

DISTRIBUTION BOARDS & FEEDER DATA SCHEDULES

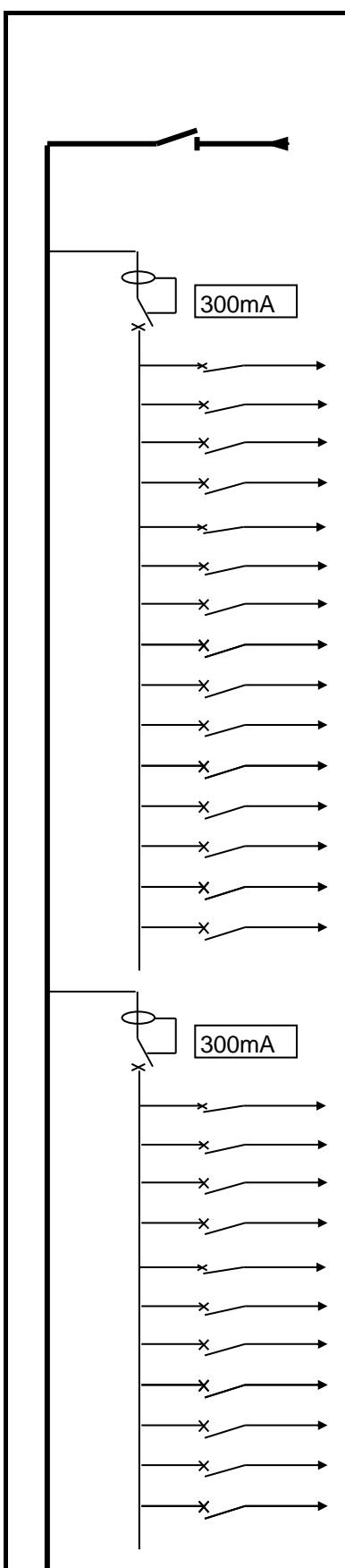
F E E D E R		PROTECTION DATA			FEEDER DATA							
Designation	Volts	Type	Frame Size Amp.	Trip Rating Amp.	Type	Size mm ²	Nb of Phases	App. Length m	Touching / Spaced/ Duct Bank	Flat / Trefoil / multicore	Connected LOAD Kva	Demand LOAD Amp / kVA
DP-OPD												
Incoming From Plant Room	415	MCCB	630	500	XLPE	2 x (4 C 120) + 2 x 70 E	3		touching	multicore	311.6	311 / 214.5
LP-GF	415	MCCB	160	100	XLPE	1 x (4 C, 35) + 1 x 6 E	3	5	touching	multicore	40.2	43 / 29.8
LP-F1	415	MCCB	160	100	XLPE	1 x (4 C, 35) + 1 x 6 E	3	30	touching	multicore	39.4	42 / 29.2
PP-GF	415	MCCB	160	160	XLPE	1 x (4 C, 70) + 1 x 35 E	3	41	touching	multicore	70	71 / 49.0
PP-F1	415	MCCB	250	200	XLPE	1 x (4 C, 95) + 1 x 50 E	3	35	touching	multicore	87	87 / 60.1
UPS-OPD (75 KVA)	415	MCCB	160	125	XLPE	1 x (4 C, 35) + 1 x 16 E	3	15	touching	multicore	75	67 / 46.4
SPARE	415	MCCB	160	100	XLPE							
SPARE	415	MCCB	160	40	XLPE							
UDP-OPD												
Incoming From UPS	415	MCCB	160	80	XLPE	1 x (4 C 25) + 1 x 16 E	3	5	touching	multicore	51.3	67 / 46.4
UPP-GF	415	MCCB	160	40	XLPE	1 x (4 C, 10) + 1 x 10 E	3	5	touching	multicore	16	21 / 14.4
UPP-F1	415	MCCB	160	50	XLPE	1 x (4 C, 16) + 1 x 16 E	3	30	touching	multicore	23	30 / 20.7
ULP-GF	415	MCCB	160	32	XLPE	1 x (4 C, 6) + 1 x 6 E	3	10	touching	multicore	2.9	4 / 2.9
UPP-F1.D	415	MCCB	160	40	XLPE	1 x (4 C, 10) + 1 x 10 E	3	30	touching	multicore	9.4	12 / 8.4
SPARE	415	MCCB	160	40	XLPE							

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-GF
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	100		35				<div>MD: Motion Detector</div> <div>LR: Latching Relay</div>
	4	32						
L1	1P+N	16	CT	2.5	198.0			Corridor
L2	1P+N	16	CT	2.5		118.8		Reception& waiting area/Cariology
L3	1P+N	16	CT	2.5			138.6	Reception& waiting area/Neuro-Resp
L4	1P+N	16	CT	2.5	118.8			Corridor
L5	1P+N	16	CT	2.5		189.0		Waiting Area
L6	1P+N	16	CT	2.5			409.0	Entrance
L7	1P+N	16		2.5	158.4			Public Pharmacy/Gift shop
L8	1P+N	16		2.5		199.8		Clean utility
L9	1P+N	16		2.5			201.6	Dirty utility/Staff toilets(M)&(F)
L10	1P+N	16		2.5	166.8			Gen.consult R.(1)&(2)/Equip.Store
L11	1P+N	16		2.5		214.8		Gen. consult R.(4)&(5)Elec.R./Server R.
L12	1P+N	16		2.5			178.2	Cardiac Consut. Rooms
	1P+N	16						Spare
	1P+N	16						Spare
	1P+N	16						Spare
	4	32						
L13	1P+N	16		2.5	175			Cardiac Consut. Rooms
L14	1P+N	16		2.5		178.2		Consultation R. Neurology/Egg/Emg
L15	1P+N	16		2.5			135.6	Pulmonary Consult. Examination Rooms
L16	1P+N	16		2.5	324.6			Gymnasium
L17	1P+N	16		2.5		285.4		Hydrotherapy Pool
L18	1P+N	16		2.5			201.6	Toilets(M)&(F)
L19	1P+N	16		2.5	289			Staff Lounge /Changing &Shower(M)&(F)/Lockers
L20	1P+N	16		2.5		266.2		Utility/Waiting Area/Toilets(M)&(F)
	1P+N	16		2.5				Spare
	1P+N	16		2.5				Spare
	1P+N	16		-		-		Spare

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-GF
Panel Type: Recessed Mounted

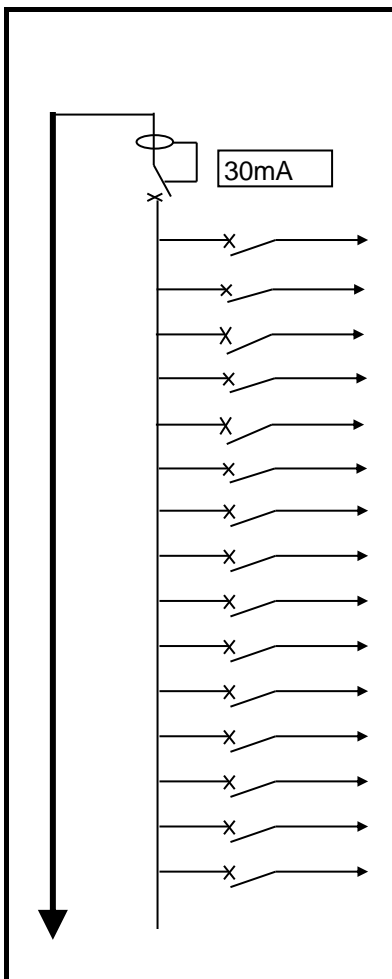
Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
	4	32						
S1	1P+N	20		4	720			Corridor
S2	1P+N	20		4		1260		Reception& waiting area/Neuro-Resp
S3	1P+N	20		4			990	Egg/Emg
S4	1P+N	20		4	810			Consultation R. Neurology
S5	1P+N	20		4		810		Consultation R. Neurology
S6	1P+N	20		4			990	Pulmonary Consult. Examination Room
S7	1P+N	20		4	990			Pulmonary Consult. Examination Room
S8	1P+N	20		4		1620		Echocardiography ultrasound / Holter monit.
S9	1P+N	20		4			990	Cardiac Consult. Exam. Room / Ecg (2)
S10	1P+N	20		4	990			Cardiac Consult. Exam. Room / Ecg (1)
S11	1P+N	20		4		990		Cardiac Consult. Room / Stress Test
S12	1P+N	20		4			1260	Reception& waiting area/Cariology
	1P+N	20						SPARE
	1P+N	20						SPARE
	4	32						
S13	1P+N	20		4	990			General consult Room 5
S14	1P+N	20		4		990		General consult Room 4
S15	1P+N	20		4			900	Corridor / Equip.Store
S16	1P+N	20		4	990			General consult Room 2
S17	1P+N	20		4		990		General consult Room 1
S18	1P+N	20		4			540	Supervisor's Office
S19	1P+N	20		4	1440			Clean Utility/ Dirty Utility/Staff TLts
S20	1P+N	20		4		900		Reception & cas./ Archive store
S21	1P+N	20		4			900	Entrance / Gift Shop
S22	1P+N	20		4	1440			Waiting Area
S23	1P+N	20		4		810		Waiting Area VIP / Utility
S24	1P+N	20		4			630	Pantry / Lounge
	1P+N	20						SPARE
	1P+N	20						SPARE

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-GF
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)		
	Poles (Nb)	Rate (A)			R	Y	B
	4	32					
S25	1P+N	20		4	500		
S26	1P+N	20		4		1080	
S27	1P+N	20		4			500
S28	1P+N	20		4	540		
S29	1P+N	20		4		900	
S30	1P+N	20		4			720
S31	1P+N	20		4	900		
S32	1P+N	20		4		900	
S33	1P+N	20		4			900
S34	1P+N	20		4	500		
S35	1P+N	20		4		500	
S36	1P+N	20		4			720
zz	1P+N	20		4	500		
S35	1P+N	20		4		500	
S36	1P+N	20		4			720

Designation of Load
Pantry / Lounge (18.1)
Lockers / Staff Lounge
Staff Lounge (18.1)
Staff Shower/Changing
Hydrotherapy Pool
Treatment Room (2) & (3)
Treatment Room (1) / Clean Utility
Gymnasium
Gymnasium
Gymnasium (32)
Gymnasium (33.6)
Electrical R./ Server Room
Gymnasium (32)
Gymnasium (33.6)
Electrical R./ Server Room

Breaking Capacity: 6KA
Lighting
Socket
Mechanical
Misc / Kitchen
Main Switch

Circuit Breaker (A)			Connected Load (VA)			
Frame	Rate		R	Y	B	Total
			1431	1452	1265	4147.6
			11310	12250	10760	34320
	100		12741	13702	12025	38468

Diversity Factor	Required Load (VA)
1	4148
0.7	24024
	28172

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-F1
Panel Type: Recessed Mounted

Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	100		35				<div>MD: Motion Detector</div> <div>LR: Latching Relay</div> <div>PC: Photo Cell</div>
	4	32						
L1	1P+N	16		2.5	163.2			Reception & Control
L2	1P+N	16		2.5		198.0		Corridor
L3	1P+N	16		2.5			217.8	Corridor
L4	1P+N	16		2.5	217.8			Corridor
L5	1P+N	16		2.5		195.0		Waiting area
L6	1P+N	16		2.5			240.8	Pantry/staff Lounge/Clean Utility/Store
L7	1P+N	16		2.5	201.6			Toilets(M)&(F)
L8	1P+N	16		2.5		152.4		Waiting area (VIP)/Gen. consult.
L9	1P+N	16		2.5			152.4	General Consul.Examination Rooms
L10	1P+N	16		2.5	158.4			Ophthalmology Consult.
L11	1P+N	16		2.5		118.8		Ophthalmology Procedure/Consult.
L12	1P+N	16		2.5			138.6	Xtray/Dental Consult.
	1P+N	16						Spare
	1P+N	16						Spare
	1P+N	16						Spare
	4	32						
L13	1P+N	16		2.5	152.4			Obstetrics&Gynaecology Consult.
L14	1P+N	16		2.5		277.2		Dental Lab. Consultt.
L15	1P+N	16		2.5			132.6	Obstetrics&Gynaecology Consult.
L16	1P+N	16		2.5	152.4			Nephrology & Urology Consult.
L17	1P+N	16		2.5		152.4		Urodynamics
L18	1P+N	16		2.5			178.2	Gen. Consult./Equip.Store/Drug Store
L19	1P+N	16		2.5	178.2			Ear,Nose, Throat Consult.
L20	1P+N	16		2.5		297.0		Endocrinology Clinic
L21	1P+N	16		2.5			178.2	Gen. Consult./Ear,Nose, Throat Consult.
	1P+N	16		2.5				Spare
	1P+N	16		2.5				Spare
	1P+N	16						Spare

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-F1
Panel Type: Recessed Mounted

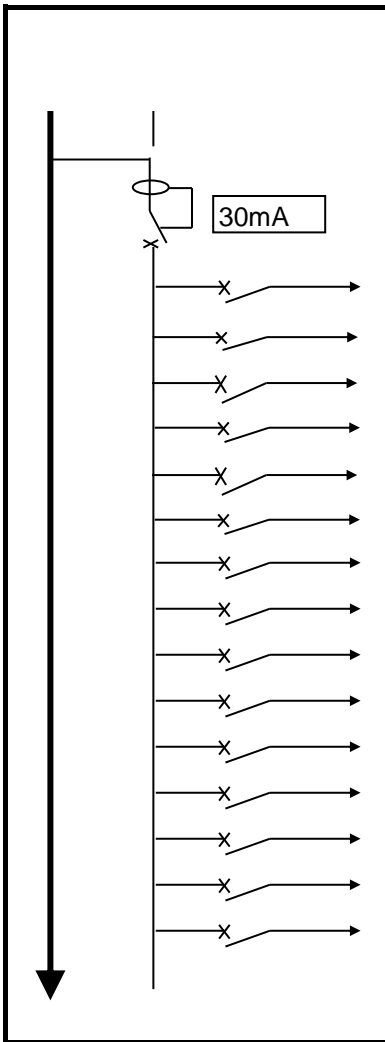
Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
	4	32						
S1	1P+N	20		4	900			Store/Dirty Utility/Toilets
S2	1P+N	20		4		720		Reception & Control
S3	1P+N	20		4			1170	Pantry/staff Lounge/Clean Utility
S4	1P+N	20		4	180			Pantry
S5	1P+N	20		4		180		Pantry
S6	1P+N	20		4			810	General Consul.Examination Room
S7	1P+N	20		4	630			Waiting area (VIP)
S8	1P+N	20		4		1440		General Consul.Examination Rooms
S9	1P+N	20		4			900	Xray / Dental Consult.Examination Room
S10	1P+N	20		4	540			Dental Consult.Examination Room
S11	1P+N	20		4		1080		Dental Consult.Examination Room
S12	1P+N	20		4			1080	Dental Consult.Examination Room
	1P+N	20						Spare
	1P+N	20						Spare
	1P+N	20						Spare
	4	32						
S13	1P+N	20		4	900			Dental Lab./ Equip. Store
S14	1P+N	20		4		720		General Consul.Examination Room
S15	1P+N	20		4			1080	Secretary Office/Hospital Nutritionist
S16	1P+N	20		4	1080			Drug Store / Endocrinology Clinic 1
S17	1P+N	20		4		1260		Endocrinology Clinic 2&3
S18	1P+N	20		4			900	Ophthalmology Consult.
S19	1P+N	20		4	900			Ophthalmology Consult.
S20	1P+N	20		4		1260		Ophthalmology Procedure/Optomety Preparation
S21	1P+N	20		4			810	Obstetrics&Gynaecology Consult.
S22	1P+N	20		4	1710			Ophthalmology Consult./Obstetrics&Gynaecology Consult.
S23	1P+N	20		4		810		Obstetrics&Gynaecology Consult.
S24	1P+N	20		4			810	Nephrology & Urology Consult.
	1P+N	20						Spare
	1P+N	20						Spare
	1P+N	20						Spare

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: LP-F1
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
	4	32						
S25	1P+N	20		4	810			Obstetrics&Gynaecology Consult.
S26	1P+N	20		4		990		Nephrology & Urology Consult.
S27	1P+N	20		4			720	Urodynamics
S28	1P+N	20		4	1260			Urodynamics / Secretary Office
S29	1P+N	20		4		1440		Ear,Nose, Throat Consult.
S30	1P+N	20		4			1350	Ear,Nose, Throat Consult./Audiometry
S31	1P+N	20		4	810			General Consul.Examination Rooms
S32	1P+N	20		4		900		Waiting Area
S33	1P+N	20		4			900	Corridor
S34	1P+N	20		4	720			Corridor
S35	1P+N	20		4		900		Corridor
S36	1P+N	20		4			720	Corridor
S37	1P+N	20		4	720			Corridor
	1P+N	20						Spare
	1P+N	20						Spare

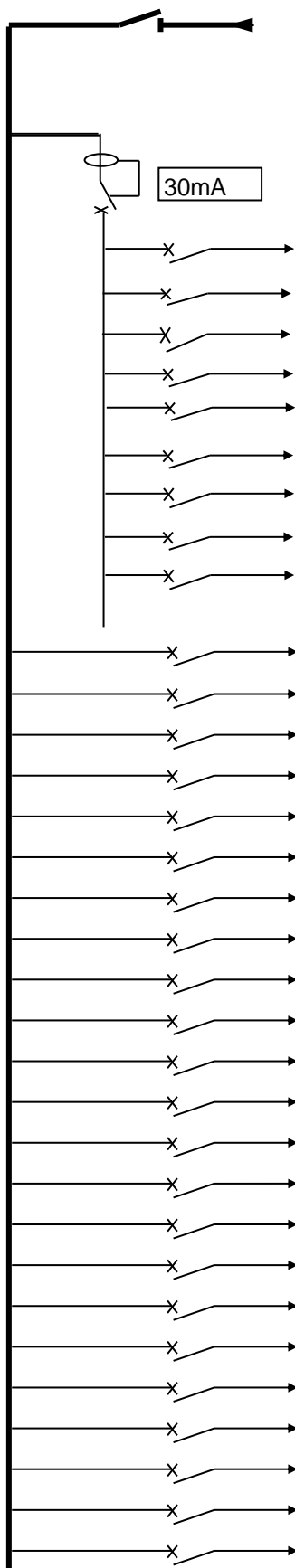
Breaking Capacity: 6KA	Circuit Breaker (A)		Connected Load (VA)				Diversity Factor	Requird Load (VA)
	Frame	Rate	R	Y	B	Total		
Lighting			1224	1391	1239	3853.4	1	3853
Socket			11160	11700	11250	34110	0.7	23877
Mechanical						0		
Misc / Kitchen						0		
Main Switch		100	12384	13091	12489	37963		27730

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: PP-GF
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	160		70				<div>MD: Motion Detector</div> <div>LR: Latching Relay</div>
	4	32						
M1	1P+N	20		4	500			EWB (20L) / Dirty Utility
M2	1P+N	20		4		500		EWB (20L) / Dirty Utility
M3	1P+N	20		4			1500	EWB (80L) / Hydrotherapy Pool Toilets
M4	1P+N	20		4	1500			EWB (80L) / Hydrotherapy Pool Toilets
M5	1P+N	20		4		1500		EWB (80L) / Staff Shower Changing
M6	1P+N	20		4			500	EWB (20L) / Shower
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE
M8	1P+N	20		4		250		EF-1 / Waiting Area Toilets
M9	1P+N	20		4			250	EF-2 / Waiting Area Toilets
M10	1P+N	20		4	250			EF-1 / Hydrotherapy Pool
M11	1P+N	20		4		1750		A/C Waiting Area
M12	1P+N	20		4			1750	A/C Waiting Area
M13	1P+N	20		4	1500			A/C Waiting Area VIP
M14	1P+N	20		4		2500		A/C Hydrotherapy Pool
M15	1P+N	20		4			2500	A/C Hydrotherapy Pool
M16	1P+N	20		4	1500			A/C Staff Lounge
M17	1P+N	20		4		1500		A/C Treatment Room (2)
M18	1P+N	20		4			1500	A/C Treatment Room (3)
M19	1P+N	20		4	1500			A/C Treatment Room (1)
M20	1P+N	20		4		1750		A/C Gymnasium
M21	1P+N	20		4			1750	A/C Gymnasium
M22	1P+N	20		4	1750			A/C Gymnasium
M23	1P+N	20		4		1500		A/C Gymnasium Office
M24	1P+N	20		4			1750	A/C Consultation R. Neurology
M25	1P+N	20		4	1500			A/C Consultation R. Neurology
M26	1P+N	20		4		1500		A/C EEG/EMG
M27	1P+N	20		4			1750	A/C Pulmonary Consult. Examination Room
M28	1P+N	20		4	1750			A/C Pulmonary Consult. Examination Room
M29	1P+N	20		4		1750		A/C Reception& waiting area/Neuro-Resp
M30	1P+N	20		4			1750	A/C Reception& waiting area/Neuro-Resp

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: PP-GF
Panel Type: Recessed Mounted

	Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
		Poles (Nb)	Rate (A)			R	Y	B	
X	M31	1P+N	20		4	1750			A/C Cardiac Consult. Exam. Room / Ecg (2)
X	M32	1P+N	20		4		1500		A/C Echocardiography ultrasound
X	M33	1P+N	20		4			1500	A/C Holter Monitoring
X	M34	1P+N	20		4	1750			A/C Reception & waiting area/Cariology
X	M35	1P+N	20		4		1750		A/C Cardiac Consult. Room / Stress Test
X	M36	1P+N	20		4			1750	A/C Cardiac Consult. Exam. Room / Ecg (1)
X	M37	1P+N	20		4	1500			A/C General consult Room 4
X	M38	1P+N	20		4		1500		A/C General consult Room 5
X	M39	1P+N	20		4			1500	A/C General consult Room 2
X	M40	1P+N	20		4	1500			A/C General consult Room 1
X	M41	1P+N	20		4		1500		A/C Pantry / Lounge
X	M42	1P+N	20		4			1500	A/C Clean Utility
X	M43	1P+N	20		4	1750			A/C Reception & Cas
X	M44	1P+N	20		4		1500		A/C Supervisor's Office
X	M45	1P+N	20		4			2500	A/C Public Pharmacy
X	M46	1P+N	20		4	1750			A/C Electrical Room
X	M47	1P+N	20		4		1750		A/C Server Room
X		1P+N	20						SPARE
X		1P+N	20						SPARE
X		1P+N	20						SPARE
X		1P+N	20						SPARE

Breaking Capacity: 6KA	Circuit Breaker (A)		Connected Load (VA)				Diversity Factor	Required Load (VA)
	Frame	Rate	R	Y	B	Total		
Lighting								
Socket								
Mechanical			21750	24000	23750	69500	0.7	48650
Misc / Kitchen								
Main Switch		160	21750	24000	23750	69500		48650

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: PP-F1
Panel Type: Recessed Mounted

Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	200		95				<div>MD: Motion Detector</div> <div>LR: Latching Relay</div>
	4	32						
M1	1P+N	20		4	500			EWB (20L)
M2	1P+N	20		4		500		EWB (20L)
M3	1P+N	20		4			500	EWB (20L) / Toilets
M4	1P+N	20		4		500		EWB (20L) / Toilets
M5	1P+N	20		4			500	EWB (20L) / Toilets
M6	1P+N	20		4	500			EWB (20L)
M7	1P+N	20		4		500		EWB (20L) / Toilets
M8	1P+N	20		4			500	EWB (20L) / Toilets
M9	1P+N	20		4	500			EWB (20L) / Toilets
M64	1P+N	20		4		500		EWB (20L)
	1P+N	20						SPARE
	1P+N	20						SPARE
M10	1P+N	20		4		250		EF-1 / Corridor
M11	1P+N	20		4			250	EF-1 / Toilets
M12	1P+N	20		4	250			EF-1 / Corridor
M13	1P+N	20		4		250		EF-1 / Corridor
M14	1P+N	20		4	-		2500	A/C Waiting Area
M15	1P+N	20		4	2500			A/C Waiting Area
M16	1P+N	20		4		1750		A/C Ophthalmology Consult.
M17	1P+N	20		4			1500	A/C Ophthalmology Consult.
M18	1P+N	20		4	1500			A/C Visual Field Testing
M19	1P+N	20		4		1750		A/C Ophthalmology Consult.
M20	1P+N	20		4			1500	A/C Optometry Preparation
M21	1P+N	20		4	1500			A/C Optometry Preparation
M22	1P+N	20		4		1500		A/C Ophthalmology Procedure
M23	1P+N	20		4			1750	A/C Obstetrics&Gynaecology Consult.
M24	1P+N	20		4	1750			A/C Obstetrics&Gynaecology Consult.
M25	1P+N	20		4		1750		A/C Obstetrics&Gynaecology Consult.
M26	1P+N	20		4			1750	A/C Obstetrics&Gynaecology Consult.
M27	1P+N	20		4	1750			A/C Nephrology & Urology Consult.
M28	1P+N	20		4		1750		A/C Nephrology & Urology Consult.
M29	1P+N	20		4			1750	A/C Urodynamics
M30	1P+N	20		4	1750			A/C Urodynamics
M31	1P+N	20		4		1750		A/C Secretary Office
M32	1P+N	20		4			1750	A/C Ear,Nose, Throat Consult.
M33	1P+N	20		4	1750			A/C Ear,Nose, Throat Consult.
M34	1P+N	20		4		1750		A/C General Consul.Examination Room
M35	1P+N	20		4			1750	A/C Ear,Nose, Throat Consult.

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: PP-F1
Panel Type: Recessed Mounted

Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M36	1P+N	20		4	1750			A/C Audiometry
M37	1P+N	20		4		1500		A/C Endocrinology Clinic 3
M38	1P+N	20		4			1500	A/C Endocrinology Clinic 2
M39	1P+N	20		4	1500			A/C Secretary Office Endocrinology

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: PP-F1
Panel Type: Recessed Mounted

	Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)			Designation of Load
		Poles (Nb)	Rate (A)			R	Y	B	
	M40	1P+N	20		4		1500		A/C Hospital Nutritionist
	M41	1P+N	20		4			1500	A/C Endocrinology Clinic 1
	M42	1P+N	20		4	1500			A/C General Consul.Examination Room
	M43	1P+N	20		4		1500		A/C Equipment Store
	M44	1P+N	20		4			1500	A/C Drug Store
	M45	1P+N	20		4	1750			A/C Dental Consult.Examination Room
	M46	1P+N	20		4		1500		A/C Dental Consult.Examination Room
	M47	1P+N	20		4			1750	A/C Dental Lab.
	M48	1P+N	20		4	1750			A/C Dental Consult.Examination Room
	M49	1P+N	20		4		1750		A/C Dental Consult.Examination Room
	M50	1P+N	20		4			1500	A/C Panoramic Xray
	M51	1P+N	20		4	1750			A/C Dental Consult.Examination Room
	M52	1P+N	20		4		1750		A/C Dental Consult.Examination Room
	M53	1P+N	20		4			1750	A/C General Consul.Examination Room
	M54	1P+N	20		4	1750			A/C General Consul.Examination Room
	M55	1P+N	20		4		1750		A/C Waiting Area VIP
	M56	1P+N	20		4			1750	A/C General Consul.Examination Room
	M57	1P+N	20		4	1500			A/C Staff Lounge
	M58	1P+N	20		4		1500		A/C Pantry
	M59	1P+N	20		4			1500	A/C Clean Utility
	M60	1P+N	20		4	2500			A/C Records
	M61,62,63	3P+N	20		4	500	500	500	Booster Pump
		1P+N	20		4				SPARE
		1P+N	20		4				SPARE
		1P+N	20		4				SPARE

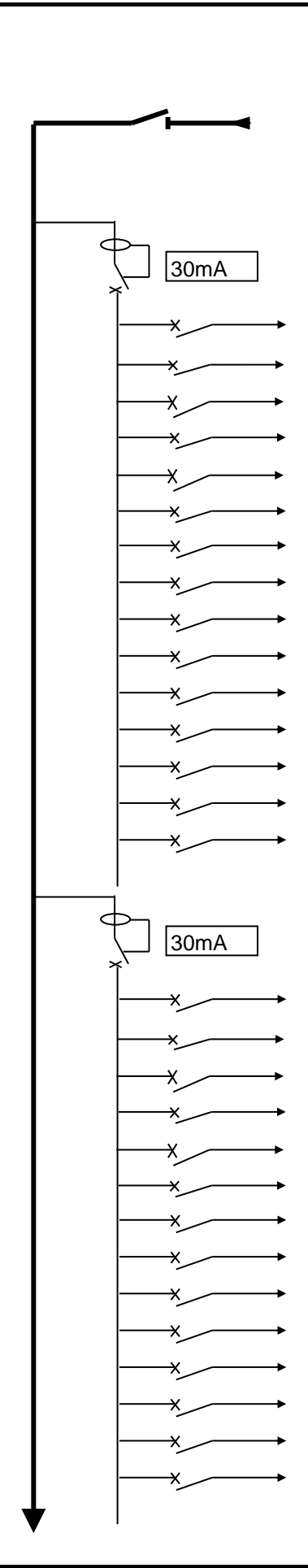
Breaking Capacity: 6KA	Circuit Breaker (A)		Connected Load (VA)				Diversity Factor	Requird Load (VA)
	Frame	Rate	R	Y	B	Total		
Lighting								0
Socket								0
Mechanical			30500	27750	29250	87500	0.7	61250
Misc / Kitchen								0
Main Switch		200	30500	27750	29250	87500		61250

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: UPP-GF
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	40		10				MD: Motion Detector LR: Latching Relay
	4	25						
S1	1P+N	20		4	1350			Reception&Cas/Supervisor's Office
S2	1P+N	20		4		720		General consult Room 2
S3	1P+N	20		4			990	General consult Room 1
S4	1P+N	20		4	720			General consult Room 5
S5	1P+N	20		4		720		General consult Room 4
S6	1P+N	20		4			1260	Cardiac Consut. Exam. Room / Ecg (1) & Stress Test
S7	1P+N	20		4	180			Cardiac Consut. Exam. Room / Stress Test
S8	1P+N	20		4		180		Cardiac Consut. Exam. Room / Stress Test
S9	1P+N	20		4			180	Cardiac Consut. Exam. Room / Stress Test
S10	1P+N	20		4	180			Cardiac Consut. Exam. Room / Stress Test
S11	1P+N	20		4		540		Reception& waiting area/Cariology
S12	1P+N	20		4			720	Holter Monitoring
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE
	4	25						
S13	1P+N	20		4	720			Echocardiography ultrasound
S14	1P+N	20		4		540		Cardiac Consut. Exam. Room / Ecg (2)
S15	1P+N	20		4			540	Reception& waiting area/Neuro-Resp
S16	1P+N	20		4	720			Pulmonary Consult. Examination Room
S17	1P+N	20		4		720		Pulmonary Consult. Examination Room
S18	1P+N	20		4			720	Consultation R. Neurology
S19	1P+N	20		4	720			Consultation R. Neurology
S20	1P+N	20		4		720		EEG/EMG
S21	1P+N	20		4			1350	Gymnasum
S22	1P+N	20		4	750			Server Room
S23	1P+N	20		4		750		Server Room
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE

Breaking Capacity: 6KA	Circuit Breaker (A)			Connected Load (VA)				Diversity Factor	Requird Load (VA)
	Frame	Rate		R	Y	B	Total		
Lighting									
Socket				5340	4890	5760	15990	0.9	14391
Mechanical									

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: UPP-GF
Panel Type: Recessed Mounted

	Circuit Ref	Circuit Beaker		Control	Wires (mm2)	Load (VA)			Designation of Load	
		Poles (Nb)	Rate (A)			R	Y	B		
Misc / Kitchen										
Main Switch		40			5340	4890	5760	15990		14391

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: UPP-F1
Panel Type: Recessed Mounted

Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	50		16				<div>MD: Motion Detector</div> <div>LR: Latching Relay</div>
	4	32						
S1	1P+N	20		4	1080			Reception & Control
S2	1P+N	20		4		1080		General Consul.Examination Rooms
S3	1P+N	20		4			810	General Consul.Examination Room/Xray
S4	1P+N	20		4	810			Dental Consult.Examination Room
S5	1P+N	20		4		810		Dental Consult.Examination Room
S6	1P+N	20		4			810	Dental Consult.Examination Room
S7	1P+N	20		4	810			Dental Consult.Examination Room
S8	1P+N	20		4		810		Dental Consult.Examination Room
S9	1P+N	20		4			810	Dental Consult.Examination Room
S10	1P+N	20		4	720			General Consul.Examination Room
S11	1P+N	20		4		1530		Drug Store / Hospital Nutritionist / Secretary Office
S12	1P+N	20		4			540	Endocrinology Clinic 1
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE
	4	32						
S13	1P+N	20		4	720			Endocrinology Clinic 2
S14	1P+N	20		4		720		Endocrinology Clinic 3
S15	1P+N	20		4			1080	Ophthalmology Consult.Rooms
S16	1P+N	20		4	1080			Ophthalmology Consult./ Ophthalmology Procedure
S17	1P+N	20		4		1080		Obstetrics&Gynaecology Consult.
S18	1P+N	20		4			990	Obstetrics&Gynaecology Consult.
S19	1P+N	20		4	720			Nephrology & Urology Consult.
S20	1P+N	20		4		1080		Obstetrics&Gynaecology / Nephrology & Urology Consult.
S21	1P+N	20		4			1080	Urodynamics
S22	1P+N	20		4	720			Ear,Nose, Throat Consult.
S23	1P+N	20		4		1260		Ear,Nose, Throat Consult./ Secretary Office
S24	1P+N	20		4			1170	Ear,Nose, Throat Consult./Audiometry
S25	1P+N	20		4	720			General Consul.Examination Room
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE

Breaking Capacity: 6KA	Circuit Breaker (A)		Connected Load (VA)				Diversity Factor	Requird Load (VA)
	Frame	Rate	R	Y	B	Total		
Lighting								
Socket			7380	8370	7290	23040	0.9	20736
Mechanical								
Misc / Kitchen								

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: UPP-F1
Panel Type: Recessed Mounted

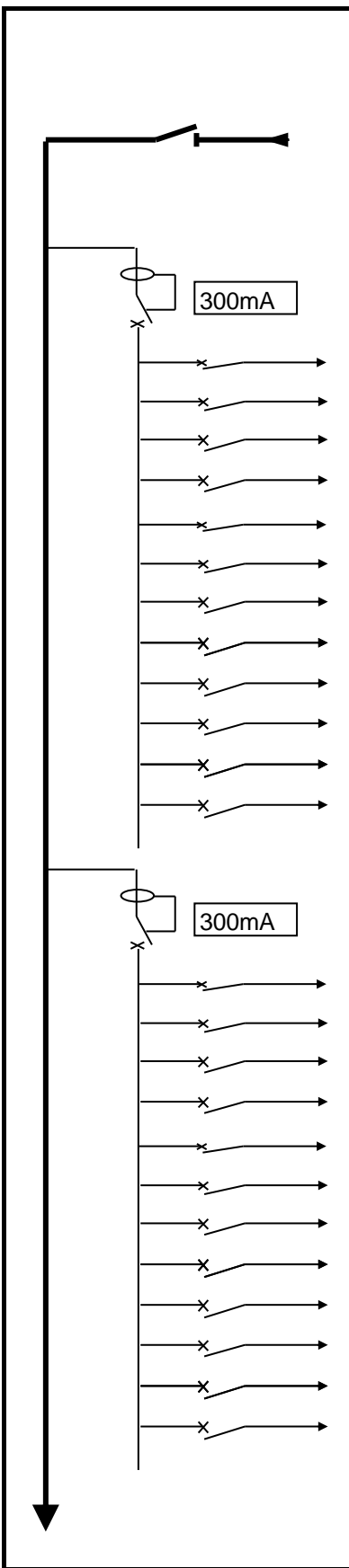
	Circuit Ref	Circuit Breaker		Control	Wires (mm2)	Load (VA)			Designation of Load	
		Poles (Nb)	Rate (A)			R	Y	B		
Main Switch		50			7380	8370	7290	23040		20736

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: Ground Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: ULP-GF
Panel Type: Recessed Mounted



Circuit Ref	Circuit Breaker		Control	Wires (mm ²)	Load (VA)		
	Poles (Nb)	Rate (A)			R	Y	B
M.S.	4	32		6			
	4	20					
U1	1P+N	10	CT	1.5	219.6		
U2	1P+N	10	CT	1.5		203.2	
U3	1P+N	10	CT	1.5			163.2
U4	1P+N	10	CT	1.5	243.0		
U5	1P+N	10	CT	1.5		138.6	
U6	1P+N	10	CT	1.5			158.4
U7	1P+N	10		1.5	132.6		
U8	1P+N	10		1.5		135.6	
U9	1P+N	10		1.5			168.0
	1P+N	10		1.5	0.0		
	1P+N	10		1.5		0.0	
	1P+N	10		1.5			0.0
	4	20					
U10	1P+N	10		1.5	79		
U11	1P+N	10		1.5		193.8	
U12	1P+N	10		1.5			143.4
U13	1P+N	10		1.5	158		
U14	1P+N	10		1.5		99	
U15	1P+N	10		1.5			99
U16	1P+N	10		1.5	139		
U17	1P+N	10		1.5		118.8	
U18	1P+N	10		1.5			118.8
U19	1P+N	10		1.5	139		
U20	1P+N	10		-		99	
U21	1P+N	10		-			0

Designation of Load	
MD: Motion Detector LR: Latching Relay	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Ground Floor	
Spare	
Spare	
Spare	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
First Floor	
Spare	

Breaking Capacity: 6KA
Lighting
Socket
Mechanical
Misc / Kitchen
Main Switch

Circuit Breaker (A)			Connected Load (VA)			
Frame	Rate		R	Y	B	Total
			1110	988	851	2948.8
						0
	32		1110	988	851	2948.8

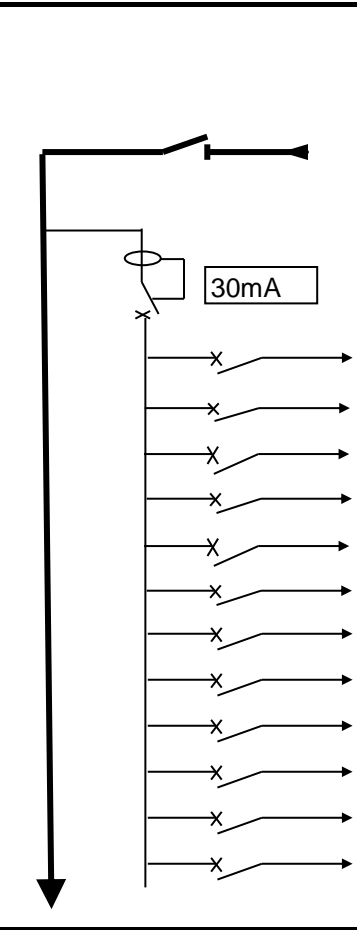
Diversity Factor	Required Load (VA)
1	2949
0.7	0
	2949

FINAL BRANCH CIRCUIT PANELBOARD

Building: SOH Hospital
Location: First Floor

Voltage: 415/240V.
Frequency: 50Hz

Panel Ref.: UPP-F1.D
Panel Type: Recessed Mounted



Circuit Ref	Circuit Beaker		Control	Wires (mm2)	Load (VA)			Designation of Load
	Poles (Nb)	Rate (A)			R	Y	B	
M.S.	4	40		10				MD: Motion Detector LR: Latching Relay
	4	32						
S1	1P+N	25		6	4000			Dental Lab (Machine 38 & 39)
S2	1P+N	20		4		500		Dental Lab (Machine 41, 42 & 43)
S3	1P+N	20		4			500	Dental Lab (Machine 46)
S4	1P+N	20		4		1000		Dental Lab (Machine 44,45 & 47)
S5	1P+N	20		4		400		Dental Lab (Machine 55)
S6	1P+N	20		4			800	Dental Lab (Machine 50, 51 & 52)
S7	1P+N	20		4		750		Dental Lab (Machine 48 & 49)
S8	1P+N	20		4		420		Dental Lab (Machine 53)
S9	1P+N	20		4			1000	Dental Lab (Machine 54)
	1P+N	20						SPARE
	1P+N	20						SPARE
	1P+N	20						SPARE

Breaking Capacity: 6KA	Circuit Breaker (A)		Connected Load (VA)				Diversity Factor	Requird Load (VA)
	Frame	Rate	R	Y	B	Total		
Lighting								
Socket			4000	3070	2300	9370	0.9	8433
Mechanical								
Misc / Kitchen								
Main Switch		40	4000	3070	2300	9370		8433