

ARVICO CORPORATION  
GROUND POWER UNIT  
MODEL 4-90STD-D

**SPECIFICATIONS AND CAPABILITIES**

**I. MODEL NO. 4-90STD-D**

**A General**

Length (approx.)	123 ins.(312 cm)
Width (approx.)	72 ins.(183 cm)
Height (approx.)	78 ins.(198 cm)
Weight (approx.)	4800 lbs.(2087 kg)
Operating Temp.	Minus 40 to 125 degrees F (minus 40 to 51 degrees C)
Storage Temp.	Minus 65 to 180 degrees F (minus 54 to 82 degrees C)

**B Chassis (effectivity A)**

Chassis and running gear	Welded structural steel. Two axles with leaf springs and towbar. Tires are 6.9 x 9 inch 6 ply
Tire Pressure	75 psig (5.2 bar).
Brakes	Rear wheels mechanical drum brakes actuated by mechanical lever.
Enclosure	Mild steel panels with sound proof material.

**B1 Chassis (effectivity B)**

Chassis and running Gear	Welded structural steel. Two axles With leaf springs and towbar. Front axle is pivoted to provide fifth wheel steering. Tires are 6.9 x 9 in, 6 ply.
Tire Pressure	75 psig (5.2 bar)
Brakes	Rear wheels have mechanical drum brakes activated by a mechanical lever or towbar.
Enclosure	Mild steel panels with sound proof material.

**C Engine and Accessories**

Engine	Deutz water cooled, 6 cylinder diesel Model BF6M 1013E.
--------	---

ARVICO CORPORATION  
GROUND POWER UNIT  
MODEL 4-90STD-D

**C. Engine and Accessories (cont.)**

Horsepower	184 at 2000 rpm.
Governor	2000 rpm is maintained to within plus/minus 0.5% from no load to full load.
Aspiration	Turbocharged.
Cylinders	6 vertical, in line.
Firing Order	1 : 5 : 3 : 6 : 2 : 4
Displacement	436 cubic inches (7146 cubic cm)
Usable Fuel	Diesel and a wide variety of jet fuels.
Fuel Tank Capacity	60 gallons (227 liters)
Oil Capacity (c/w filter)	21 liters ( 5.5 gallons)
Fuel Gauge	Electric 24 VDC
Air Filter	Dry type with plugged filter indicator
Oil Filter	Full flow replaceable cartridge.
Cooling System	50/50 water/glycol
Cooling System Capacity	16 liters (4.2 gallons)
Alternator	55 amps, 24 VDC
Battery and Starter	24 VDC

**D. Alternator**

Model	430S1315A
Speed	2000 rpm
Frequency	400
Voltage (AC)	115/200
Phase	3
Power Factor	0.8 lagging
Ambient Temp C	40
Temperature Rise C	80
Excitation	Externally Regulated 66 Volts DC, 3 AMPS
Insulation	Class H
Single Bearing	Sealed, Pre lubricated

**E. Shut Down**

Low oil pressure	Engine shuts down at 8 psi
High water temperature	Engine shuts down at 221 degrees F (105 degrees C).
Overspeed	Engine shuts down if speed exceeds 2500 rpm.
Low Fuel(option)	Light on panel plus strobe light.

**ARVICO CORPORATION  
GROUND POWER UNIT  
MODEL 4-90STD-D**

Low Fuel(option)	Light on panel plus engine shutdown.
Low Coolant (option)	Light on engineers panel plus engine shut down

**F. AC Power System**

AC output	115/200 VAC, 3 phase, 4-wire, wye connected, 100% duty cycle at 2000 rpm.
Output Power Rating	90 KVA at 0.8 PF
Output Kilowatts	72 kw
Rated Load	260 amps
Overload	125% of rated load
Frequency	400 Hertz
Field Excitation	Automatic field flashing Static type 66 vdc at 3 amps
28.5 VDC output (option)	800 amps to 1500 amps continuous 2000 amps to 2500 amps peak.

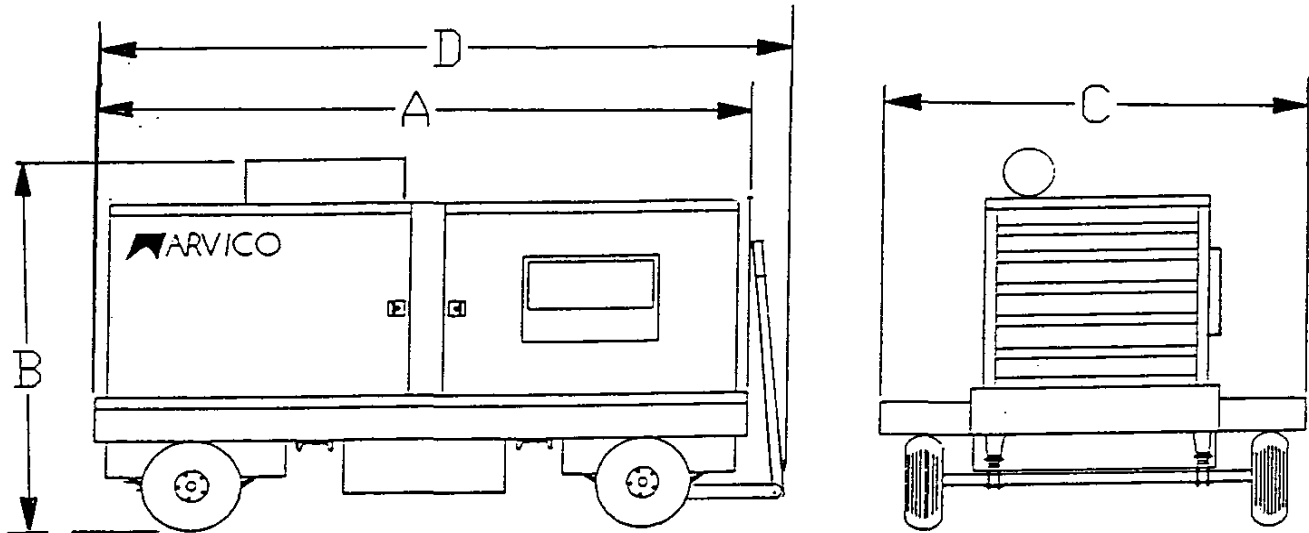
**G. AC Protection System**

Overvoltage	Trips at 130 volts with time delay.
Undervoltage	Trips at 90 volts with time delay.
Overfrequency	Trips at 410 Hertz.
Underfrequency	Trips at 390 Hertz.
Overload	Trips within 5 minutes at 125% rated load.

**H. DC Protection System**

Overvoltage	Trips at 32 volts.
High Temperature	Transformer will trip at 135 degrees (275 degrees F) Rectifier will trip at 90 degrees C (194 degrees F).

ARVICO CORPORATION  
GROUND POWER UNIT  
MODEL 4-90STD-D



Model	KVA	A	B	C	D	WEIGHT
4-75STD-D	75	112 (285)	78 (198)	72 (183)	123 (312)	4700 (2134)
4-90STD-D	90	112 (285)	78 (198)	72 (183)	123 (312)	4800 (2177)
4-120STD-D	120	112 (285)	78 (198)	72 (183)	123 (312)	4800 (2177)
4-140STD-D	140	112 (285)	78 (198)	72 (183)	123 (312)	5100 (2313)

DIMENSIONS IN INCHES (CM) AND WEIGHTS IN LBS (KG)