

## What is Industrial Electrical Power Plugs (豬咀)?

### 甚麼是豬咀?

Living in modern world, electric operated equipments have become indispensable and everywhere. However, do you exactly know how to connect your electric equipment to the power source?

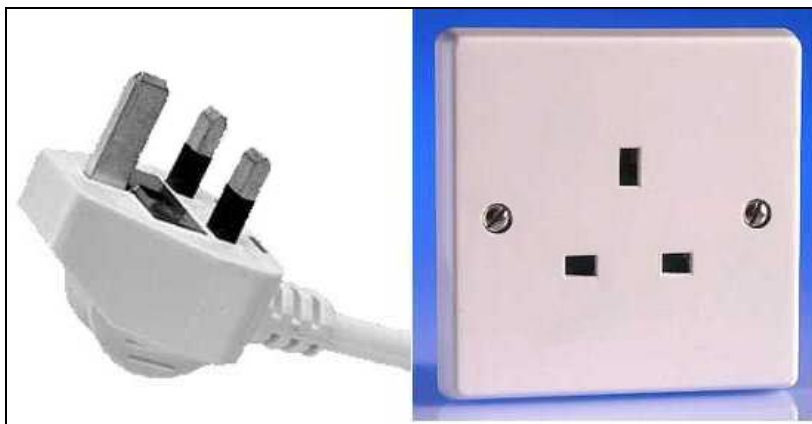
生活在科技發達的社會裡，電力使用已成為人類生活不可或缺的一部分。但是，你們究竟有沒有想到，電源與電力裝置是怎樣連接的呢？

In case you are not working in the electrical field, your answer may be: “Use the electric wire to connect the electric equipment to the power source.” This answer is only half correct. In our daily life, the electric connections comes in a great variety. The simplest form will be your household plugs and sockets.

如果對電力毫無認識的話，相信答案會是：「用電線把電源和電氣裝置接駁便可以的嗎？」這個答案基本上是對的。但是，在實際操作上，不同場合、不同用途的電氣裝置便需要不同的附加裝置，最簡單的便是電插蘇 (plug)，電插頭(socket)等等……

Even for simple plugs and sockets, the designers have to take a number of factors into considerations including safety, reliability and user-friendliness. For instance, those designed for indoor use will be a simple device that most of you are familiar with.

事實上，電氣裝置的設計人員便要在安全、方便使用 (或重覆接駁上的方便程度) 的範圍裡面作出不同程度的平衡。舉例說：要是在普通家庭或在其他室內地方，電插蘇或電插頭只需在絕緣、電負荷 (電流量) 那些安全範圍上作出考量便可以。所以，最後的產品設計也非常簡單 (如下圖)。



### 香港常用的 13A 電插蘇和電插頭 (英國標準 BS1363 Type G)

#### Typical 13A Electric Plug and Sockets using in Hong Kong (under BS1363 Type G)

For those outdoor usages (e.g. theme parks/playgrounds), the design would get much more complicated as factors like dust and water has to be considered and protected against.

若是要在室外地方使用電力的話 (比如遊樂場) ，電插頭的防水防塵效能便成為其中一個重要因素。因為在室外環境裡面，過量的水 (或水蒸氣) 和塵埃是會影響電力絕緣性能，情況嚴重的話是會導致漏電，電線短路，做成危險。

In Hong Kong, water-proof electric plugs (commonly called 豬咀) were designed under European International Standard IEC 60309:1997 (or under BS4343). Different voltage applications would have different color codes: For example, single phase AC electric plugs (200-250V) would be colored in BLUE, three phases ones (346-460V) would be colored in RED. Besides colour, outdoor plugs and sockets have different ratings as well.

在香港，防水插頭 (俗稱豬咀) 是根據歐盟標準 IEC 60309:1997 (或英國標準 BS 4343) 而設計的。不同顏色的豬咀也有不同的用途：如單相 (200-250VAC) 豬咀便是藍色，三相豬咀 (346-460VAC) 便是紅色等等。當然，豬咀的「大小」是和電流量的大小有關呢！



**三相豬咀(346-460AC)**  
**3-phase AC Power Plugs (346-460V)**



**單相豬咀(200-250VAC)**  
**1-phase AC Power Plugs (200-250V)**

The next time when you take your family members to playgrounds, ask your children not to interfere with those RED and Blue stuff (豬咀) lying on the ground, otherwise the tiny trains around may suddenly stop!

所以，當下次你一家大小去遊樂場玩的話，千萬不要讓你的小朋友亂踢地上的豬咀，可能令某些機動遊戲裝置停頓呢！

**Typical Electric Plugs using in Playgrounds....**  
**遊樂場常用的豬咀....**

