

ELECTRICAL LOAD SCHEDULE

(Typical example for additional living quarters)

Description	Operating Voltage (V)	Load rating [kW]	Absorbed load [kW]	Full Load Current [A]	Cable Size [mm ²]	Load factor [%]	Power factor at L.F.	Consumer load type											
								Continuous		Intermittent		Stand-by		Future					
								[kW]	[kVA _r]	[kW]	[kVA _r]	[kW]	[kVA _r]	[kW]	[kVA _r]				
6.6kV/460V ALQ Switchboard Transformer	0	0.00	0.00	0.00	3c x 95	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
RO Potable Water Maker	440	20.00	20.00	30.87	3c x 6	100%	0.85	20.00	12.39	0.00	0.00	0.00	0.00	0.00	0.00				
Calorifier	440	130.00	130.00	170.00	3c x 95	100%	1.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
UV Sterilizer	440	6.00	6.00	9.26	4c x 6	100%	0.85	6.00	3.72	0.00	0.00	0.00	0.00	0.00	0.00				
440V ALQ Lighting & Small Power Distribution Board	440	35.42	35.42	46.53	4c x 25	100%	1.00	35.42	1.70	0.00	0.00	0.00	0.00	0.00	0.00				
400V ALQ Lighting & Small Power Distribution Board	440	15.74	15.74	24.29	4c x 25	100%	0.85	15.74	9.75	0.00	0.00	0.00	0.00	0.00	0.00				
Spare	254			0.00		0%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Electrical Heater (Via Thyristor Control Panel)	440	60.00	60.00	78.73	3c x 35	100%	1.00	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Humidifier	440	60.00	60.00	87.00	4c x 35	100%	0.85	60.00	37.18	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Supply Fan A Motor	440	11.00	11.00	19.30	3c x 6	100%	0.82	12.09	8.44	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Supply Fan B Motor	440	11.00	11.00	19.30	3c x 6	100%	0.82	0.00	0.00	0.00	0.00	12.09	8.44	0.00	0.00				
Main Extract Fan A Motor	440	3.00	3.00	5.50	3c x 6	100%	0.81	3.42	2.48	0.00	0.00	0.00	0.00	0.00	0.00				
Main Extract Fan B Motor	440	3.00	3.00	5.50	3c x 6	100%	0.81	0.00	0.00	0.00	0.00	3.41	2.47	0.00	0.00				
AHU Axial Fan A Motor	440	1.10	1.10	2.10	3c x 6	100%	0.79	1.29	1.00	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Axial Fan B Motor	440	1.10	1.10	2.10	3c x 6	100%	0.79	0.00	0.00	0.00	0.00	1.29	1.00	0.00	0.00				
AHU Compressor A	440	5.16	5.16	11.60	3c x 6	100%	0.85	5.16	3.20	0.00	0.00	0.00	0.00	0.00	0.00				
AHU Compressor B	440	5.16	5.16	11.60	3c x 6	100%	0.85	0.00	0.00	0.00	0.00	5.16	3.20	0.00	0.00				
Assumed Maximum Demand								totals:		349.1	79.9	0.0	0.0	22.0	15.1	0.0	0.0		
Peak of normal running plant load = X1*Cont. load + Y1*Interm. Load X1 = 100% Y1 = 50%								384.03 kW		kVA		358.1		0.0		26.6		0.00	
								87.85 kVA _r		cos phi		0.97		0.00		0.82		0.00	
Assumed Maximum Demand = 110% of Peak normal load								393.95 kVA		0.97		A							