Table 8.2 Recommended Sizing of Battery Cables and External Battery Side Fuse							
Model No.	Rated Continuous DC Input Current (See Note 1)	Minimum Ampacity of cable as per NEC (See Note 2)	External Battery Fuse Size (Based on Column 2) (See Note 3)	Minimum cable size (See Note 4)			Part No. of Recommended Samlex America Inverter Installation Kit (See Note 5)
				3 ft / 0.91M	6 ft / 1.83M	10 ft / 3.05M	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PST-600-12	80A	100A	80A	AWG#6	AWG#4	AWG#2	DC-1000-KIT
PST-600-24	40A	50A	40A	AWG#10	AWG#10	AWG#6	DC-1000-KIT

NOTES FOR TABLE 8.2

1) Column 2 indicates the value of the rated continuous DC input current drawn from the battery. The overall current capacity of the internal DC input fusing is the same as this value.

2) Column 3 indicates minimum NEC Ampacity for sizing of conductors. NEC Ampacity is not less than 125% of the rated continuous DC input current (Column 2) - Refer to NEC-2014 *(National Electrical Code)* - Section 215.2(A)(1)(a) for Feeder Circuits.

3) Column 4 indicates the size of external fuse in the battery circuit. It is mandatory to install this fuse within 7" of the battery Positive terminal to protect the battery cables against short circuit. Amp rating of the fuse is based on the following considerations:

   a) Not less than the Rated Continuous DC Input Current (Column 2)

   b) Closest Standard Ampere Rating of Fuse has been used - Refer to NEC-2014 (National Electrical Code) - Section 240.6(A)

   c) Where Standard Fuse Rating does not match the required Ampacity (Column 2), the next higher Standard Rating of the fuse has been used - Refer to NEC-2014 (National Electrical Code) - Section 240.4(B)

   d) **Type of fuse:** Fast-acting, Current Limiting, UL Class T (UL Standard 248-15) or equivalent. MRBF-XXX Series fuses made by Cooper Bussmann may also be used. These fuses comply with ISO-8820-6 for road vehicles.

4) Columns 5 to 7 indicate minimum cable conductor size that is based on the following 2 considerations. **Thicker conductor out of the following 2 considerations has been chosen:**

   a) As per guidelines in ISO 10133 for 105°C cable insulation and cable running in free air. Conductor size is based on:
      (i) NEC Ampacity specified at Column 3,
      (ii) Copper conductor with temperature rating of 105°C/221°F and
      (iii) Ambient temperature of 30°C / 86°F