

Connected Load PK-8840 Desulfurization Plant

Utem	Name	Qty	Load ea KW	Total Load	Comments
E-6000	Desulfuration Heater	1	200	200	
E-6010	Cold Diesel Preheater	1	185	185	
E-6030	Hydrogen Air Cooler	1	385	385	
K6070	Hydrogen Compressor	2	30	60	
E-6080	Hydrogen Preheater	2	104	208	
P-6110	Desulfurization Pump	1	11	11	unknown, figure 15HP
EM-6030	Motor for air cooled H.E	2	3.75	7.5	
	Misc elect & inst	1	50	50	

TOTAL Connected Load

1106.5 KW at 460v 3/60

3,541 Amps

$$\text{Amps} = \frac{\text{kW} \times 1000}{V \times \text{PF} \times 1.732}$$

Conclusion: Would probably need 4,000A switchgear or MCC feed at 460/3/60
approx 5 breakers and 5 starters

USAGE:

Electrical in operation

600 amps approximately 460v/ 3/60

Hydrogen

Compressors rated at 900N m3/h @1,737Kpa each.

If operating at 1500 lph, usage is approx 100 Nm³/h