



# The circuit protection boom

Circuit protection devices are an essential part of every home, business or other building with electricity – so you'd imagine the demand for these components would stay fairly stable, yet there's been a huge uplift in sales of late, says Niglon's commercial director Paul Dawson

Niglon has seen a 62% increase over the past six months and when you investigate the factors leading to this upturn, there's been a unique combination of new Government guidelines and the global Coronavirus pandemic which have had an impact.

## New landlord regulations

The Government has introduced regulations – which have applied to all new privately rented properties since June 2020 and existing property since June this year – which ensures all landlords are taking precautions to protect their tenants.

The Electrical Safety Regulations require an inspection by a 'qualified and competent' person at least every five years, with the resulting inspection condition report being shared with the tenant – and, if necessary, the local authority. The local authority can arrange for remedial work to be undertaken, if the tenant agrees and the landlord has not taken action; and they can then recover the cost of the work from the landlord plus a fine of up to £30,000.

## How does this affect circuit protection solutions?

The vast majority of landlords will always have arranged regular inspections of their properties in the interest of safety (and resolving any issues at the earliest opportunity before they potentially become costly or dangerous problems) – but those who may have been less vigilant about the electrics in their properties are more likely to be arranging checks now, in order to avoid the potential financial penalties associated with failing to comply with the new regulations.

More checks mean more potential issues highlighted – and with changes to wiring regulations also being introduced in the UK, it means new circuit protection devices are in demand.

## 18th edition amends

After a period of uncertainty, it's now expected that the second amendments to the 18th edition wiring regulations will be published on 28th March 2022 and will take effect exactly a year later. Previous updates have always included a transition period of roughly six months, where any components designed before the specified date did not need to meet the new specifications.

But this time, the regulations have no such transition period so the entire supply chain is having to act much more quickly to ensure the changes are implemented sooner rather than later, with less than 18 months to go now until the introduction date.

The amendments are likely to see arc fault detection devices (AFDDs) required on all single-phase final circuits (not exceeding 32A) supplying socket outlets and fixed current-using equipment. Development is well underway to ensure Niglon has an offering to meet the requirements ahead of the changes being implemented.

Previously, section 531.3.3 stated AC Type RCD could be used in 'standard' installations, with no clarification of what was meant by the term standard. Once the amendments come into place, A Types must be used for all installations where there is a DC pulsated residual current, as they can detect and protect against the risk of electric shock. Having reviewed the proposed amendments, the team at Niglon halted production of its AC Type RCDs and is concentrating instead on production of A Type.

A clarification on section 536.4.202 also led to action for the Niglon team (again much earlier than needed to ensure their customers were well prepared for the changeover date). Previously, this regulation had stated the design current should not exceed the rated current of the assembly, with many contractors using diversity factors to calculate the correct selection of RCDs and switches.

As of the end of March next year, both RCDs and Switch Isolators must be protected by an Overcurrent Protective Device, selected according to the manufacturers' instructions.

Since the clarification has been out for consultation, Niglon has been advising

customers to only use RCDs within consumer units which have a current value equal to or greater than that of the electrical supply company's upstream main cut out fuse. To that end, the 63A RCDs within consumer units were discontinued and production was moved to only 80A and 100A options.

## Lifestyle changes

Another major contributing factor to this boom in demand for circuit protection devices has been the numerous lifestyle changes which we've seen in the UK over the past few years.

One such change is the introduction of electric vehicles. While there's not yet one sitting on the driveway of every home in the UK, electric and hybrid vehicles accounted for 10% of new car registrations in 2020 (according to Statista) and there are now 300,000 pure electric cars on the roads – and around the same number of hybrids. There are more than 25,000 public charging devices for these cars around the UK (according to Next Green Car) and of course, many owners will have chosen to install charging points in their own home for convenience – especially given the Government grant available which makes this a more affordable option.

With a visit from an installer necessary, and the increased demand on the home's electrical system, it's inevitable that some electric vehicle owners will need to upgrade their circuit protection devices in order to make best use of an at-home charging point.

Another item growing in popularity while simultaneously adding pressure on a home's circuit is a hot tub. With sales increasing exponentially throughout pandemic lockdowns and beyond (up to 1,000% for some companies!) – and the hot tub seemingly being the new 'must-have' item for every home, again the extra capacity required to run them will have contributed towards the increased demand for circuit protection components. Even for those who haven't invested in a hot tub, Rated People report a 12% uprise in people renovating their homes last year – again, an activity likely to bring about the need for newer circuit protection devices, especially in older properties.

And while a new hot tub or some home improvements might have been a welcome lifestyle change for UK residents – there was another, much more significant, impact of Coronavirus as thousands more began working from home. While a proportion of these have now returned to their regular place of work, the added pressure on the electrical circuits of the nation's residential properties will have no doubt been a factor in the uplift in sales.

