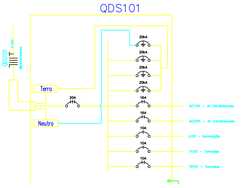
QDS101



Quadro de Cargas

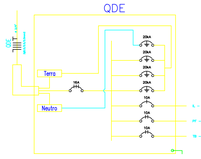
QDS101

Circ.	Descrição	Iluminação 40W	Tomadas 100VA	Ar Cond. 2600W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
AC1101	Ar Condicionado			1	2600.0	2888.9	100%	0.90	13.13	2	16A	4	CA	Obs.:
AC2101	Ar Condicionado			1	2600.0	2888.9	100%	0.90	13.13	2	16A	4	AB	Obs.:
L101	Iluminação	12			480.0	533.3	100%	0.90	4.20	1	10A	1.5	C	Obs.:
T1101	Tomadas		6		600.0	600.0	100%	1.00	4.72	1	10A	2.5	B	Obs.:
T2101	Tomadas		2		200.0	200.0	100%	1.00	0.91	2	10A	2.5	BC	Obs.:
RES.	Circuito Reserva													–
RES.	Circuito Reserva													–
Total		12	8	2	6480.0	7111.1								
Aliment.	C=10m QT=2%				9119.2	10007.4	60%	0.91	15.80	3	20A	2.5	ABC	–

Potência Total (6480.0 W) (7111.1 V.A) Potência Demandada: 60% (3888.0 W) (4266.7 V.A)

Corrente nas Fases: A=26.3A B=18.8A C=18.2A

QDE



Quadro de Cargas

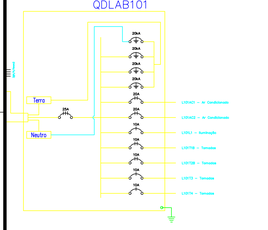
QDE

Circ.	Descrição	Iluminação 40W	60W	Tomadas 2400VA	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
IL	Iluminação	1			40.0	44.4	100%	0.90	0.20	1	10A	1.5	A	Obs.:
PF	Ponto de Força			1	2400.0	2400.0	100%	1.00	6.32	2	10A	2.5	BC	Obs.:
TB	Tomadas		1		600.0	600.0	100%	1.00	1.58	2	10A	2.5	AB	Obs.:
RES.	Circuito Reserva													–
RES.	Circuito Reserva													–
Total		1	1	1	3040.0	3044.4								
Aliment.	C=16.82m QT=2%				5202.9	5210.5	60%	1.00	4.70	3	16A	2.5	ABC	–

Potência Total (3040.0 W) (3044.4 V.A) Potência Demandada: 60% (1824.0 W) (1826.7 V.A)

Corrente nas Fases: A=1.8A B=7.9A C=6.3A

QDLAB101



Quadro de Cargas

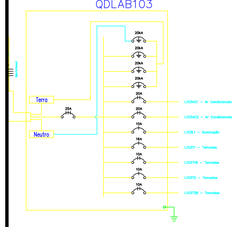
QDLAB101

Circ.	Descrição	Iluminação 40W	Tomadas 100VA	100W	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L101AC1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
L101AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	AB	Obs.:
L101L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	C	Obs.:
L101T08	Tomadas		4	5		900.0	900.0	100%	1.00	4.09	2	10A	2.5	AB	Obs.:
L101T28	Tomadas		5	10		1000.0	1000.0	100%	1.00	4.55	2	10A	2.5	BC	Obs.:
L101T3	Tomadas		10			1000.0	1000.0	100%	1.00	7.87	1	10A	2.5	C	Obs.:
L101T4	Tomadas		11			1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	B	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	25	15	2	10852.0	11613.3								
Aliment.	C=10m QT=2%					12699.9	13590.8	60%	0.93	21.50	3	25A	4	ABC	–

Potência Total (10852.0 W) (11613.3 V.A) Potência Demandada: 60% (6511.2 W) (6968.0 V.A)

Corrente nas Fases: A=35.7A B=33.1A C=33.5A

QDLAB103



Quadro de Cargas

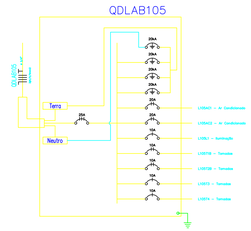
QDLAB103

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L103AC1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
L103AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	AB	Obs.:
L103L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	C	Obs.:
L103T1	Tomadas		12			1200.0	1200.0	100%	1.00	9.45	1	16A	2.5	B	Obs.:
L103T18	Tomadas		11			1100.0	1125.0	100%	0.80*	5.11	2	10A	2.5	BC	Obs.:
L103T2	Tomadas		10			1000.0	1000.0	100%	1.00	7.87	1	10A	2.5	C	Obs.:
L103T28	Tomadas		10			1000.0	1025.0	100%	0.80*	4.66	2	10A	2.5	AB	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	21	22	2	11152.0	11963.3								
Aliment.	C=10m QT=2%					12870.9	13807.3	60%	0.93	21.80	3	25A	4	ABC	–

Potência Total (11152.0 W) (11963.3 V.A) Potência Demandada: 60% (6691.2 W) (7178.0 V.A)

Corrente nas Fases: A=36.2A B=35.0A C=34.0A

QDLAB105



Quadro de Cargas

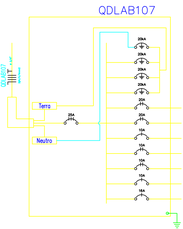
QDLAB105

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L105AC1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
L105AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	BC	Obs.:
L105L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	B	Obs.:
L105T18	Tomadas		11			1100.0	1100.0	100%	1.00	5.00	2	10A	2.5	AB	Obs.:
L105T28	Tomadas		10			1000.0	1000.0	100%	1.00	4.55	2	10A	2.5	CA	Obs.:
L105T3	Tomadas		11			1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	A	Obs.:
L105T4	Tomadas		11			1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	B	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	21	22	2	11152.0	11913.3								
Aliment.	C=10m QT=2%					12884.4	13764.0	60%	0.94	21.70	3	25A	4	ABC	–

Potência Total (11152.0 W) (11913.3 V.A) Potência Demandada: 60% (6691.2 W) (7148.0 V.A)

Corrente nas Fases: A=34.0A B=34.7A C=36.1A

QDLAB107



Quadro de Cargas

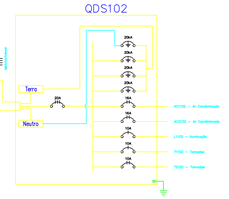
QDLAB107

Circ.	Descrição	Iluminação 40W	Tomadas 100VA	100W	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
107AC1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
107AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	AB	Obs.:
L107L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	C	Obs.:
L107T18	Tomadas		9			900.0	900.0	100%	1.00	4.09	2	10A	2.5	AB	Obs.:
L107T28	Tomadas		12			1200.0	1200.0	100%	1.00	5.46	2	10A	2.5	BC	Obs.:
L107T3	Tomadas		10			1000.0	1000.0	100%	1.00	7.87	1	10A	2.5	C	Obs.:
L107T4	Tomadas		12			1200.0	1200.0	100%	1.00	9.45	1	16A	2.5	B	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	22	21	2	11152.0	11913.3								
Aliment.	C=10m QT=2%					12722.3	13590.8	60%	0.94	21.50	3	25A	4	ABC	–

Potência Total (11152.0 W) (11913.3 V.A) Potência Demandada: 60% (6691.2 W) (7148.0 V.A)

Corrente nas Fases: A=35.7A B=34.8A C=34.4A

QDS102



Quadro de Cargas

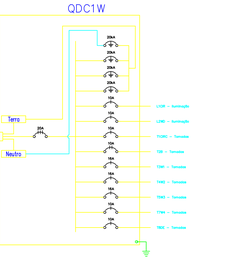
QDS102

Circ.	Descrição	Iluminação 40W	Tomadas 100VA	Ar Cond. 2600W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
AC1102	Ar Condicionado			1	2600.0	2888.9	100%	0.90	13.13	2	16A	4	CA	Obs.:
AC2102	Ar Condicionado			1	2600.0	2888.9	100%	0.90	13.13	2	16A	4	AB	Obs.:
L1102	Iluminação	8			320.0	355.6	100%	0.90	2.80	1	10A	1.5	C	Obs.:
T1102	Tomadas		6		600.0	600.0	100%	1.00	4.72	1	10A	2.5	B	Obs.:
T2102	Tomadas		2		200.0	200.0	100%	1.00	0.91	2	10A	2.5	BC	Obs.:
RES.	Circuito Reserva													–
RES.	Circuito Reserva													–
Total		8	8	2	6320.0	6933.3								
Aliment.	C=10m QT=2%				9122.1	10007.4	60%	0.91	15.80	3	20A	2.5	ABC	–

Potência Total (6320.0 W) (6933.3 V.A) Potência Demandada: 60% (3792.0 W) (4160.0 V.A)

Corrente nas Fases: A=26.3A B=18.8A C=16.8A

QDC1W



Quadro de Cargas

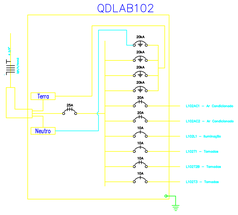
QDC1W

Circ.	Descrição	Iluminação 40W	Tomadas 100VA	42W	600VA	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L1C1R	Iluminação	5				200.0	222.2	100%	0.90	1.75	1	10A	1.5	A	Obs.:
L2M0	Iluminação	5				200.0	222.2	100%	0.90	1.75	1	10A	1.5	A	Obs.:
T1CRC	Tomadas		6			600.0	600.0	100%	1.00	4.72	1	10A	2.5	C	Obs.:
T2B	Tomadas			1		420.0	420.0	100%	1.00	1.91	2	10A	2.5	AB	Obs.:
T2W1	Tomadas				2	1200.0	1200.0	100%	1.00	9.45	1	16A	2.5	A	Obs.:
T4W2	Tomadas				2	1200.0	1200.0	100%	1.00	9.45	1	16A	2.5	C	Obs.:
T5W3	Tomadas				2	1200.0	1200.0	100%	1.00	9.45	1	16A	2.5	B	Obs.:
T7W4	Tomadas				1	600.0	600.0	100%	1.00	4.72	1	10A	2.5	B	Obs.:
T8DE	Tomadas		1			100.0	100.0	100%	1.00	0.79	1	10A	2.5	C	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		10	7	1	7	5720.0	5764.4								
Aliment.	C=10m QT=2%					6080.2	6127.5	60%	0.99	9.70	3	20A	2.5	ABC	–

Potência Total (5720.0 W) (5764.4 V.A) Potência Demandada: 60% (3432.0 W) (3458.7 V.A)

Corrente nas Fases: A=14.9A B=16.1A C=15.0A

QDLAB102



Quadro de Cargas

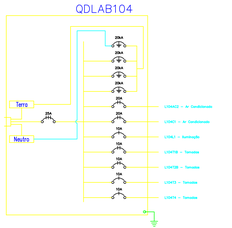
QDLAB102

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L102AC1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
L102AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	AB	Obs.:
L102L1	Iluminação	16				640.0	711.1	100%	0.90	5.60	1	10A	1.5	C	Obs.:
L102T1	Tomadas			11		1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	B	Obs.:
L102T28	Tomadas		10			1000.0	1000.0	100%	1.00	4.55	2	10A	2.5	BC	Obs.:
L102T3	Tomadas			2		200.0	200.0	100%	1.00	1.57	1	10A	2.5	C	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		16	10	13	2	9192.0	9957.8								
Aliment.	C=10m QT=2%					11108.7	12032.0	60%	0.92	19.00	3	25A	4	ABC	–

Potência Total (9192.0 W) (9957.8 V.A) Potência Demandada: 60% (5515.2 W) (5974.7 V.A)

Corrente nas Fases: A=31.6A B=29.0A C=27.5A

QDLAB104



Quadro de Cargas

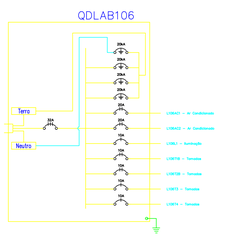
QDLAB104

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Ar Cond. 3126W	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L104AC2	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	CA	Obs.:
L104C1	Ar Condicionado				1	3126.0	3473.3	100%	0.90	15.79	2	20A	6	BC	Obs.:
L104L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	B	Obs.:
L104T18	Tomadas		11			1100.0	1100.0	100%	1.00	5.00	2	10A	2.5	AB	Obs.:
L104T28	Tomadas		10			1000.0	1000.0	100%	1.00	4.55	2	10A	2.5	CA	Obs.:
L104T3	Tomadas		11			1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	A	Obs.:
L104T4	Tomadas		11			1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	B	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	21	22	2	11152.0	11913.3								
Aliment.	C=10m QT=2%					12884.4	13764.0	60%	0.94	21.70	3	25A	4	ABC	–

Potência Total (11152.0 W) (11913.3 V.A) Potência Demandada: 60% (6691.2 W) (7148.0 V.A)

Corrente nas Fases: A=34.0A B=34.7A C=36.1A

QDLAB106



Quadro de Cargas

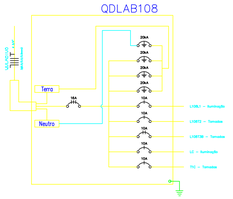
QDLAB106

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Ar Cond. A	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L106AC1	Ar Condicionado				1	3126.0	3907.5	100%	0.80	17.76	2	20A	6	CA	Obs.:
L106AC2	Ar Condicionado				1	3126.0	3907.5	100%	0.80	17.76	2	20A	6	BC	Obs.:
L106L1	Iluminação	15				600.0	666.7	100%	0.90	5.25	1	10A	1.5	B	Obs.:
L106T18	Tomadas		11			1100.0	1100.0	100%	1.00	5.00	2	10A	2.5	AB	Obs.:
L106T28	Tomadas		10			1000.0	1000.0	100%	1.00	4.55	2	10A	0	CA	Obs.:
L106T3	Tomadas			11		1100.0	1100.0	100%	1.00	8.66	1	10A	2.5	A	Obs.:
L106T4	Tomadas			11		1100.0	1100.0	100%	1.00	8.66	1	10A	0	B	Obs.:
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
RES.	Circuito Reserva														–
Total		15	21	22	2	11152.0	12781.7								
Aliment.	C=11.43m QT=2%					13321.3	15268.0	60%	0.87	24.10	3	32A	6	ABC	–

Potência Total (11152.0 W) (12781.7 V.A) Potência Demandada: 60% (6691.2 W) (7669.0 V.A)

Corrente nas Fases: A=36.0A B=36.7A C=40.1A

QDLAB108



Quadro de Cargas

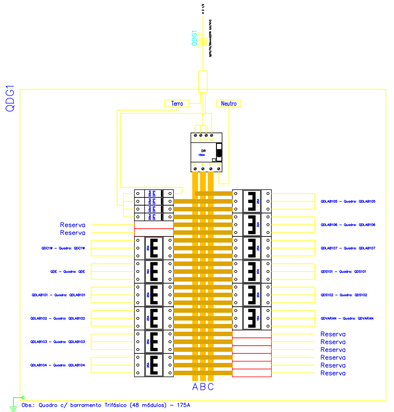
QDLAB108

Circ.	Descrição	Iluminação 40W	Tomadas 100W	100VA	Pot. W	Pot. V.A	Demanda (%)	Fat. Pot.	Corr. A	Fases	Prot. A	Cond. mm2	Fases ABC	Obs.
L108L1	Iluminação	12			480.0	533.3	100%	0.90	4.20	1	10A	1.5	C	Obs.:
L108T2	Tomadas		5		500.0	500.0	100%	1.00	3.94	1	10A	2.5	B	Obs.:
L108T28	Tomadas		1		100.0	100.0	100%	1.00	0.45	2	10A	2.5	BC	Obs.:
LC	Iluminação	3			120.0	133.3	100%	0.90	1.05	1	10A	1.5	B	Obs.:
TIC	Tomadas		9		900.0	900.0	100%	1.00	7.09	1	10A	2.5	A	Obs.:
RES.	Circuito Reserva													–
RES.	Circuito Reserva													–
Total		15	1	14	2100.0	2166.7								
Aliment.	C=10m QT=2%				2616.9	2700.0	60%	0.97	4.30	3	16A	2.5	ABC	–

Potência Total (2100.0 W) (2166.7 V.A) Potência Demandada: 60% (1260.0 W) (1300.0 V.A)

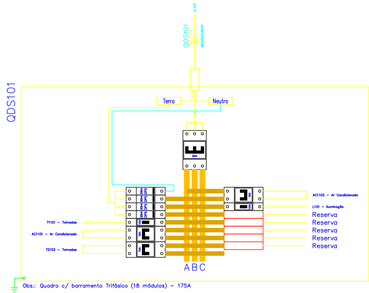
Corrente nas Fases: A=7.1A B=5.4A C=4.7A

QDG1



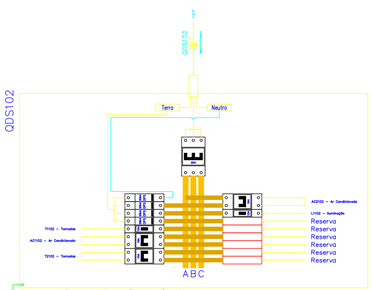
Obs.: Quadro c/ barramento Tritásico (48 módulos) – 175A

QDS101



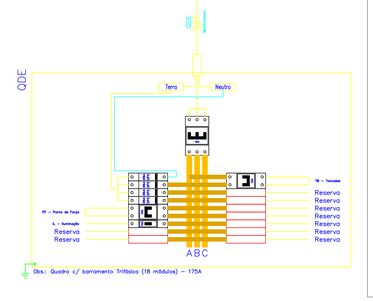
Obs.: Quadro c/ barramento Tritásico (18 módulos) – 175A

QDS102



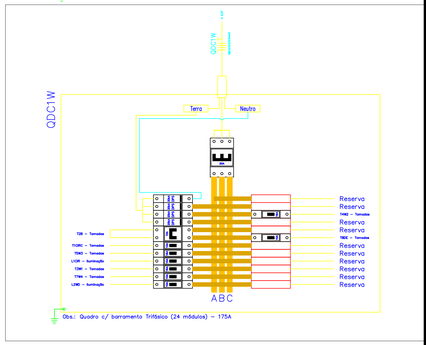
Obs.: Quadro c/ barramento Tritásico (18 módulos) – 175A

QDE



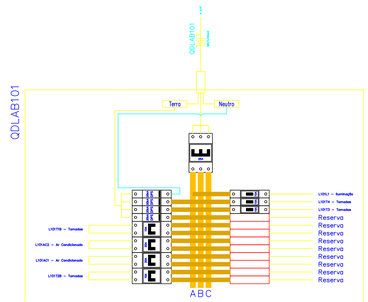
Obs.: Quadro c/ barramento Tritásico (18 módulos) – 175A

QDC1W



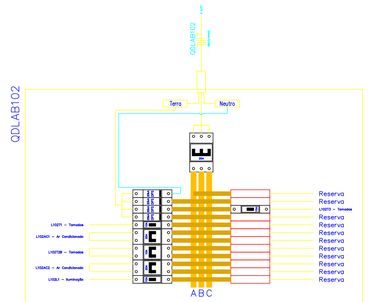
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB101



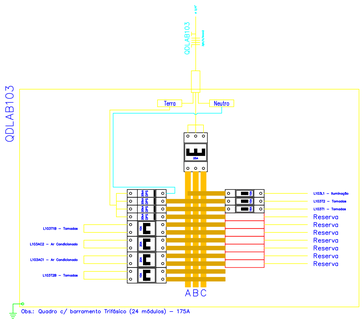
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB102



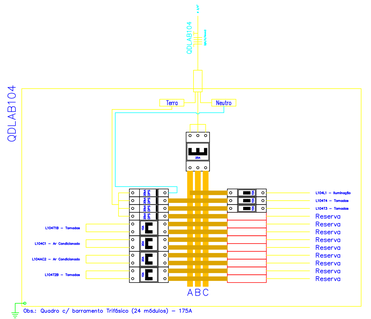
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB103



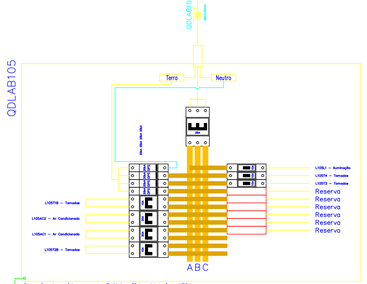
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB104



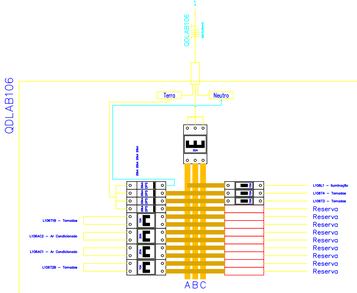
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB105



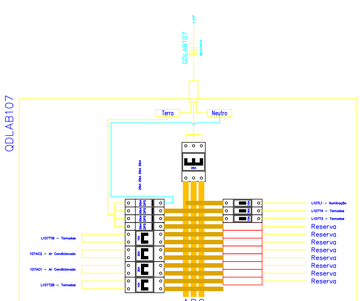
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB106



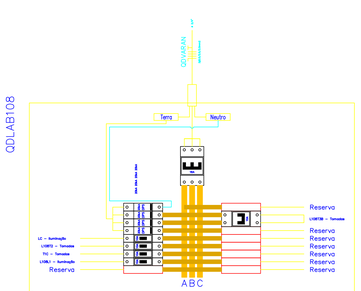
Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB107



Obs.: Quadro c/ barramento Tritásico (24 módulos) – 175A

QDLAB108



Obs.: Quadro c/ barramento Tritásico (18 módulos) – 175A

CONTEÚDO DO PROJETO:

PLANTA BAIXA CONTENDO DIMENSIONAMENTO DE FIAÇÃO,
QUADROS DE CARGAS, DIAGRAMAS UNIFILARES E REPRESETAÇÃO DE DISJUNTORES

ATIVIDADE TÉCNICA: PROJETO ELÉTRICO DO LABORATÓRIO DAS ENGENHARIAS DA UFVJM CAMPUS MUCURI

LOCAL: RUA DO CRUZEIRO, N.01, JARDIM SÃO PAULO - TEOFILO OTONI (MG)

CLIENTE: INSTITUTO DE CIÊNCIA, ENGENHARIA E TECNOLOGIA

RESPONSÁVEL TÉCNICO:

FRANCISCO TIAGO CARVALHO SILVA (08646760693)
Assinado de forma digital por FRANCISCO TIAGO CARVALHO SILVA (08646760693)
Dados: 2021.02.01 11:04:03 -03'00'

Francisco Tiago Carvalho Silva
Eng.Eletricista CREA 172269/D

FOLHA: 02/04

ESCALA: INDICADA

DATA: AGOSTO DE 2020

UFVJM