

[Test Result]

$$\text{Eng. HP} = \frac{\text{Volt X Amps}}{700} + \text{Aux HP} \\ \frac{(a)*(x)*(y)*(z)}$$

- (a) is Correction Factor of Intake Air
 (X) is Correction Factor of Fuel density
 (Y) is Correction Factor of Fuel Temperature
 (Z) is Correction Factor of an Latitude

Before Test	After Test
1. Correction Factor	1. Correction Factor
1) Air Temp. Correction Factor	1) Air Temp. Correction Factor
Ventilator Temp. Correction Factor a	Ventilator Temp. Correction Factor a
Input Data (°C) 29 °C	Input Data (°C) 12 °C
Converted Data(°F) 84.2 °F	Converted Data(°F) 53.6 °F
Correction Value 1 0.9786	Correction Value 1 1.0056
Intaken Air Temp. Correction Factor a	Intaken Air Temp. Correction Factor a
Input Data (°C) 34 °C	Input Data (°C) 17 °C
Converted Data(°F) 93.2 °F	Converted Data(°F) 62.6 °F
Correction Value 2 1.052	Correction Value 2 1.0859
Final Correction Value (a) 0.9786	Final Correction Value (a) 1.0056
2) Sea Level Correction Factor	2) Sea Level Correction Factor
Input Data (m) 500 m	Input Data (m) 500 m
Converted Data(ft) 1640.4 ft	Converted Data(ft) 1640.4 ft
Correction Value (z) 0.9936	Correction Value (z) 0.9936
3) Fuel Density Correction Factor	3) Fuel Density Correction Factor
Input Data (m) 0.8326	Input Data (m) 0.8445
Correction Value (x) 0.9914	Correction Value (x) 0.9997
4) Fuel Temp. Correction Factor	4) Fuel Temp. Correction Factor
Input Data (°C) 25 °C	Input Data (°C) 15 °C
Converted Data(°F) 77 °F	Converted Data(°F) 59 °F
Correction Value (y) 0.9915	Correction Value (y) 1.0005
2. Locomotive Horse Power	2. Locomotive Horse Power
1) HP driven Assistive Device 199 Hp	1) HP driven Assistive Device 199 Hp
2) An electric pressure (V) 800 V	2) An electric pressure (V) 840 V
3) An electric Current (A) 2430 A	3) An electric Current (A) 2550 A
4) Total Horse power 3114 Hp	4) Total Horse power 3261 Hp
5) Average Traction Horse power 2915 Hp	5) Average Traction Horse power 3062 Hp