

# GPU HOBART 60 P 20



Le groupe électrogène décrit dans ce manuel est un modèle de GPU entraîné par un moteur diesel.

Il est fabriqué par HOBART sous la référence 60 P 20.

Sa fonction est de produire et de distribuer une puissance électrique régulée, 400Hz a un avion en stationnement pour faire fonctionner les équipements électrique de l'avion quand les génératrices de bord sont arrêtées.

PHYSICAL

BASIC UNIT

Length overall	82 inches (2082.8 mm)
Width	36 inches (914.4 mm)
Height overall	43 inches (1092.2 mm)
Weight	3300 pounds (1496.8 kg)

TRAILER-MOUNTED UNIT

Length overall	100 inches (2540 mm)
Width	78 inches (1981.2 mm)
Height	72 inches (1828.8 mm)
Weight	5200 pounds (2358.7 kg)

GENERATOR

Output power rating	60 KVA
Output voltage	115/200 V
Rated load capacity	173 A
Frequency (cycles-per-second)	400 Hz
Output kilowatts	48 KW
Power factor	0.8 PF
Duty cycle	100%
Operating speed at 400 Hz	2000 RPM
Overload capacity (125% of rated load capacity)	216 A

GENERATOR PROTECTIVE SYSTEM

Overvoltage relay	trips 130 V to 134 V; resets 125 V
Undervoltage relay	trips 102 V or below; resets 110 V
Overfrequency relay	trips 415 Hz to 425 Hz; resets 410 Hz
Underfrequency relay	trips 375 Hz to 385 Hz; resets 385 Hz
Overload relay	trips 75 KVA in less than 5 minutes
Undervoltage time delay relay	4 to 12 seconds

ENGINE	
Manufacturer	Perkins Engines Inc.
Model	6-3544
Type	In-line, 6-cylinder, 4-cycle Diesel
Displacement	354 cu. in. (5.8 liters)
Compression ratio	16:1
Firing order	1-5-3-6-2-4
Number of main bearings	7
Horsepower at 2000 RPM	107
Governed speed	2000 RPM +/- 4.5%
Idle speed	850 +/- 25 RPM
Electrical system	12 volt
Oil capacity (with filter)	15 quarts (14 liters)
Oil capacity (without filter)	14 quarts (13.6 liters)
Coolant capacity (approx.)	20 quarts (19 liters)
Fuel	Diesel oil conforming to ASTM Specification D.975-66T, Nos. 1-D and 2-D
Lube oil	MIL-L-2104B

Specifications and Capabilities (Sheet 2 of 2)  
Figure 2

#### 4. Identification

##### A. General

Generator sets are identified by their Specification number which consists of the Series number plus a dash number (i.e. -1, -2, etc.) suffix. The suffix number indicates the mounting design of the generator set. For example, Specification number 6824-2 identifies a machine designed for mounting on a tow tractor.

##### B. Generator Sets Available in 6824 & 6824A Series.

(1) The identification chart below lists machines currently available in Series.

Specification Number	Characteristics
6824-1, 6824A-1, and 6824A-5 *	Designed for trailer or truck mounting. 12-V DC electrical power and fuel to be supplied from facilities on trailer or truck.
6824-2, 6824A-2, and 6824A-6 *	Designed for mounting on a tow tractor. 12-V DC electrical power and fuel supplied by tow tractor. Furnished with roll-out tracks for mounting on a tow tractor.
6824-3, 6824A-3, and 6824A-7 *	Designed for stationary mounting. Equipped with two 12-V batteries and fuel tank.
6824-4, 6824A-4, and 6824A-8 *	Dual output unit for trailer or truck mounting. 12-V DC electrical power and fuel to be supplied from facilities on trailer or truck. (See Para. 9).

\* See Addendum No. 1 at front of manual.