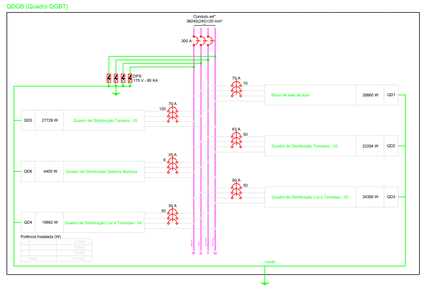
Quadro de Cargas (QDGB)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
QD1	Bloco de sala de aula	3F+N+T	B1	220 / 127 V	30000	3+N+T	12000	12000	6000	1.00	0.98	98.5	70	222.7	225			Ok
QD2	Quadro de Distribuição Tomadas - 02	3F+N+T	B1	220 / 127 V	28243	3+N+T	8280	7762	9201	1.00	0.98	96.0	50	178.2	63.0			Ok
QD3	Quadro de Distribuição Luz e Tomadas - 03	3F+N+T	B1	220 / 127 V	34390	3+N+T	11990	11990	10410	1.00	0.98	96.0	50	217.0	225			Ok
QD5	Quadro de Distribuição Tomada - 05	3F+N+T	B1	220 / 127 V	54600	3+N+T	10400	19600	24600	1.00	0.98	96.0	95	276.7	300			Ok
QD6	Quadro de Distribuição Sistema Bombas	3F+N+T	B1	220 / 127 V	6763	3+N+T	2350	1150	1150	1.00	0.95	23.0	6	48.7	25			Ok
QD4	Quadro de Distribuição Tomadas - 04	3F+N+T	B1	220 / 127 V	27400	3+N+T	10400	10400	6600	1.00	0.98	97.8	50	179.3	80.0			Ok
TOTAL					181633		137530	84364	82364									

Quadro de Demanda (QDGB)

Tipo de carga	Potência instalada (kVA)	Fator de demanda (%)	Demanda (kVA)
Motores	6.78	75	5.08
Iluminação e TUG's (Escolas e semelhantes)	12.60	100	12.60
	142.80	50	71.40
		TOTAL	88.68

QDGB (Quadro QGBT)



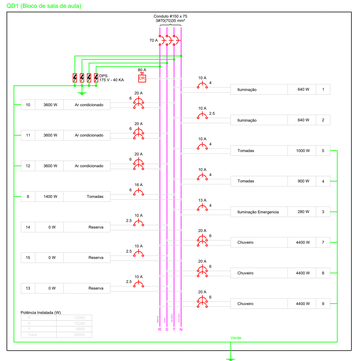
Quadro de Cargas (QD1)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W)					Tomadas (W)						Pot. total (W)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
					30	100	200	300	400	100	200	300	500	600	4400	(VA)	(W)												
1	Iluminação	F+N	B1	127 V	5											640	640	1	640			1.00	0.98	5.4	4	42.0	1.5	1.68	1.68	Ok
	a				5											316	256	1		256		0.70	1.0	4	42.0					Ok
	b				5											189	140	1			140	0.70	1.0	4	42.0					Ok
	c				5																	0.70	0.9	4	42.0					Ok
	d				5											79	64	1			64	0.70	0.9	4	42.0					Ok
	e				5											237	192	1			192	0.70	0.9	4	42.0					Ok
2	Iluminação	F+N	B1	127 V	20											700	640	1			640	1.00	0.98	5.4	4	42.0	1.5	2.12	2.12	Ok
	a															0	0	1				1.00	0.9	0.0	4	42.0				Ok
	b					12										474	384	1			384	0.70	0.9	2.9	4	42.0				Ok
	c															0	0	1				1.00	0.9	0.0	4	42.0				Ok
	d															0	0	1				1.00	0.9	0.0	4	42.0				Ok
	e					8										316	256	1		256		0.70	0.9	2.4	4	42.0				Ok
	f															0	0	1				1.00	0.9	0.0	4	42.0				Ok
3	Iluminação Emergência	F+N+T	B1	127 V					14							1050	350	1			350	1.00	1.00	2.8	4	42.0	1.5	1.58	1.58	Ok
4	Tomadas	F+N+T	B1	127 V						5	2					1056	900	1			900	1.00	0.98	7.1	4	42.0	10.0	2.59	2.59	Ok
5	Tomadas	F+N+T	B1	127 V						5	2					1184	1000	1			1000	1.00	0.98	7.9	4	42.0	10.0	2.61	2.61	Ok
6	Tomadas	F+N+T	B1	127 V						10	2					1657	1400	1			1400	1.00	0.98	11.1	4	42.0	10.0	1.89	1.89	Ok
7	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200	2200		1.00	0.98	20.0	4	54.0	20.0	2.33	2.33	Ok
8	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200	2200		1.00	0.98	20.0	4	54.0	20.0	2.33	2.33	Ok
9	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200	2200		1.00	0.98	20.0	4	54.0	20.0	2.35	2.35	Ok
10	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	1.84	1.84	Ok
11	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	1.84	1.84	Ok
12	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	1.85	1.85	Ok
13	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
14	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
15	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
TOTAL					40	14	21	9	9	3						30597	29860	R+S+T	12000	12000	5860								

Quadro de Demanda (QD1)

Tipo de carga	Potência instalada (kVA)	Fator de demanda (%)	Demanda (kVA)
Iluminação e TUG's (Escolas e semelhantes)	12.00	100	12.00
	29.10	50	10.05
		TOTAL	22.05

QD1 (Bloco de sala de aula)



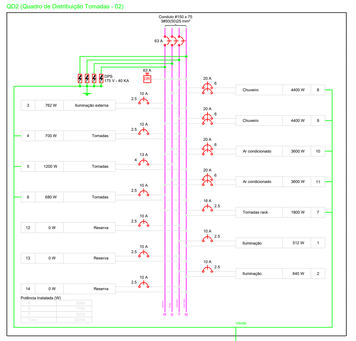
Quadro de Cargas (QD2)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W)					Tomadas (W)						Pot. total (VA)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
					30	100	200	300	400	100	200	300	500	600	4400															
	a					13										474	384	1			384	0.70	0.9	2.9	4	42.0				Ok
	b					13										474	384	1			384	0.70	0.9	2.9	4	42.0				Ok
	c					8										316	256	1			256	0.70	0.9	2.4	4	42.0				Ok
2	Iluminação	F+N	B1	127 V	20											237	192	1			192	0.70	0.9	2.4	4	42.0				Ok
	a															79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	b															79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	c															79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	d															79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	e															237	192	1			192	0.70	0.9	2.4	4	42.0				Ok
3	Iluminação externa	F+N	B1	127 V	16	1										907	762	1	762			1.00	0.98	10.8	4	31.0	10.0	2.96	3.10	Ok
	a															832	512	1		512			1.0	4.6	4	31.0				Ok
	b															375	250	1			250		0.95	1.6	2.5	31.0				Ok
4	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1		700	500	1.00	0.98	8.8	4	42.0	10.0	1.81	1.98	Ok
5	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200		0.98	7.6	4	42.0	10.0	0.74	0.74	Ok
6	Tomadas	F+N+T	B1	127 V								3				836	680	R	680			1.00	0.98	17.3	2.5	31.0	10.0	1.72	1.84	Ok
7	Tomadas rack	F+N+T	B1	127 V											1	1800	1800	R	1800			1.00	0.98	16.5	4	31.0	10.0	0.70	1.05	Ok
8	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S		2200	2200	1.00	1.00	20.0	4	54.0	20.0	0.74	1.05	Ok
9	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200		2200	1.00	0.98	20.0	4	54.0	20.0	0.97	0.99	Ok
10	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	1.73	1.78	Ok
11	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	0.81	1.05	Ok
12	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
13	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
14	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.80	Ok
TOTAL					52	14	4	2	3	3	2					25743	22294	R+S+T	8280	7762	6252									

Quadro de Demanda (QD2)

Tipo de carga	Potência instalada (kVA)	Fator de demanda (%)	Demanda (kVA)
Iluminação e TUG's (Escolas e semelhantes)	12.00	100	12.00
	17.44	50	8.72
		TOTAL	20.72

QD2 (Quadro de Distribuição Tomadas - 02)



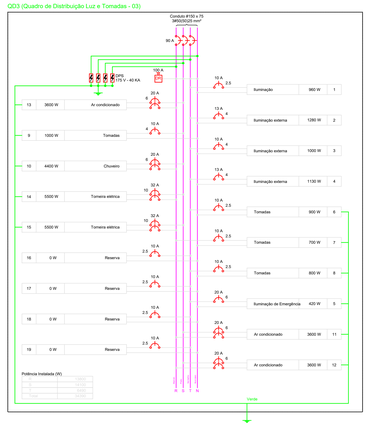
Quadro de Cargas (QD3)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W)					Tomadas (W)						Pot. total (VA)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
					30	100	200	300	400	100	200	300	500	600	4400															
1	Iluminação	F+N	B1	127 V	5											640	640	1	640			1.00	0.98	5.4	4	42.0	1.5	1.68	1.68	Ok
	a				5											237	192	1		192		0.70	0.9	2.4	4	42.0				Ok
	b				5											158	128	1			128	0.70	0.9	1.6	4	42.0				Ok
	c				5											158	128	1			128	0.70	0.9	1.6	4	42.0				Ok
2	Iluminação externa	F+N	B1	127 V	16											1280	1280	1			1280	1.00	1.00	10.1	4	42.0	10.0	3.89	4.12	Ok
	a				16											800	800	1			800	0.70	0.9	4.2	4	42.0				Ok
	b				16											480	480	1			480	0.70	0.9	2.5	4	42.0				Ok
4	Iluminação externa	F+N	B1	127 V	2											1120	1120	1			1120	1.00	1.00	8.8	4	42.0	10.0	3.69	3.77	Ok
	a				2											160	160	1			160	0.70	0.9	0.6	4	42.0				Ok
	b				2											960	960	1			960	0.70	0.9	3.6	4	42.0				Ok
5	Iluminação de Emergência	F+N+T	B1	127 V					21	3						2100	420	1			420	1.00	0.98	36.7	6	54.0	20.0	1.42	1.59	Ok
6	Tomadas	F+N+T	B1	127 V						5	2					1184	1000	1			1000	1.00	0.98	7.9	4	42.0	10.0	1.61	1.78	Ok
7	Tomadas	F+N+T	B1	127 V						5	2					947	800	1	800			1.00	0.98	17.6	2.5	31.0	10.0	1.93	2.09	Ok
8	Tomadas	F+N+T	B1	127 V							1	1				501	400	1			400	1.00	0.98	16.5	2.5	31.0	10.0	1.70	1.91	Ok
9	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200	2200		1.00	0.98	20.0	4	54.0	20.0	1.51	1.83	Ok
10	Chuveiro	F+F+T	B1	220 V											1	4400	4400	R+S	2200	2200		1.00	0.98	20.0	4	54.0	20.0	1.51	1.83	Ok
11	Ar condicionado	F+F+T	B1	220 V										1		4000	3600	R+S	1800	1800		1.00	0.98	18.2	4	54.0	20.0	1.33	1.66	Ok
12	Tomada	F+N+T	B1	127 V												1000	1000	1			1000	1.00	0.98	7.9	4	42.0	10.0	0.53	1.02	Ok
13	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.73	Ok
14	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.73	Ok
15	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.73	Ok
16	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		4.73	Ok
TOTAL					56	10	2	2	1	1	3	2	2			20448	18962	R+S+T	5500	7479	6983									

Quadro de Demanda (QD3)

Tipo de carga	Potência instalada (kVA)	Fator de demanda (%)	Demanda (kVA)
Iluminação e TUG's (Escolas e semelhantes)	12.00	100	12.00
	26.41	100	26.41
		TOTAL	38.41

QD3 (Quadro de Distribuição Luz e Tomadas - 03)



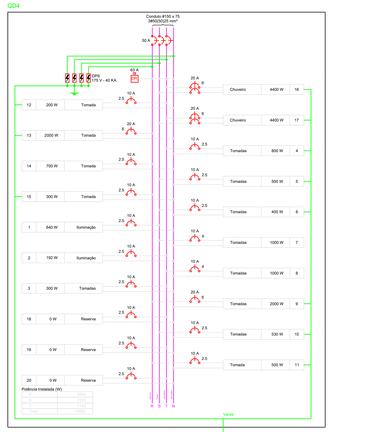
Quadro de Cargas (QD4)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W)					Tomadas (W)						Pot. total (VA)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
					30	100	200	300	400	100	200	300	500	600	4400															
1	Iluminação	F+N	B1	127 V	5											640	640	1	640			1.00	0.98	5.4	4	42.0	1.5	1.68	1.68	Ok
	a				5											237	192	1		192		0.70	0.9	2.4	4	42.0				Ok
	b				5											158	128	1			128	0.70	0.9	1.6	4	42.0				Ok
	c				5											158	128	1			128	0.70	0.9	1.6	4	42.0				Ok
	d				5											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	e				5											237	192	1			192	0.70	0.9	2.4	4	42.0				Ok
2	Iluminação	F+N	B1	127 V	4											237	192	1			192	1.00	1.00	1.5	4	42.0	10.0	0.49	0.61	Ok
	a				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	b				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	c				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	d				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
3	Tomadas	F+N	B1	127 V						4						512	400	1			400	1.00	0.98	3.5	2.5	31.0	10.0	0.74	0.91	Ok
4	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
5	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
6	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
7	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
8	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
9	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
10	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
11	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
12	Tomadas	F+F+T	B1	220 V											1	8775	8000	R+S	3500	4500		1.00	0.98	40.0	10	76.0	50.0	0.50	1.07	Ok
13	Tomada	F+F+T	B1	220 V											1	8775	8000	R+S	3500	4500		1.00	0.98	40.0	10	76.0	50.0	0.50	1.07	Ok
14	Tomada	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		0.13	Ok
15	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		0.13	Ok
16	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		0.13	Ok
17	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		0.13	Ok
18	Reserva	F+N	B1	127 V												0	0	1				1.00	1.00	0.0	2.5	31.0	10.0		0.13	Ok
TOTAL					28	10	2	2	1	1	3	2	2		2	25948	19662	R+S+T	5500	7479	6683									

Quadro de Demanda (QD4)

Tipo de carga	Potência instalada (kVA)	Fator de demanda (%)	Demanda (kVA)
Iluminação e TUG's (Escolas e semelhantes)	12.00	100	12.00
	26.67	50	12.83
		TOTAL	24.83

QD4



Quadro de Cargas (QD5)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W)					Tomadas (W)						Pot. total (VA)	Pot. total (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	In (A)	Disj. (A)	dV parc (%)	dV total (%)	Status
					30	100	130	240	400	500	600	800	1000	1200	2000	5000	6700													
1	Iluminação	F+N	B1	127 V	5											640	640	1	640			1.00	0.98	5.4	4	42.0	1.5	1.68	2.01	Ok
	a				5											316	256	1		256		0.70	0.9	2.4	4	42.0				Ok
	b				5											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	c				5											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	d				5											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	e				5											237	192	1			192	0.70	0.9	2.4	4	42.0				Ok
2	Iluminação	F+N	B1	127 V	4											237	192	1			192	1.00	1.00	1.5	4	42.0	10.0	0.49	0.61	Ok
	a				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	b				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	c				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	d				2											79	64	1			64	0.70	0.9	0.6	4	42.0				Ok
	e				2											237	192	1			192	0.70	0.9	2.4	4	42.0				Ok
3	Tomadas	F+N	B1	127 V						4						512	400	1			400	1.00	0.98	3.5	2.5	31.0	10.0	0.74	0.91	Ok
4	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
5	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0	10.0	0.74	0.74	Ok
6	Tomadas	F+N+T	B1	127 V						5	2					1317	1200	1			1200	1.00	0.98	8.8	4	42.0