

Panelboard: LP-3		Location: 3F EE Room		Mounting: SURFACE												
Voltage System: 230V, 3-PHASE, 3-WIRE + G, 60Hz		Enclosure: NEMA 1														
CKT. No.	LOAD DESCRIPTION	Qty. of C.O.	Qty. of L.O.	Qty. (Other Loads)	VOLT-AMPS	VOLTS	PHASE / LINE CURRENT				CIRCUIT BREAKER			No. OF WIRE & SIZE		CONDUIT (mmø)
							ØAB	ØCA	ØBC	ØABC	AT	AF	P	CONDUCTOR (mm ²)		
1	L.O.-		13	0	543	230	2.96				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
2	O.F.- 4 units		0	4	400	230	1.74				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
3	L.O.-		13	0	543	230		2.96			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
4	O.F.- 4 units		0	4	400	230	1.74				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
5	L.O.-		13	0	543	230			2.96		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
6	O.F.- 4 units		0	4	400	230				1.74		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15
7	L.O.-		13	0	543	230	2.96				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
8	O.F.- 4 units		0	4	0	230	0.00				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
9	L.O.-		11	0	328	230			1.42		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
10	L.O.-		20	0	473	230	2.06				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
11	L.O.-		24	0	967	230				4.20		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15
12	L.O.-		16	0	437	230				1.90		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15
13	L.O.-		11	0	233	230	1.01				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
14	L.O.-		22	1	1000	230	4.95				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
15	L.O.-		33	0	635	230		2.76			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
16	L.O.-		29	7	1269	230		5.61			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
17	L.O.-		15	0	263	230			1.14		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
18	L.O. (4F)		8	0	710	230				3.08		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15
19	L.O. (4F)		7	0	707	230	3.07				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
20	L.O. (4F)		29	4	914	230	3.97				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
21	L.O. (4F)		20	0	306	230			1.33		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
22	O.F.- 4 units		0	4	400	230	1.74				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
FEEDER/ MAIN OCP		0	297	32	12034	230	18.87	19.02	14.43	0.00	100	100	3	3- 30mm² THHN + 1- 8.0mm² THHN G	40	
I(total) = 0.00A + 1.25 x 18.87A =					23.77 A											
Load Computation:																
General Lighting: 1436 sq.m x 24 VA/ sq.m =					34464 VA											
I(total) = 34,464 VA/ (1.732 x 230 V) =					86.51 A											

PANEL : PP-3		Location: 3F EE Room		Mounting: SURFACE												
SYSTEM : 230V, 3-PHASE, 3-WIRE + G, 60Hz		Enclosure: NEMA 1														
CKT. No.	LOAD DESCRIPTION	Qty. of C.O.	Qty. of L.O.	Qty. (Other Loads)	VOLT-AMPS	VOLTS	PHASE / LINE CURRENT				CIRCUIT BREAKER			No. OF WIRE & SIZE		CONDUIT (mmø)
							ØAB	ØCA	ØBC	ØABC	AT	AF	P	CONDUCTOR (mm ²)		
1	C.O. (Classroom 5)		8		1440	230	6.26				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
2	C.O. (Overhead projectors)		2		1000	230	4.35				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
3	C.O. (Classroom 7)		8		1440	230		6.26			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
4	C.O. (Overhead projectors)		2		1000	230	4.35				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
5	C.O. (Classroom 8)		8		1440	230			6.26		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
6	C.O. (Doc storage, testing/training)		12		2160	230			9.39		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
7	C.O. (Hallway)		8		1440	230	6.26				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
8	C.O. (EE, ELV, HR, Jan)		11		2460	230	10.70				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
9	C.O. (Budget, Storage)		11		2700	230		11.74			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
10	C.O. (Classroom 6)		8		1440	230	6.26				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
11	C.O. (File, Meeting Acad record, archiving)		13		2600	230			11.90		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
12	C.O. (Accounting)		12		3240	230			14.09		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
13	C.O. (COA, Staff Head, Storage, Meditation)		13		3060	230	13.30				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
14	C.O. (Dining)		7		1260	230	5.48				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
15	C.O. (Hand dryer, Male Toilet)		1		1800	230		7.93			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
16	C.O. (Hand dryer, Female Toilet)		1		1800	230		7.93			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
17	C.O. - Electric bike		1		500	230			2.17		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
18	C.O. - Electric bike		1		500	230			2.17		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
19	PP-3A		31		12100	230	17.13	18.26	17.22		40	100	3	3- 8.0mm ² THHN + 1- 5.5mm ² THHN G	25	
20	SPACE					230					100	3				
FEEDER/ MAIN OCP		158	0	0	43380	230	63.48	62.52	62.61	0.00	150	250	3	3- 60mm² THHN + 1- 14mm² THHN G	50	
I(total) = 0.00A + 1.25 x 1.732 x 63.48 A =					137.43 A											

PANEL : PP-3A		Location: 3F EE Room		Mounting: SURFACE												
SYSTEM : 230V, 3-PHASE, 3-WIRE + G, 60Hz		Enclosure: NEMA 1														
CKT. No.	LOAD DESCRIPTION	Qty. of C.O.	Qty. of L.O.	Qty. (Other Loads)	VOLT-AMPS	VOLTS	PHASE / LINE CURRENT				CIRCUIT BREAKER			No. OF WIRE & SIZE		CONDUIT (mmø)
							ØAB	ØCA	ØBC	ØABC	AT	AF	P	CONDUCTOR (mm ²)		
1	C.O. - Treadmill		1		1500	230	6.52				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
2	C.O. - Overhead Projector		1		900	230	2.17				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
3	C.O. (Physical Fitness)		5		900	230		3.91			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
4	C.O. - Treadmill		1		1500	230	6.52				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
5	C.O. - Hand dryer (4F FT)		1		1800	230			7.83		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
6	C.O. (Multi-purpose Rm, 4F)		8		1440	230			6.26		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
7	C.O. - OH Projector (Multi-purpose Rm 4F)		1		900	230	2.17				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
8	C.O. (Multi-purpose Rm, 4F)		8		1440	230	6.26				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
9	C.O. - Hand dryer (4F MT)		1		1800	230		7.83			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
10	SPARE					230		0.00			20	100	2			
11	C.O. (Storage Rm., ACCU Deck 4F)		4		720	230			3.13		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
12	SPARE					230		0.00			20	100	2			
13	SPARE					230	0.00				20	100	2			
14	SPARE					230	0.00				20	100	2			
FEEDER/ MAIN OCP		31	0	0	12100	230	17.13	18.26	17.22	0.00	40	100	3	3- 8.0mm² THHN + 1- 5.5mm² THHN G	25	
I(total) = 0.00A + 1.25 x 1.732 x 18.26 A =					39.53 A											

PANEL : PP-K		Location: 3F		Mounting: SURFACE												
SYSTEM : 230V, 3-PHASE, 3-WIRE + G, 60Hz		Enclosure: NEMA 1														
CKT. No.	LOAD DESCRIPTION	Qty. of C.O.	Qty. of L.O.	Qty. (Other Loads)	VOLT-AMPS	VOLTS	PHASE / LINE CURRENT				CIRCUIT BREAKER			No. OF WIRE & SIZE		CONDUIT (mmø)
							ØAB	ØCA	ØBC	ØABC	AT	AF	P	CONDUCTOR (mm ²)		
1	C.O. - Worktop freezer, 3-door		1		800	230	3.48				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
2	C.O. - Exhaust hood		1		750	230	3.26				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
3	POS		1		500	230		2.17			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
4	Baine Marie		1		3000	230		13.04			20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
5	C.O. - Induction Cooker		1		2600	230			11.80		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
6	C.O. - Chiller, 20 cu.ft.		1		800	230			3.48		20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
7	Silver Caddy		1		1000	230	4.35				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
8	C.O. - Worktop chiller, 3-door		1		800	230	3.48				20	100	2	2- 3.5mm ² THHN + 1- 3.5mm ² THHN G	15	
9	SPARE					230					20	100	2			
10	SPARE					230					20	100	2			
FEEDER/ MAIN OCP		8	0	0	10250	230	14.57	15.22	14.78	0.00	40	100	3	3- 8.0mm² THHN + 1- 5.5mm² THHN G	25	
I(total) = 0.00A + 1.25 x 1.732 x 14.57A =					32.95 A											

PANEL : PPM-3		Location: 3F EE Room		Mounting: SURFACE	
SYSTEM : 230V, 3-PHASE, 3-WIRE + G, 60Hz		Enclosure: NEMA 1			