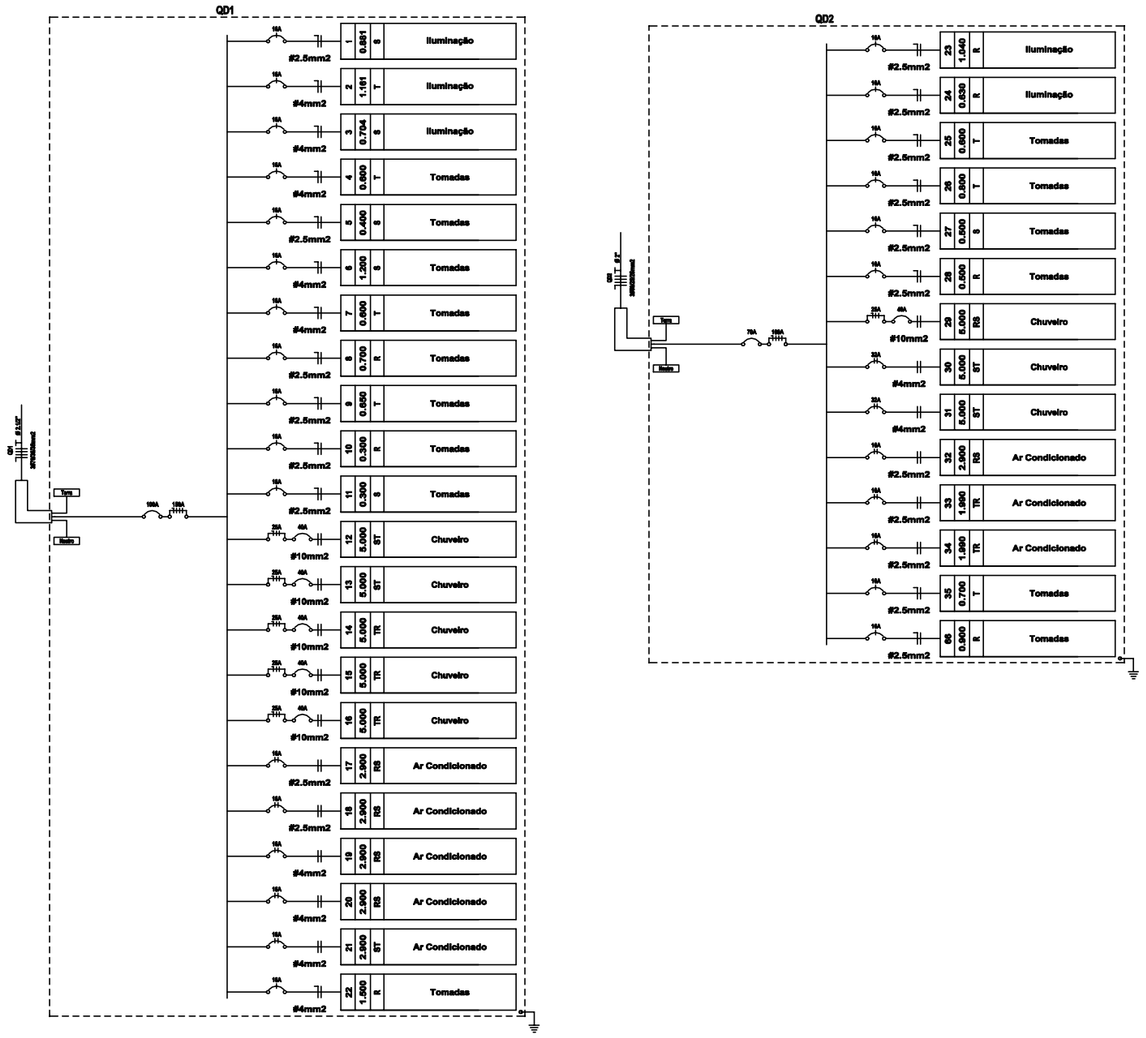

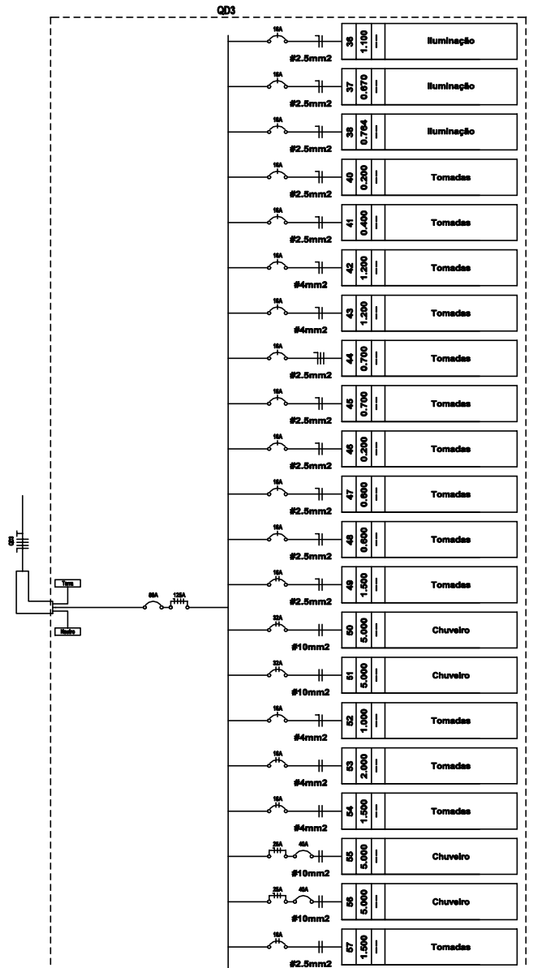

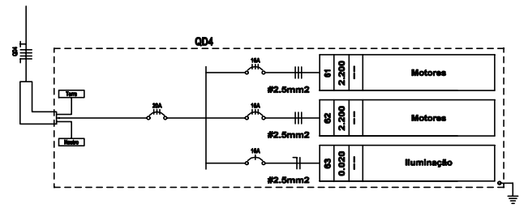

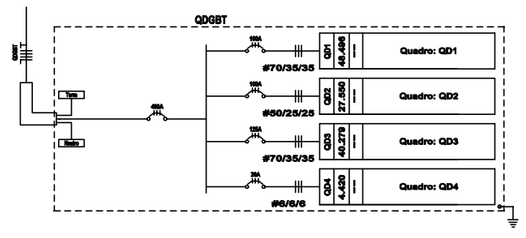

Quadro de Cargas

QD1 (Quadro: QD1)

Circ.	Descrição	Iluminação 10W	17W	32W	36W	50W	55W	60W	100W	Tomadas 100W	150W	Chuveiro 5000W	Ar Cond. 2900W	Pot. W	Fat. Pot.	Pot. V.A	Fase R	Fase S	Fase T	Demanda (%)	Fases R S T	Tensão V	Corr. A	Prot. A	Cond. mm2	Comp.(m) Cond.	Q.T. (%)
1	Iluminação	1	1		18				2					881.0	0.95	927.4	0.0	927.4	0.0	100%	S	127	7.30	1P-16A	2.5	–	–
2	Iluminação				6	1	1	14						1161.0	0.95	1222.1	0.0	0.0	1222.1	100%	T	127	9.62	1P-16A	4	–	–
3	Iluminação			2	5			6	1					704.0	0.95	741.1	0.0	741.1	0.0	100%	S	127	5.84	1P-16A	4	–	–
4	Tomadas									6				600.0	0.80	750.0	0.0	0.0	750.0	100%	T	127	5.91	1P-16A	4	–	–
5	Tomadas									4				400.0	0.80	500.0	0.0	500.0	0.0	100%	S	127	3.94	1P-16A	2.5	–	–
6	Tomadas									12				1200.0	0.80	1500.0	0.0	1500.0	0.0	100%	S	127	11.81	1P-16A	4	–	–
7	Tomadas									6				600.0	0.80	750.0	0.0	0.0	750.0	100%	T	127	5.91	1P-16A	4	–	–
8	Tomadas									7				700.0	0.80	875.0	875.0	0.0	0.0	100%	R	127	6.89	1P-16A	2.5	–	–
9	Tomadas									5	1			660.0	0.80	812.5	0.0	0.0	812.5		T	127	6.40	1P-16A	2.5	–	–
10	Tomadas									3				300.0	0.80	375.0	375.0	0.0	0.0		R	127	2.95	1P-16A	2.5	–	–
11	Tomadas									3				300.0	0.80	375.0	0.0	375.0	0.0	100%	S	127	2.95	1P-16A	2.5	–	–
12	Chuveiro											1		5000.0	1.00	5000.0	0.0	2500.0	2500.0	100%	ST	220	22.73	2P-40A	10	–	–
13	Chuveiro											1		5000.0	1.00	5000.0	0.0	2500.0	2500.0	100%	ST	220	22.73	2P-40A	10	–	–
14	Chuveiro											1		5000.0	1.00	5000.0	2500.0	0.0	2500.0	100%	TR	220	22.73	2P-40A	10	–	–
15	Chuveiro											1		5000.0	1.00	5000.0	2500.0	0.0	2500.0	100%	TR	220	22.73	2P-40A	10	–	–
16	Chuveiro											1		5000.0	1.00	5000.0	2500.0	0.0	2500.0	100%	TR	220	22.73	2P-40A	10	–	–
17	Ar Condicionado												1	2900.0	0.80	3625.0	1812.5	1812.5	0.0	100%	RS	220	16.48	2P-16A	2.5	–	–
18	Ar Condicionado												1	2900.0	0.80	3625.0	1812.5	1812.5	0.0	100%	RS	220	16.48	2P-16A	2.5	–	–
19	Ar Condicionado												1	2900.0	0.80	3625.0	1812.5	1812.5	0.0	100%	RS	220	16.48	2P-16A	4	–	–
20	Ar Condicionado												1	2900.0	0.80	3625.0	1812.5	1812.5	0.0	100%	RS	220	16.48	2P-16A	4	–	–
21	Ar Condicionado												1	2900.0	0.80	3625.0	0.0	1812.5	1812.5	100%	ST	220	16.48	2P-16A	4	–	–
22	Tomadas									12	2			1500.0	0.80	1875.0	1875.0	0.0	0.0	100%	R	127	14.76	1P-16A	4	–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
Total		1	1	2	29	1	1	20	3	58	3	5	5	48496.0		53828.0	17874.9	19105.9	17847.0					4P-100A	70	54.03	2
Aliment.														48496.0	0.90	53828.0	17874.9	19105.9	17847.0	100%	RST	220	141.65	4P-100A	70	54.03	

Potência Demandada: 100% (48496.0 W) (53828.0 V.A)

Corrente nas Fases: R=159.7A S=159.7A T=159.0A

Quadro de Cargas

QD2 (Quadro: QD2)

Circ.	Descrição	Iluminação 30W	36W	40W	60W	100W	Tomadas 100W	200W	Chuveiro 5000W	Ar Cond. 1600W	2900W	Pot. W	Fat. Pot.	Pot. V.A	Fase R	Fase S	Fase T	Demanda (%)	Fases R S T	Tensão V	Corr. A	Prot. A	Cond. mm2	Comp.(m) Cond.	Q.T. (%)
23	Iluminação		20	3		2						1040.0	0.95	1094.7	1094.7	0.0	0.0	100%	R	127	8.62	1P-16A	2.5	–	–
24	Iluminação	2			7							630.0	0.95	663.2	663.2	0.0	0.0	100%	R	127	5.22	1P-16A	2.5	–	–
25	Tomadas						6					600.0	0.80	750.0	0.0	0.0	750.0	100%	T	127	5.91	1P-16A	2.5	–	–
26	Tomadas						4	2				800.0	0.80	1000.0	0.0	0.0	1000.0	100%	T	127	7.87	1P-16A	2.5	–	–
27	Tomadas						5					500.0	0.80	625.0	0.0	0.0	625.0	100%	S	127	4.92	1P-16A	2.5	–	–
28	Tomadas						5					500.0	0.80	625.0	625.0	0.0	0.0	100%	R	127	4.92	1P-16A	2.5	–	–
29	Chuveiro								1			6000.0	1.00	6000.0	2500.0	3500.0	0.0	100%	RS	220	22.73	2P-40A	10	–	–
30	Chuveiro								1			6000.0	1.00	6000.0	0.0	2500.0	3500.0	100%	ST	220	22.73	2P-32A	4	–	–
31	Chuveiro								1			6000.0	1.00	6000.0	0.0	2500.0	3500.0	100%	ST	220	22.73	2P-32A	4	–	–
32	Ar Condicionado									1		2900.0	0.80	3625.0	1812.5	1812.5	0.0	100%	RS	220	16.48	2P-16A	2.5	–	–
33	Ar Condicionado									1		1990.0	0.80	2487.5	1243.8	0.0	1243.8	100%	TR	220	11.31	2P-16A	2.5	–	–
34	Ar Condicionado									1		1990.0	0.80	2487.5	1243.8	0.0	1243.8	100%	TR	220	11.31	2P-16A	2.5	–	–
35	Tomadas						7					700.0	0.80	875.0	0.0	875.0	0.0	100%	T	127	6.89	1P-16A	2.5	–	–
66	Tomadas						3	3				900.0	0.80	1125.0	1125.0	0.0	0.0	100%	R	127	8.86	1P-16A	2.5	–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
RES.	Circuito Reserva																									–	–
Total		2	20	3	7	2	30	5	3	2	1	27550.0		30357.0	10307.9	9037.4	1012.5					7P-70A	50	54.03	
Aliment.												27550.0	0.91	30357.0	10307.9	9037.4	1012.5	100%	RST	220	79.89	4P-70A	50	54.03	

Potência Demandada: 100% (27550.0 W) (30357.9 V.A)

Corrente nas Fases: R=59.4A S=59.6A T=59.7A

Quadro de Cargas

QD3 (Quadro: QD3)

Circ.	Descrição	Iluminação 20W	25W	30W	35W	40W	60W	80W	100W	Tomadas 100W	150W	200W	600W	1000W	1500W	2000W	Chuveiro 5000W	Pot. W	Fat. Pot.	Pot. V.A	Fase R	Fase S	Fase T	Demanda (%)	Fases R S T	Tensão V	Corr. A	Prot. A	Cond. mm2	Comp.(m) Cond.	Q.T. (%)
36	Iluminação							15		2								1100.0	0.95	1157.9	1157.9	0.0	0.0	100%	R	127	9.12	1P-16A	2.5	–	–
37	Iluminação		2				5	7										870.0	0.95	705.3	705.3	0.0	0.0	100%	R	127	5.56	1P-16A	2.5	–	–
38	Iluminação	1			4	15												764.0	0.95	804.2	0.0	0.0	804.2	100%	T	127	6.33	1P-16A	2.5	–	–
40	Tomadas									2								200.0	0.80	250.0	0.0	250.0	0.0	100%	S	127	1.97	1P-16A	2.5	–	–
41	Tomadas									4								400.0	0.80	500.0	0.0	500.0	0.0	100%	S	127	3.94	1P-16A	2.5	–	–
42	Tomadas												2					1200.0	0.80	1500.0	0.0	0.0	1500.0	100%	T	127	11.81	1P-16A	4	–	–
43	Tomadas									4		1	1					1200.0	0.80	1500.0	0.0	1500.0	0.0	100%	S	127	11.81	1P-16A	4	–	–
44	Tomadas									5		1						700.0	0.80	876.0	437.5	437.5	0.0	100%	RS	220	3.98	2P-16A	2.5	–	–
45	Tomadas									7								700.0	0.80	875.0	875.0	0.0	0.0	100%	R	127	6.89	1P-16A	2.5	–	–
46	Tomadas									3								300.0	0.80	250.0	0.0	250.0	0.0	100%	S	127	1.97	1P-16A	2.5	–	–
47	Tomadas												1					600.0	0.80	750.0	0.0	750.0	0.0	100%	S	127	5.91	1P-16A	2.5	–	–
48	Tomadas												1					600.0	0.80	750.0	0.0	750.0	0.0	100%	S	127	5.91	1P-16A	2.5	–	–
49	Tomadas														1			1800.0	0.80	1875.0	1875.0	0.0	0.0	100%	R	127	14.76	1P-16A	2.5	–	–
50	Chuveiro																1	6000.0	1.00	6000.0	0.0	2500.0	3500.0	100%	ST	220	22.73	2P-32A	10	–	–
51	Chuveiro																1	6000.0	1.00	6000.0	2500.0	3500.0	0.0	100%	RS	220	22.73	2P-32A	10	–	–
52	Tomadas													1				1000.0	0.80	1250.0	0.0	0.0	1250.0	100%	T	127	9.84	1P-16A	4	–	–
53	Tomadas														1			2000.0	0.80	2500.0	0.0	1250.0	1250.0		ST	220	11.37	2P-16A	4	–	–
54	Tomadas															1		1000.0	0.80	1875.0	937.5	0.0	937.5		TR	220	8.52	2P-16A	4	–	–
55	Chuveiro															1	1	6000.0	1.00	6000.0	0.0	2500.0	3500.0	100%	ST	220	22.73	2P-40A	10	–	–
56	Chuveiro																1	6000.0	1.00	6000.0	2500.0	0.0	3500.0	100%	TR	220	22.73	2P-40A	10	–	–
57	Tomadas														1			1000.0	0.80	1875.0	937.5	937.5	0.0	100%	RS	220	8.52	2P-16A	2.5	–	–
58	Tomadas															1		1000.0	0.80	1250.0	625.0	0.0	625.0		TR	220	5.68	2P-16A	2.5	–	–
59	Tomadas															1		1000.0	0.80	1250.0	0.0	625.0	625.0	100%	ST	220	5.68	2P-16A	2.5	–	–
60	Tomadas									8	2							1100.0	0.80	1375.0	1375.0	0.0	0.0	100%	R	127	10.83	1P-16A	2.5	–	–
64	Tomadas									10								1000.0	0.80	1250.0	1250.0	0.0	0.0	100%	R	127	9.84	1P-16A	2.5	–	–
65	Iluminação			3				3										340.0	0.95	353.2	0.0	0.0	353.2	100%	T	127	2.85	1P-16A	2.5	–	–
RES.	Circuito Reserva																													–	–
RES.	Circuito Reserva																													–	–
RES.	Circuito Reserva																													–	–
RES.	Circuito Reserva																													–	–
Total		1	2	3	4	20	22	3	2	42	2	2	5	3	3	1	4	40279.0		44780.5	15175.0	14749.9	14855.6								
Aliment.																		40279.0	0.90	44780.5	15175.0	14749.9	14855.6	100%	RST	220	117.84	4P-80A	70	54.03	

Potência Demandada: 100% (40279.0 W) (44780.5 V.A)

Corrente nas Fases: R=139.2A S=129.2A T=130.3A

Quadro de Cargas

QD4 (Quadro: QD4)

Circ.	Descrição	Iluminação 20W	Motores 2200W	Pot. W	Fat. Pot.	Pot. V.A	Fase R	Fase S	Fase T	Demanda (%)	Fases R S T	Tensão V	Corr. A	Prot. A	Cond. mm2	Comp.(m) Cond.	Q.T. (%)
61	Motores		1	2200.0	0.80	2750.0	916.7	916.7	916.7		RST	220	7.22	3P-16A	2.5	–	–
62	Motores		1	2200.0	0.80	2750.0	916.7	916.7	916.7		RST	220	7.22	3P-16A	2.5	–	–
63	Iluminação	1		20.0	0.95	21.1	21.1	0.0	0.0		R	127	0.17	1P-16A	2.5	–	–
RES.	Circuito Reserva														–	–	
RES.	Circuito Reserva														–	–	
Total		1	2	4420.0		5521.1	1854.4	1833.3	1833.3								
Aliment.				4420.0	0.80	5521.1	1854.4	1833.3	1833.3	100%	RST	220	14.65	3P-20A	6	54.03	

Potência Demandada: 100% (4420.0 W) (5521.1 V.A)

Corrente nas Fases: R=14.8A S=14.4A T=14.4A

Quadro de Cargas

QDGBT

Circ.	Descrição	Qd.Circ.	Pot. W	Fat. Pot.	Pot. V.A	Fase R	Fase S	Fase T	Demanda (%)	Fases R S T	Tensão V	Corr. A	Prot. A	Cond. mm2	Comp.(m) Cond.	Q.T. (%)
QD1	Quadro: QD1	48496.0	48496.0	0.90	53828.0	17942.7	17942.7	17942.7	100%	RST	220	141.28	3P-100A	35	–	–
QD2	Quadro: QD2	27550.0	27550.0	0.91	30357.9	10119.3	10119.3	10119.3	100%	RST	220	79.89	3P-70A	35	–	–
QD3	Quadro: QD3	40279.0	40279.0	0.90	44780.5	14928.8	14928.8	14928.8	100%	RST	220	117.83	3P-80A	60	–	–
QD4	Quadro: QD4	4420.0	4420.0	0.80	5521.1	1840.4	1840.4	1840.4	100%	RST	220	14.48	3P-20A	10	–	–
RES.	Circuito Reserva														–	–
RES.	Circuito Reserva														–	–
Total		120745	120745.0		134487.5	44829.2	44829.2	44829.2								
Aliment.			120745.0	0.90	134487.5	44829.2	44829.2	44829.2	100%	RST	220	353.91	3P-400A	300	54.03	

Potência Demandada: 100% (120745.0 W) (134487.5 V.A)

Corrente nas Fases: R=353.5A S=353.2A T=353.0A

TITULO/CONTEUDO

Projeto Elétrico Creche Recanto da Lagoa

NOME DO EMPREENDIMENTO PREFEITURA MUNICIPAL PARA DE MINAS	**FINALIDADE** Projeto Elétrico CEMEI
ENDERECO	**BAIRRO** Recanto da Lagoa / **CIDADE** PARÁ DE MINAS
NÚMERO E DATA DA ART DE PROJETO	**NÚMERO E DATA DA ART DE EXECUÇÃO**
PROPRIETÁRIO PREFEITURA MUNICIPAL DE PARA DE MINAS	**CNPJ/CPF/IDENTIDADE** 18.313.817/0001-85 / **FORMATO** A2
RT (TÉCNICO) ISRAEL BERNARDES	**CREA/REGIAO** 206550/D-MG / **FOLHA** 02/02
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