5 DATA	STEEL WIRE ARMOUR	CARBONTEK®
222-1596	4.0mm ²	✓			✓		✓
222-1597	4.0mm ²	✓			✓	✓	✓
222-1600	6.0mm ²	✓			✓		✓
222-1601	6.0mm ²	✓			✓	✓	✓

DIMENSIONAL DETAILS:

	NUMBER & NOMINAL CSA OF CONDUCTORS	NOMINAL OVERALL DIAMETER OF BEDDING	APPROX. OVERALL DIAMETER	APPROX. WEIGHT
222-1596	3 × 4.0mm ² + Cat5e FTP	12.5mm	14.8mm	315kg/km
222-1597	3 × 4.0mm ² + Cat5e FTP	12.5mm	16.5mm	510kg/km
222-1600	3 × 6.0mm ² + Cat5e FTP	13.6mm	16.0mm	410kg/km
222-1601	3 × 6.0mm ² + Cat5e FTP	13.6mm	18.6mm	700kg/km

ELECTRICAL PROPERTIES:

	4.0mm ²	6.0mm ²
Maximum current rating (A)	45	58
Voltage drop (mV/A/m)	12	7.9

Weight and dimensional information is provided as an approximate guide only.

Current carrying capacities based on ambient temperature of 30°C and conductor operating temperature of 90°C. Refer to BS7671 for further details including grouping factors and ambient temperatures other than 30°C

THE EV-ULTRA® RANGE



	CONDUCTOR SIZE	3 CORE 	5 CORE 	2 CORE DATA	4 PAIR CAT5 DATA	STEEL WIRE ARMOUR	CARBONTEK®
222-1595	4.0mm ²	✓		✓			✓
222-1598	4.0mm ²	✓		✓		✓	✓
222-1599	6.0mm ²	✓		✓			✓
222-1602	6.0mm ²	✓		✓		✓	✓
222-1596	4.0mm ²	✓			✓		✓
222-1597	4.0mm ²	✓			✓	✓	✓
222-1600	6.0mm ²	✓			✓		✓
222-1601	6.0mm ²	✓			✓	✓	✓
245-6407	6.0mm ²		✓		✓		✓
245-6408	6.0mm ²		✓		✓	✓	✓

THE EV-ULTRA® RANGE



CLEATS AND GLANDS



EV-Ultra® 3 Core with 4 Pair Data (CAT5)

	DIAMETER	GLAND	CLEAT
222-1595	15	Compression gland to suit	6
222-1600	16.5		7
222-1597	16.7	20	7
222-1601	19.0	20	8

EV-ULTRA® 3 CORE WITH 2 CORE DATA

	TYPE	DIAMETER	GLAND	CLEAT
222-1595		13.6	Compression gland to suit	6
222-1599		14.4		6
222-1597		15.0	20	6
222-1602		16.8		7

EV-Ultra® 5 Core with 4 Pair Data (CAT5)

	TYPE	DIAMETER	GLAND	CLEAT
245-6407		17.8	Compression gland to suit	8
245-6408		20.5	25	9

MUCH MORE THAN JUST AN EV CABLE

Power and data connectivity combined in one cable.

Hard wired data connectivity is a superior and secure alternative to using WiFi, resulting in a faster, neater and easier installation process.

Available in both PVC Tuff-Sheath and SWA variants.



Electric Vehicle Charging Points



CCTV Column Wiring



Gate Access (most new video intercom systems use IP equipment, even PoE too), Cat5 Version



Outbuilding Wiring to Enable Access Point and/or IP CCTV Inclusion



Caravan Sites, for Network Distribution either for Access Points or Individual Plot Network



Solar/Battery Inverter Wiring for Export Limitation CT



5 CORE + 4 PAIR DATA

5 CORE + 4 PAIR DATA

For three phase applications. Available in Tuff Sheath® and SWA.

Cable Construction

Conductor: Plain Annealed Copper Class 2 Stranded to BS EN 60228

Insulation: Thermosetting XLPE Type GP8 to BS 7655-1.3

Bedding: CarbonTek®

Steel Wire Armour: Galvanised steel wire armour (where applicable)

Sheathing: CarbonTek®

Data Cable: 4 pair super screened data cable

Application

The cable is designed for use in the installation of electric vehicle charge points. The cable incorporates power conductor and a 4 pair super screened data cable. encapsulated in a double sheathed design for extra protection. Whilst designed for use in electric vehicle charge points, the cable is also suitable for other installations where power and a 4 pair data/ signal cable is required. These cables are designed to be installed in air, clipped to surface, on cable tray/ladder work and embedded in concrete. The cables can be laid direct in the ground providing that suitable mechanical protection is in place.



STANDARD CORE COLOURS





UNDERSTANDING THE PRODUCT CODES:

	CONDUCTOR SIZE	3 CORE	5 CORE	2 CORE DATA	4 PAIR CAT5 DATA	STEEL WIRE ARMOUR	CARBONTEK®
245-6047	6.0mm ²		✓		✓		✓
245-6408	6.0mm ²		✓		✓	✓	✓

DIMENSIONAL DETAILS:

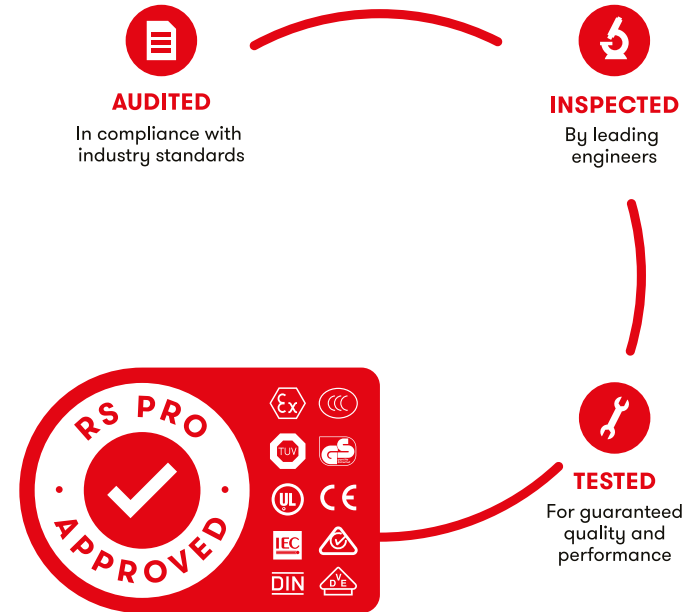
	NUMBER & NOMINAL CSA OF CONDUCTORS	NOMINAL OVERALL DIAMETER OF BEDDING	APPROX. OVERALL DIAMETER	APPROX. WEIGHT
245-6407	5 × 6.0mm ² + Cat5e FTP	15.5mm	17.9mm	500kg/km
245-6408	5 × 6.0mm ² + Cat5e FTP	15.5mm	20.5	836kg/km

ELECTRICAL PROPERTIES:

	6.0mm ²	10mm ²	16mm ²
Maximum current rating (A)	52	71	91
Voltage drop (mV/A/m)	6.8	4.0	2.5

RS PRO products are audited against demanding international standards, inspected for durability and consistency and tested by leading engineers.

Only when products have been through this process are they awarded our seal of approval, quality that can be trusted. Confidence in this process is reflected in our long product warranties, proof that our products will consistently deliver the quality you expect for a long time to come.





rspro.com