# 安全充電 放心出行 Safe Charging Worry-free Journey

電動車輛 充電設施 **Charging Facilities** for Electric Vehicles

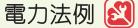
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## 充電模式分類 Classification of Charging Mode

#### 模式1 Mode 1

就充電模式1而言·電動車輛與交流電供電網絡的連接是通過一個標準BS 1363插座和無通訊功能的充電電纜·傳送到電動車輛的車載充電器。

In Mode 1 charging, connection of the electric vehicle (EV) to the AC supply network utilizes a standardized BS 1363 socket outlet and a charging cable without communication function to the on-board charger of the EV.

#### 模式2 Mode 2

就充電模式2而言,電纜控制盒已納入充電連接器內。除最終電路、保護裝置和插座必須要有適當額定值以配合不超逾32安培的較高充電電流外,充電模式2就充電設施提供的固定電力裝置,與充電模式1類似。

In Mode 2 charging, an in-cable control box is incorporated into the charging cable assembly. The provision of fixed electrical installation for charging facility is similar to that for Mode 1 except that the final circuit, protective device and socket outlet shall be of a suitable rating to cater for the higher level of charging current not exceeding 32A.

#### 模式3 Mode 3

就充電模式3而言,電動車輛與交流電供電網絡的連接是通過一個專用的電動車輛供電設備,把導向電纜功能延伸至電動車輛供電設備中的控制設備,控制導向電纜與交流電供電網絡永久連接。視乎電動車輛的車載充電器額定功率,充電模式3可傳送更高的充電電流。

In Mode 3 charging, connection of the EV to the AC supply network utilizes a dedicated EV supply equipment (EVSE) where the control pilot function extends to control equipment in the EVSE, permanently connected to the AC supply network. Subject to the power rating of the on-board charger of an EV, Mode 3 charging can deliver a higher charging current.

#### 模式4 Mode 4

就充電模式4而言,電動車輛與交流電供電網絡的連接是通過一個非車載充電器,把導向電纜功能延伸至與交流電源永久連接的設備。在此充電模式中,單相或三相的交流電會在電動車輛充電裝備中轉化為直流電。直流電透過繫在電動車輛充電設備的充電電纜,供電予電動車輛。

In Mode 4 charging, connection of the EV to the AC supply network utilizes an off-board charger where the control pilot function extends to equipment permanently connected to the AC supply. In this charging mode, either single-phase or three-phase AC is converted to DC within the EV charging equipment. The resulting DC is supplied to the EV via a charging cable that is tethered to the EV charging equipment.

### 故障防護 Fault Protection

充電模式 Charging Mode	插座的種類 Socket Outlet Type	所需的漏電保護裝置 Required Leakage Protection Device
模式 1 Mode 1	標準 BS 1363 插座 ( 連接至交流電供電網絡 ) Standardized BS 1363 socket outlet (connected to an AC Supply network)	
模式 2 Mode 2	標準 IEC 60309 插座 (連接至交流電供電網絡) Standardized IEC 60309 socket outlet (connected to an AC supply network)	A 型電流式漏電斷路器 RCD Type A
模式 3/4 Mode 3/4	標準 IEC 62196 插座 (連接至充電設備) Standardized IEC 62196 socket outlet (connected to an EV supply equipment)	B 型電流式漏電斷路器; RCD Type B; 或 or  A 型電流式漏電斷路器及合適的設備・當直流故障電流超過6mA時可將電源截斷 RCD Type A and appropriate equipment that provide disconnection of the supply in case of DC fault current above 6mA