

A CASE STUDY FROM KOHLER UNINTERRUPTIBLE POWER

KUP protecting firefighting smoke extraction services at new urban development

Kohler Uninterruptible Power was recently selected to provide critical power protection for the essential firefighting services at a new urban development within the 3,400 home masterplan for Acton Gardens, London. The UPS units in question have been installed to support critical fire-fighting lifts and Mechanical Automatic Opening Vents for smoke clearance.

Acton Gardens is an award-winning urban village spanning 52 acres in west London. The development is a joint venture between Countryside, the UK's leading mixed-tenure developer, and L&Q, one of the UK's leading housing associations and forms part of a long-term regeneration designed to reshape the lives of residents. Acton Gardens will provide 3,400 new homes, establishing a thriving community hub which will incorporate expansive open green spaces, medical facilities and a public square.

KUP worked on the project alongside the main electrical contractor for the development, Hanover Building Services Contractors. Hanover Building Services specialise in various installation types from estate regeneration to high end residential refurbishment and hospitals. As Charlie Weeden, Director for Hanover Building Services states:

“KUP were already specified for the project but we would never have felt the need to look elsewhere. KUP have always been very competitive on price, their team are knowledgeable, helpful, and their products are technically



advanced and ideal for supporting the essential firefighting systems installed at the development”.

“It is crucial that the UPS installed is 100% reliable to avoid a disastrous fire outbreak in the building. If one of the smoke extraction systems were to fail, it could compromise egress from the building in the event of a fire and as a result lives could be at stake” says Weeden

KUP recommended the [PowerWAVE 5000/TP](#) uninterruptible power supply for this project for its superior ability to support smoke extraction fans located in the stairwells of the buildings and fire-fighting lifts. The PowerWAVE 5000/TP is a standalone, three-phase UPS available in seven power ratings from 10 to 50kVA. The system is also available in three different cabinet sizes, enabling the user to select the ideal internal battery capacity for the critical load. A larger external battery cabinet can be also connected, as was required by the client



for this life-safety project where a 3 hour run time was mandatory. With a small footprint and power density of up to 100kW/m², the PW5000/TP was the right choice for the development where space is at a premium. The near unity input power factor minimizes cabling and fusing costs due to the resulting lack of reactive power consumption. In addition to these key features, the UPS is designed with state-of-the-art efficiency of up to 95.5%, helping to reduce carbon footprint and running costs.

A total of eight PowerWAVE 5000/TP UPS ranging between 30kVA to 50kVA have been installed within the development across the five phases, since 2016. In addition to these, KUP also recommended the installation of a PowerWAVE 6000 200kVA UPS to back-up the vital sprinkler system. The PowerWAVE 6000 is a standalone three-phase UPS with a footprint of up to 0.64m² (up to 200kVA) and efficiency of up to 96%. It offers both intelligent energy management and maximum power protection, whilst using less energy, to provide notable cost savings and a reduced impact on the environment. Weeden finishes by saying;

“Not only is it important to have a reliable, quality UPS at this development, but it is essential to have a service provider you can trust. KUP offer outstanding technical support, timely logistics, and their engineers are exceptionally knowledgeable, so we were able to rely on them to install and commission the UPS on time and without any issues. I would absolutely recommend KUP for their exemplary services and competitive cost over five phases of the Acton Gardens project.”