

Generator Set Sizing

Project Sample QuickSize Project

Customer Lance Barendt

Generator Set

Model No. 180REOZJD **Gensets** 1

Engine 6068HF285

Alternator 4S15

Performance Summary

LN/LL Voltage 277/480 volts **Altitude** 500 feet

Frequency 60 hertz **Ambient Temp.** 70 F

Phase(s) 3 phase

Genset Rating @ 130C 180 kW

Genset Derated Rating 180.0 kW

Total Running Power 55.3 kW

Percent of Available kW Used 30.72 %

Alternator Starting kVA 354.29 kVA @ 20.0 % dip

Peak Starting kVA 213.36 kVA

Maximum Voltage Dip 12.52 %

Maximum Frequency Dip 1.18 % (20 % Allowed)

Voltage THD 0.0 % (20 % Allowed)

Load Profile

	Run Qty	Run kW	Run kVA	Run pF	Start kW	Start kVA	Volt Dip	Freq Dip	Volt (L-N) THD
Step #1 Load Step #1									
<Motor> (Motor)									
	1	21.00	24.50	0.86	55.65	132.50			
<AirConditioning> (Air Conditioning)									
	1	10.10	12.62	0.80	33.99	71.40			
<Lighting> (Lighting)									
	1	20.00	20.00	1.00	20.00	20.00			
Step Totals:									
	51.10	54.94	0.93	109.64	213.36	12.52	1.18	0.0/0.0/0.0	
Cum. Totals:									
	51.1	54.94	0.93						
Step #2 Load Step #2									
<OfficeEquipment> (Office Equipment)									
	1	4.20	5.25	0.80	4.20	5.25			

Step Totals:	4.20	5.25	0.80	4.20	5.25	0.31	0.02	0.0/0.0/0.0
Cum. Totals:	55.3	60.19	0.92					
Grand Totals:	55.3	60.19	0.92			12.52%	1.18%	0.0%

Frequency Dip information is based on estimated data