

LOAD CALCULATIONS FOR "PANEL HP1"
 BASED ON THE 2023 NEC

	L1	L2	L3	NEC 220.61(A) NEUTRAL
CALCULATED LOAD (NEC 215.5)	12,840 VA	9,440 VA	9,300 VA	12,840 VA
CALCULATED LOAD WITH DEMAND FACTORS (NEC 215.5)				
GENERAL LOAD	3,000 VA	2,000 VA	1,500 VA	3,000 VA
RECEPTACLE LOAD (NEC TABLE 220.44)				
1ST 10,000W	1,440 VA	1,440 VA	0 VA	1,440 VA
CONTINUOUS LOAD (NEC 215.2)	2,400 VA	0 VA	1,800 VA	2,400 VA
PLUS 25%	600 VA	0 VA	450 VA	
0% (NEUTRAL) NEC 215.2(A) EX NO 2				0 VA
MOTOR LOAD (NEC 430.24)	6,000 VA	6,000 VA	6,000 VA	6,000 VA
PLUS 25% OF LARGEST MOTOR	1,500 VA	1,500 VA	1,500 VA	1,500 VA
KITCHEN LOADS (NEC 220.56)				
L1 (0 X 1) =	0 VA			0 VA
L2 (0 X 1) =		0 VA		
L3 (0 X 1) =			0 VA	
TOTAL BALANCED LOAD (3-PHASE)	10,940 VA	10,940 VA	10,940 VA	
TOTAL BALANCED LOAD (1-PHASE)	310 VA	0 VA	310 VA	
TOTAL UNBALANCED LOAD (1-PHASE)	3,690 VA	0 VA	0 VA	
NEUTRAL LOAD				14,340 VA
LINE AMPS BALANCED (3-PHASE)	91.1 A	91.1 A	91.1 A	
LINE AMPS BALANCED (1-PHASE)	3.0 A	0.0 A	3.0 A	
LINE AMPS UNBALANCED (1-PHASE)	30.8 A	0.0 A	0.0 A	
TOTALS	124.9 A	91.1 A	94.1 A	119.5 A
ADJUSTMENT FACTOR	0.0 A	0.0 A	0.0 A	0.0 A
TOTAL DESIGN LOAD	124.9 A	91.1 A	94.1 A	119.5 A

HARMONIC CURRENT CALCULATION (NEC 310.15 (B) 4 (C) & NEC TABLE 310.15 B (2) A)

(Harmonic Load 0 VA ÷ Connected Load 31,580 VA) X 100 = 0 %

Harmonic Load Does Not Exceed 50%

KEY

A - Amps

VA - Volt Amps