

Welcome to our “e-REW Express”. Taking into consideration the range of electrical appliances commonly used nowadays in modern households, it is reckoned that the total load could easily exceed 60 A single phase for residential flats.

In view of the above, we recommend that developers, architects, E&M consultants and contractors should adopt 3-phase electricity supply for residential flats in new buildings. In this issue of “e-REW Express”, we will highlight the advantages of adopting 3-phase supply in residential flats.

We hope you will find the information of this e-REW Express useful. If you have any suggestion, please send an email to us at mail@hkelectric.com or contact our Customer Installation Department on 2887 3455 so that we can further improve our service.

Adoption of 3-phase Supply for Residential Flats in New Buildings

In the light of the rise in standard of living in the recent years, the aspiration to improve quality of living homes in our community is getting higher. Nowadays, a much wider range of electrical appliances such as electric water heaters, kitchen apparatus, etc., are increasingly popular in modern households. 3-phase supply is highly recommended ensuring that adequate capacity of electricity supply is provided so that the occupants may avail themselves of the modern range of electrical appliances to enjoy quality living standard.

Example of Electrical Appliances in Modern Household:



Induction Cooker



Oven



Dishwasher



Dehumidifier



Tumble Dryer

Apart from ensuring an adequate capacity of electricity supply, the design for the residential flats to receive 3-phase supply also has the following advantages: -

1. It minimizes unbalanced load condition and overloaded condition of the communal installations, such as lateral mains and/ or rising mains due to unbalanced connection and/or unbalanced load patterns that could often occur with single-phase installations. This is because load balancing can be more easily achieved with 3-phase installations in the design and construction stages. Even in the exceptional circumstances when subsequent load balancing work is required, the work will be much simpler with 3-phase installations.
2. It reduces energy loss in the neutral conductors when compared with single-phase installation.
3. It enables the occupants to use 3-phase electrical appliances at home.

Example of 3-phase Household Electrical Appliances:



**Instantaneous Type
Electric Water Heater**



**Variable Refrigerant Volume
Air Conditioning System**

We are pleased to provide our advisory service to Registered Electrical Contractor/Worker (REC/REW) regarding the electrical design for residential flats. They are advised to provide us with the schematic wiring diagram for our consideration.