



**FEEDER & LOAD SCHEDULE WIRING CODE :**

CODE	FEEDER WIRES AND PVC CONDUIT SIZE
Y0	2#3.5 sq.mm THHN/THWN and 1#3.5 sq.mm THHN/THWN in 20mm dia PVC CONDUIT
Y1	3#5.5 sq.mm THHN/THWN and 1#3.5 sq.mm THHN/THWN in 25mm dia PVC CONDUIT
Y2	2#14 sq.mm THHN/THWN and 1#5.5 sq.mm THHN/THWN in 25mm dia PVC CONDUIT
Y3	2#22 sq.mm THHN/THWN and 1#8.0 sq.mm THHN/THWN in 41mm dia IMC CONDUIT
Y4	2#38 sq.mm THHN/THWN and 1#14 sq.mm THHN/THWN in 41mm dia CABLE TRAY
Y5	3#100 sq.mm THHN/THWN and 1#22 sq.mm THHN/THWN in 63mm dia IMC CONDUIT
Y6	3#150 sq.mm THHN/THWN and 1#30 sq.mm THHN/THWN in 103mm dia PVC CONDUIT
Y7	3#200 sq.mm THHN/THWN and 1#60 sq.mm THHN/THWN in 103mm dia PVC CONDUIT

**SINGLE LINE DIAGRAM**  
NO SCALE

**PANEL "S"**

VOLTS: 240V  
PHASE: 3  
WIRE: 3  
AIC: 25,000

MAIN: 200A, 3P  
BUSSING: 200A  
TYPE: BOLT-ON  
MOUNTING: FLUSH

LOCATION: DATA CENTER  
ENCLOSURE TYPE: NEMA 1

CKT	BKR	WIRE CODE	LOAD DESCRIPTION	LOAD (VA)	VOLT-AMPERE (VA)	LOAD (VA)	LOAD DESCRIPTION	WIRE CODE	BKR	CKT
1	30-3P	Y1	PACU 1	2000	4000	2000	PACU 2	Y1	30-3P	2
3	30-3P		SPARE	0	0	0	SPARE		30-3P	4
5	100-2P	Y4	PANEL "U1"	10000	10000	10000	SPARE		100-2P	6
7	100-2P		SPARE	0	0	0	SPARE		100-2P	8
9	30-2P	Y1	2.5HP SPLIT-TYPE A/C	2500	5000	2500	PANEL "RP"	Y4	30-2P	10
11	30-2P		SPARE	0	0	0	SPARE		30-2P	12

CONNECTED KVA PER PHASE	14.00	16.00	9.00
DEMAND FACTOR APPLICATIONS	conn. load (kVA)	demand factor (%)	demand load (kVA)
RECEPTACLE (FIRST 10kVA)	0.0	100%	0.0
RECEPTACLE (OVER 10kVA)	0.0	50%	0.0
CONTINUOUS LOADS	12.0	125%	15.0
NON-CONTINUOUS LOADS	27.0	100%	27.0

TOTAL CONNECTED LOAD: 39.0 kVA  
SPARE CAPACITY: 7.8 kVA  
TOTAL DEMAND LOAD: 42.0 kVA  
TOTAL SERVICE: 101.0 Amps

**PANEL "Q"**

VOLTS: 240V  
PHASE: 1  
WIRE: 2  
AIC: 10,000

MAIN: 80AT, 2P  
BUSSING: 100A  
TYPE: BOLT-ON  
MOUNTING: FLUSH

LOCATION: CHSS OFFICE  
ENCLOSURE TYPE: NEMA 1

CKT	BKR	WIRE SIZE	LOAD DESCRIPTION	LOAD (VA)	VOLT-AMPERE (VA)	LOAD (VA)	LOAD DESCRIPTION	WIRE SIZE	BKR	CKT
1	30-2P	Y1	SERVER RACK	5000	4000	4000	3.0HP INVERTER SPLIT-TYPE A/C	Y1	30-2P	2
3	30-2P	Y1	3.0HP INVERTER SPLIT-TYPE A/C	3000	1500	1500	SPARE		30-2P	4
5	20-2P	Y0	LIGHTING - OFFICE AREA	1000	1400	1400	RECEPTACLE - OFFICE AREA	Y0	20-2P	6
7	20-2P		SPARE	0	0	0	SPARE		20-2P	8
9	20-2P		SPARE	0	0	0	SPARE		20-2P	10

CONNECTED KVA PER PHASE	6.90	6.90	
DEMAND FACTOR APPLICATIONS	conn. load (kVA)	demand factor (%)	demand load (kVA)
RECEPTACLE (FIRST 10kVA)	3.0	100%	3.0
RECEPTACLE (OVER 10kVA)	1.8	50%	0.9
CONTINUOUS LOADS	6.0	125%	7.5
NON-CONTINUOUS LOADS	3.0	50%	1.5

TOTAL CONNECTED LOAD: 13.8 kVA  
SPARE CAPACITY: 2.8 kVA  
TOTAL DEMAND LOAD: 12.9 kVA  
TOTAL SERVICE: 53.8 Amps

**PANEL "RP" (ATS)**

VOLTS: 240V  
PHASE: 1  
WIRE: 2  
AIC: 10,000

MAIN: 100AT, 2P  
BUSSING: 100A  
TYPE: BOLT-ON  
MOUNTING: FLUSH

LOCATION: DATA CENTER  
ENCLOSURE TYPE: NEMA 1

CKT	BKR	WIRE SIZE	LOAD DESCRIPTION	LOAD (VA)	VOLT-AMPERE (VA)	LOAD (VA)	LOAD DESCRIPTION	WIRE SIZE	BKR	CKT
1	30-2P	Y1	SERVER RACK	5000	5000	5000	SERVER RACK	Y1	30-2P	2
3	30-2P	Y1	SERVER RACK	5000	5000	5000	SERVER RACK	Y1	30-2P	4
5	30-2P		SPARE	0	0	0	SPARE		30-2P	6

CONNECTED KVA PER PHASE	10.00	10.00	
DEMAND FACTOR APPLICATIONS	conn. load (kVA)	demand factor (%)	demand load (kVA)
RECEPTACLE (FIRST 10kVA)	0.0	100%	0.0
RECEPTACLE (OVER 10kVA)	0.0	50%	0.0
CONTINUOUS LOADS	5.0	125%	6.3
NON-CONTINUOUS LOADS	15.0	50%	7.5

TOTAL CONNECTED LOAD: 20.0 kVA  
SPARE CAPACITY: 4.0 kVA  
TOTAL DEMAND LOAD: 13.8 kVA  
TOTAL SERVICE: 57.3 Amps

**PANEL "CSM"**

VOLTS: 240V  
PHASE: 1  
WIRE: 2  
AIC: 10,000

MAIN: 100AT, 2P  
BUSSING: 100A  
TYPE: BOLT-ON  
MOUNTING: FLUSH

LOCATION: CSM EE ROOM  
ENCLOSURE TYPE: NEMA 1

CKT	BKR	WIRE SIZE	LOAD DESCRIPTION	LOAD (VA)	VOLT-AMPERE (VA)	LOAD (VA)	LOAD DESCRIPTION	WIRE SIZE	BKR	CKT
1	30-2P	Y1	SERVER RACK	5000	2500	2500	SPARE		30-2P	2
3	30-2P		SPARE	0	0	0	SPARE		30-2P	4
5	20-2P		SPARE	0	0	0	SPARE		20-2P	6
7	20-2P		SPARE	0	0	0	SPARE		20-2P	8
9	20-2P		SPARE	0	0	0	SPARE		20-2P	10

CONNECTED KVA PER PHASE	2.50	2.50	
DEMAND FACTOR APPLICATIONS	conn. load (kVA)	demand factor (%)	demand load (kVA)
RECEPTACLE (FIRST 3kVA)	0.0	100%	0.0
RECEPTACLE (OVER 3kVA)	0.0	50%	0.0
CONTINUOUS LOADS	5.0	125%	6.3
NON-CONTINUOUS LOADS	0.0	50%	0.0

TOTAL CONNECTED LOAD: 5.0 kVA  
SPARE CAPACITY: 1.0 kVA  
TOTAL DEMAND LOAD: 6.3 kVA  
TOTAL SERVICE: 26.0 Amps

**PANEL SCHEDULE**  
NO SCALE