

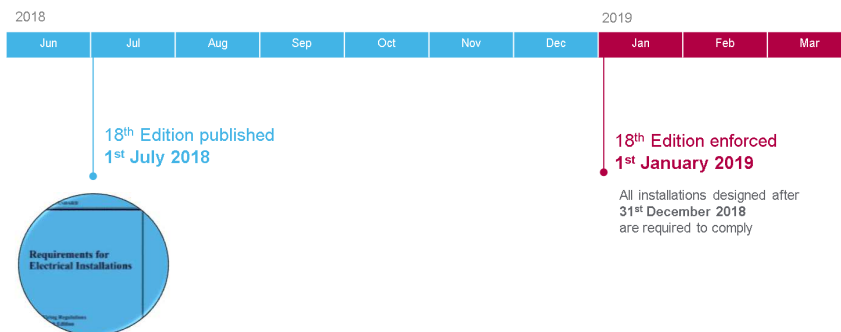
Easy9 consumer units - A conventional busbar system

Affordable circuit protection you can depend on.



- **Enclosure:** can be modified to suit split and configuration on site.
- **Flexible split load configuration option:** ensures mainstream applications can be catered for with a single consumer unit.
- **Rigid metal DIN rail:** solid to avoid flexing and raised for cabling flexibility.
- **Secure busbar guard:** requires tool for removal, ensuring more safety for you.
- **MCB style blanking module:** additional end user safety feature, requiring enclosure cover to be removed first.
- **Reversible enclosure door:** central fixing points enable the door to open from top or bottom, providing flexibility and increased installation options.

18th Edition ready with Surge Protection Devices



Protect electronics from damage or destruction due to overvoltages with Surge Protection Devices from the Easy9 consumer unit range.

New Regulation 443.4 requires protection where overvoltage:

- results in serious injury to, or loss of, human life (e.g. hospitals)
- results in interruption of public services or damage to cultural heritage (e.g. bus stations)
- results in interruption of commercial or industrial activity (e.g. banks)
- affects a large number of co-located individuals (e.g. blocks of flats)

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For all other cases a risk assessment must be performed. The risk assessment to determine if protection is needed for both residential and commercial applications involves a **CRL (calculated risk level) formula**.

Exception: single dwelling units where the total value of the installation and equipment therein does not justify such protection.

The CRL is found by the following formula: $CRL = f_{env} / (L_p \times N_g)$

where:

- **f_{env}** is an environmental factor and the value of f_{env} shall be selected according to Table 443.1
- **L_p** is the risk assessment length in km
- **N_g** is the lightning ground flash density (flashes per km² per year) relevant to the location of the power line and connected structure (see Lightning flash Density N_g map of UK in Figure 443.1)

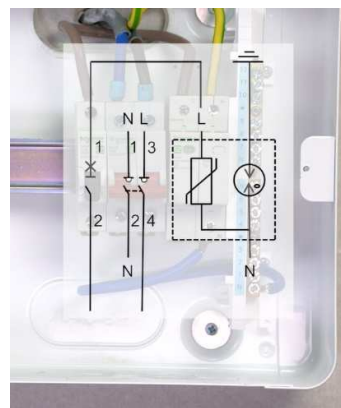
The risk assessment length LP is calculated as follows:

$$LP = 2 LPAL + LPCL + 0.4 LPAH + 0.2 LPCH \text{ (km)}$$

where: LPAL is the length (km) of low-voltage overhead line;
 LPCL is the length (km) of low-voltage **underground** cable;
 LPAH is the length (km) of high-voltage overhead line;
 LPCH is the length (km) of high-voltage **underground** cable

The total length (LPAL + LPCL + LPAH + LPCH) is limited to 1 km, or by the distance from the first overvoltage protective device installed in the HV power network (see Figure 47) to the origin of the electrical installation, whichever is the smaller

Source: BEAMA GUIDE TO SURGE PROTECTION DEVICES (SPDs): July 2018



Surge Protection Devices

Material Ref	Description
EZ9L33620	EZ9 Surge Arrestor Device T2 1P-N 20kA
EZ9L33620KIT	EZ9 Surge Arrestor KIT T2 1P-N 20Ka, c/w MCB & cable links

Surge Protection consumer unit (configured)

Material Ref	Description	HxWxD (MM)
EZ9ESL3R5R5DMCU	EZ9 3,5,5 split consumer unit c/w 100A SW, SPD, 80A RCCBx2	277x537x120
EZ9ESLR7R6DMCU	EZ9 7+6 split consumer unit c/w 100A SW, SPD, 80A RCCBx2	277x537x120

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