

Número	Tipo	Grup o	Tensão								Geração				Geração				Carga					
			Base	(kV)	Nome	Barra	Grupo	Limite	Tensão (p.u.)	Estado Operativo	Visualização	Tensão (p.u.)	Tensão (kV)	Ângulo (graus)	Ativa (MW)	Reativa (Mvar)	Mínima (Mvar)	Máxima (Mvar)	Ativa (MW)	Reativa (Mvar)	Carga (Mvar)	Carga Shunt (Mvar)	Área	VDef (p.u.)
48	1 - PV	F	13,8	CSI B1	13,8	F	0,900-1,100	Ligado	0 - Normal	1,025	14,1	4,12	0	-545	-9900	9900						15	1,03	
85	0 - PQ	M	345	INV B1	2345	M	0,900-1,100	Ligado	0 - Normal	1,09	376,1	4,12							66		2774	15	1,05	
86	0 - PQ	M	345	IBT F1	2345	M	0,900-1,100	Ligado	0 - Normal	1,09	376,1	4,13										15	1	
87	2 - Referência	M	345	INF B1	2345	M	0,900-1,100	Ligado	0 - Normal	1,051	362,6	0	-2742	-1257	-9999	9999						15	1,05	
5518	0 - PQ	H	23	REA VAU		H	0,900-1,100	Ligado	2 - Auxiliar	1,014	23,3	-45										6	1	
5411	0 - PQ	H	23	REA SAN	2	H	0,900-1,100	Ligado	2 - Auxiliar	1,015	23,3	-42										6	1	
183	1 - PV	F	13,8	ACY G3	13,8	F	0,900-1,100	Ligado	0 - Normal	1,025	14,1	-9,8	60	27,95	-35	35						2	0,95	
184	1 - PV	F	13,8	ACY G4	13,8	F	0,900-1,100	Ligado	0 - Normal	1,025	14,1	-9,8	60	27,95	-35	35						2	0,95	
201	0 - PQ	H	23	SLO A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47							147,7	51,32	48	6	1	
203	0 - PQ	H	23	BPAABC	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-45							22,95	8,03	6	6	1	
204	0 - PQ	H	23	MRA A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-51							63,9	21,3	18	6	1	
206	0 - PQ	H	23	PBO AB	23	H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-44							98,94	29,85	24	6	1	
207	0 - PQ	H	23	VCE A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-42							1,36	0,56	3	6	1	
208	0 - PQ	H	23	SMIABC	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47							66,6	21,48	18	6	1	
209	0 - PQ	H	23	SICBRAS	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-39							3,06	0,77	6	1	1	
211	0 - PQ	H	23	CEN AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-46							27,89	9,34	12	6	1	
212	0 - PQ	H	23	BSP A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-48							28,12	7,91	6	4	1	
213	0 - PQ	H	23	PSA A	23	H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-44							53,64	20,78	24	6	1	
214	0 - PQ	H	23	VEL 23		H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-42							33,62	11,66	24	6	0,97	
215	0 - PQ	H	23	JLM AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-20							14,06	5,41	6	2	1	
216	0 - PQ	H	23	LAM AB	23	H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-45							129	49,76	24	6	1	
219	0 - PQ	H	23	MPO AB	23	H	0,900-1,100	Ligado	0 - Normal	1,006	23,1	-35							16,49	5,5	3	2	1	
220	0 - PQ	H	23	TBO AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-48							59,11	23,48	18	6	1	
221	0 - PQ	H	23	LUQ A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47							152,3	66,62	24	6	1	
222	0 - PQ	H	23	LCO A	23	H	0,900-1,100	Ligado	0 - Normal	1,008	23,2	-43							10,51	2,37	6	4	1	
223	0 - PQ	H	23	FDM A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47							54,34	24,77	18	6	1	
224	0 - PQ	H	23	PCA A	23	H	0,900-1,100	Ligado	0 - Normal	1,025	23,6	-44							77,96	23,44	48	6	1	
225	0 - PQ	H	23	PIR A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-42							23,11	11,56	6	6	1	
226	0 - PQ	H	23	VAL 23		H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-33							11,7	1,76	24	6	1,05	

227	0 - PQ	H	23	MBU AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-47		61,68	20,96	18	6	1
228	0 - PQ	H	23	SJA 23		H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-33		9,42	3,24	12	4	1,05
229	0 - PQ	H	23	BTW CL	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-45		8,35	2,68	6	1	
231	0 - PQ	H	23	ITG A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-46		64,66	19,69	24	6	1
233	0 - PQ	H	23	CAE AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-48		42,74	11,71	18	6	1
234	0 - PQ	H	23	ELA A	23	H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-41		30,86	5,25	3	6	1
235	0 - PQ	H	23	PAR A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-43		11,16	3,73	3	6	1
237	0 - PQ	H	23	QUI A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-43		16,29	5,46	3	6	1
238	0 - PQ	H	23	CAU AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-41		4,36	1,73	1,2	6	1
239	0 - PQ	H	23	GUA AB1	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-46		74,48	24,83	24	6	1
240	0 - PQ	H	23	BRO	23	H	0,900-1,100	Ligado	0 - Normal	1,021	23,5	-43		27,08	7,79	6	6	0,98
241	0 - PQ	H	23	VTA AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-50		46,49	10,55	12	6	1
244	0 - PQ	H	23	LIM AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-44		32,2	9,4	3	6	1
246	0 - PQ	H	23	VHA AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-44		41,01	13,67	7,5	6	1
249	0 - PQ	H	23	YZU	23	H	0,900-1,100	Ligado	0 - Normal	1,276	29,3	-15		8,47	2,49	24	2	1
250	0 - PQ	H	23	NAR A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-32		22,54	10,4	2	1	
251	0 - PQ	H	23	PBU A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-19		13,57	3,89	2	1	
252	0 - PQ	H	23	CAL A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-22		7,39	2,31	3	2	1
253	0 - PQ	H	23	NAT A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-26		35,67	14,02	6	3	1
254	0 - PQ	H	23	TRI A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-38		36,85	11,73	3	3	1
255	0 - PQ	H	23	PPO A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-41		8,09	2,31	6	3	1
256	0 - PQ	H	23	AYO A	23	H	0,900-1,100	Ligado	0 - Normal	1,005	23,1	-26		18,51	6,54	3	1	
257	0 - PQ	H	23	VIN A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-33		5,84	2,88	3	1	
258	0 - PQ	H	23	PIL A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-43		28,88	8,67	12	3	1
260	0 - PQ	H	23	ENC A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-46		97,1	38,84	24	3	1
261	0 - PQ	H	23	VAP A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-39		1,27	0,5	6	1	
262	0 - PQ	H	23	SPP A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-40		14,62	5,49	3	3	1
264	0 - PQ	B	6	VM1 INC	6	B	0,900-1,100	Ligado	0 - Normal	1,022	6,1	-67		6,2	3,56	5	1	
265	0 - PQ	H	23	VM2 A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-66				5	1	
266	0 - PQ	H	23	SES A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-42		39,71	20,96	12	4	1
267	0 - PQ	H	23	SRO A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-53		18,42	6,14	3	4	1
268	0 - PQ	H	23	HOR A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-63		19,04	8,49	6	5	1
269	0 - PQ	H	23	YBY A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-62		10,22	3,05	3	5	1
270	0 - PQ	H	23	CBV A	23	H	0,900-1,100	Ligado	0 - Normal	1,011	23,3	-60		4,28	1,43	5	1	

271	0 - PQ	H	23	PJC AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-58		35,18	13,48	12	5	1
273	0 - PQ	H	23	COV A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-32		53,37	18,31	24	4	1
274	0 - PQ	H	23	FIL A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-83		7,9	2,4	3	8	1
276	0 - PQ	H	23	CZA A	23	H	0,900-1,100	Ligado	0 - Normal	1,007	23,2	-50		25,42	11,16	6	4	1
278	0 - PQ	H	23	CAM A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-35		19,93	6,64	6	3	1
279	0 - PQ	H	23	LPA A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-84		13,29	4,29	3	8	1
280	0 - PQ	H	23	CBO A	23	H	0,900-1,100	Ligado	0 - Normal	1,054	24,2	-37		13,55	3,39	3	1	
281	0 - PQ	H	23	ACY B	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-20		10,53	3,09	2	1	
282	0 - PQ	H	23	SJB A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-32		28,71	13,16	6	3	1
284	0 - PQ	H	23	APR AB	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-22		86,9	29,33	12	2	1
285	0 - PQ	H	23	CYO A	23	H	0,900-1,100	Ligado	0 - Normal	1,007	23,2	-33		16,31	9,92	6	4	1
286	0 - PQ	H	23	MES A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-86		12,42	4,32	8	1	
287	0 - PQ	H	23	SPA A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-30		12,4	4	6	3	1
288	0 - PQ	H	23	K30 AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-24		26,93	7,93	6	2	1
289	0 - PQ	H	23	PFO A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-19		42,92	21,05	12	2	1
290	0 - PQ	H	23	IRY A	23	H	0,900-1,100	Ligado	0 - Normal	1,007	23,2	-28		23,61	8,14	6	2	1
292	0 - PQ	H	23	CUR A	23	H	0,900-1,100	Ligado	0 - Normal	1,011	23,3	-45		17,81	6,51	6	2	1
293	0 - PQ	H	23	CAP A	23	H	0,900-1,100	Ligado	0 - Normal	1,013	23,3	-46		95,27	32,01	18	6	1
295	0 - PQ	H	23	HER A	23	H	0,900-1,100	Ligado	0 - Normal	1,008	23,2	-28		30,98	11,96	12	2	1
296	0 - PQ	H	23	CDO A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-27		58,29	10,41	12	2	1
297	0 - PQ	H	23	CZU A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-27		50,68	14,19	24	4	1
298	0 - PQ	H	23	K15 A	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-27		49,25	15,65	6	2	1
299	0 - PQ	H	23	SPN A	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-62		18,31	6,59	3	4	1
301	0 - PQ	I	66	SLO B1	66	I	0,900-1,100	Ligado	0 - Normal	1,052	69,4	-43					6	1,04
303	0 - PQ	I	66	BPA B1	66	I	0,900-1,100	Ligado	0 - Normal	1,03	68	-43					6	1,02
304	0 - PQ	I	66	MRA B1	66	I	0,900-1,100	Ligado	0 - Normal	1,008	66,5	-44					6	1
305	0 - PQ	I	66	CER BP	66	I	0,900-1,100	Ligado	0 - Normal	1,034	68,2	-42		7,22			6	1
306	0 - PQ	I	66	PBO B1	66	I	0,900-1,100	Ligado	0 - Normal	1,026	67,7	-42					6	1,03
307	0 - PQ	I	66	VCE B1	66	I	0,900-1,100	Ligado	0 - Normal	1,024	67,6	-42		9,81	3,07	6	1	
308	0 - PQ	I	66	SMI B1	66	I	0,900-1,100	Ligado	0 - Normal	1,015	67	-42					6	1,01
311	0 - PQ	I	66	CEN B1	66	I	0,900-1,100	Ligado	0 - Normal	1,017	67,1	-43					6	1,01
313	0 - PQ	I	66	PSA B1	66	I	0,900-1,100	Ligado	0 - Normal	1,021	67,4	-42					6	1,01
316	0 - PQ	I	66	LAM B1	66	I	0,900-1,100	Ligado	0 - Normal	1,035	68,3	-42					6	1,02
317	0 - PQ	I	66	INP A	66	I	0,900-1,100	Ligado	0 - Normal	0,986	65,1	-31		1,8	0,36	2	1	

319	0 - PQ		66 MPO B1	66	0,900-1,100	Ligado	0 - Normal	0,988	65,2	-31	2	1
320	0 - PQ		66 TBO B1	66	0,900-1,100	Ligado	0 - Normal	1,024	67,6	-43	6	1,02
322	0 - PQ		66 LCO BP	66	0,900-1,100	Ligado	0 - Normal	1,009	66,6	-41	4	1
323	0 - PQ		66 FDM B1	66	0,900-1,100	Ligado	0 - Normal	1,045	69	-44	6	1
324	0 - PQ		66 PCA B1	66	0,900-1,100	Ligado	0 - Normal	1,012	66,8	-42	6	1
325	0 - PQ		66 PIR B1	66	0,900-1,100	Ligado	0 - Normal	0,999	65,9	-39	6	1
326	0 - PQ		66 VAL	66	0,900-1,100	Ligado	0 - Normal	0,953	62,9	-31	6	1,05
327	0 - PQ		66 MBU B1	66	0,900-1,100	Ligado	0 - Normal	1,022	67,5	-42	6	1
328	0 - PQ		66 SJA	66	0,900-1,100	Ligado	0 - Normal	0,957	63,2	-32	4	1,05
329	0 - PQ		66 BTW B1	66	0,900-1,100	Ligado	0 - Normal	1,032	68,1	-43	6	1
331	0 - PQ		66 ITG BP	66	0,900-1,100	Ligado	0 - Normal	1,02	67,3	-42	6	1,01
333	0 - PQ		66 CAE BP	66	0,900-1,100	Ligado	0 - Normal	1,008	66,5	-42	6	0,99
334	0 - PQ		66 ELA B1	66	0,900-1,100	Ligado	0 - Normal	1,023	67,5	-40	6	1
335	0 - PQ		66 PAR B1	66	0,900-1,100	Ligado	0 - Normal	0,985	65	-41	6	0,98
337	0 - PQ		66 QUI B1	66	0,900-1,100	Ligado	0 - Normal	1,014	66,9	-39	6	0,96
338	0 - PQ		66 CAU B1	66	0,900-1,100	Ligado	0 - Normal	1,026	67,7	-39	6	0,96
339	0 - PQ		66 GUA B1	66	0,900-1,100	Ligado	0 - Normal	1,05	69,3	-41	6	1,05
340	0 - PQ		66 BRO	66	0,900-1,100	Ligado	0 - Normal	1,023	67,5	-42	6	0,98
341	0 - PQ		66 VTA BP	66	0,900-1,100	Ligado	0 - Normal	1,015	67	-43	6	1
343	0 - PQ		66 GHN B1	66	0,900-1,100	Ligado	0 - Normal	1,031	68	-42	6	1
344	0 - PQ		66 LIM B1	66	0,900-1,100	Ligado	0 - Normal	0,993	65,5	-43	6	1,02
346	0 - PQ		66 VHA B1	66	0,900-1,100	Ligado	0 - Normal	0,97	64	-42	6	1
350	0 - PQ		66 NAR BP	66	0,900-1,100	Ligado	0 - Normal	0,954	63	-29	2	0,95
351	0 - PQ		66 PBU B1	66	0,900-1,100	Ligado	0 - Normal	1,049	69,2	-22	2	1,03
354	0 - PQ		66 TRI B1	66	0,900-1,100	Ligado	0 - Normal	1,032	68,1	-37	3	1
355	0 - PQ		66 PPO B1	66	0,900-1,100	Ligado	0 - Normal	1,031	68	-39	3	1
357	0 - PQ		66 VIN B1	66	0,900-1,100	Ligado	0 - Normal	1,04	68,6	-31	3	1,02
358	0 - PQ		66 PIL B1	66	0,900-1,100	Ligado	0 - Normal	0,96	63,4	-39	3	0,97
360	0 - PQ		66 ENC B1	66	0,900-1,100	Ligado	0 - Normal	0,988	65,2	-42	3	0,92
361	0 - PQ		66 VAP B1	66	0,900-1,100	Ligado	0 - Normal	1,036	68,4	-38	6	0,96
362	0 - PQ		66 SPP B1	66	0,900-1,100	Ligado	0 - Normal	0,958	63,2	-37	3	0,97
365	0 - PQ		66 VM2 B1	66	0,900-1,100	Ligado	0 - Normal	1,01	66,7	-66	5	1
367	0 - PQ	0	1 SRO B1		0,950-1,050	Ligado	0 - Normal	1,01	1	-53	4	1,03
368	0 - PQ		66 HOR B1	66	0,900-1,100	Ligado	0 - Normal	1,057	69,8	-59	5	1,05

369	0 - PQ	I	66 YBY B1	66	I	0,900-1,100	Ligado	0 - Normal	1,03	68	-59		5	1,02	
370	0 - PQ	I	66 CBV B1	66	I	0,900-1,100	Ligado	0 - Normal	1,03	68	-58		5	0,92	
371	0 - PQ	I	66 PJC B1	66	I	0,900-1,100	Ligado	0 - Normal	1,041	68,7	-55		5	0,86	
372	0 - PQ	I	66 CON B1	66	I	0,900-1,100	Ligado	0 - Normal	1,012	66,8	-61		5	1,02	
373	0 - PQ	I	66 COV BP	66	I	0,900-1,100	Ligado	0 - Normal	0,999	65,9	-32		4	1,05	
374	0 - PQ	I	66 FIL B1	66	I	0,900-1,100	Ligado	0 - Normal	0,977	64,5	-80		8	1	
375	0 - PQ	I	66 VIL BP	66	I	0,900-1,100	Ligado	0 - Normal	1,012	66,8	-38		4	0,99	
376	0 - PQ	I	66 CZA B1	66	I	0,900-1,100	Ligado	0 - Normal	0,902	59,5	-44		4	0,97	
378	0 - PQ	I	66 CAM B1	66	I	0,900-1,100	Ligado	0 - Normal	1,012	66,8	-40		3	1	
379	0 - PQ	I	66 LPA B2	66	I	0,900-1,100	Ligado	0 - Normal	1,03	68	-77		8	1	
380	0 - PQ	I	66 CBO B1	66	I	0,900-1,100	Ligado	0 - Normal	1,006	66,4	-34		3	1,04	
382	0 - PQ	I	66 ACY B3	66	I	0,900-1,100	Ligado	0 - Normal	1,01	66,7	-18		2	1,07	
384	0 - PQ	I	66 APR B1	66	I	0,900-1,100	Ligado	0 - Normal	0,984	64,9	-17		2	1,03	
386	0 - PQ	I	66 MES B1	66	I	0,900-1,100	Ligado	0 - Normal	0,916	60,5	-83		8	1,03	
388	0 - PQ	I	66 K30 BP	66	I	0,900-1,100	Ligado	0 - Normal	0,952	62,8	-21		2	0,99	
389	0 - PQ	I	66 PFO B1	66	I	0,900-1,100	Ligado	0 - Normal	0,977	64,5	-17		2	1,02	
390	0 - PQ	I	66 IRY B1	66	I	0,900-1,100	Ligado	0 - Normal	1,025	67,6	-28		2	1,03	
392	0 - PQ	I	66 CUR B1	66	I	0,900-1,100	Ligado	0 - Normal	0,859	56,7	-41		2	0,97	
393	0 - PQ	I	66 CIL	66	I	0,900-1,100	Ligado	2 - Auxiliar	0,952	62,8	-21	0,48	0,13	2	1
394	0 - PQ	I	66 WMA A	66	I	0,900-1,100	Ligado	2 - Auxiliar	0,951	62,8	-21	2,62	0,73	2	1
395	0 - PQ	I	66 HER BP	66	I	0,900-1,100	Ligado	0 - Normal	0,933	61,6	-24		2	1,04	
398	0 - PQ	I	66 K15 TA	66	I	0,900-1,100	Ligado	0 - Normal	0,943	62,2	-22		2	1	
399	0 - PQ	I	66 SPN B1	66	I	0,900-1,100	Ligado	0 - Normal	0,93	61,4	-57		4	1,02	
401	0 - PQ	K	220 ACY B2	220	K	0,900-1,100	Ligado	0 - Normal	1,073	236,1	-15		2	1,1	
402	0 - PQ	K	220 COV B1	220	K	0,900-1,100	Ligado	0 - Normal	1,033	227,3	-28		4	1,01	
403	0 - PQ	K	220 SLO B1	220	K	0,900-1,100	Ligado	0 - Normal	1,008	221,8	-39		6	0,98	
404	0 - PQ	K	220 GUA B3	220	K	0,900-1,100	Ligado	0 - Normal	1,03	226,6	-38		6	0,98	
405	0 - PQ	K	220 LAM B1	220	K	0,900-1,100	Ligado	0 - Normal	1,014	223,1	-38		6	0,97	
407	0 - PQ	K	220 ALT B1	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,003	220,7	-39		6	1	
408	0 - PQ	K	220 PBO B1	220	K	0,900-1,100	Ligado	0 - Normal	1,009	222	-37		6	0,98	
409	0 - PQ	K	220 LIM B1	220	K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-38		6	1	
410	0 - PQ	K	220 SAN TA	220	K	0,900-1,100	Ligado	0 - Normal	1,021	224,6	-38		6	0,97	
411	0 - PQ	O	1 LIM RE	11.8	O	0,800-1,200	Ligado	0 - Normal	1,11	1,1	-38		6	1	
412	0 - PQ	K	220 BSP B1	220	K	0,900-1,100	Ligado	2 - Auxiliar	1	220	-45		4	1,01	

413	0 - PQ	K	220 PSA B2	220	K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-38			6	1
414	0 - PQ	K	220 VEL	220	K	0,900-1,100	Ligado	0 - Normal	1,02	224,4	-38			6	0,97
415	0 - PQ	K	220 JLM B1	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,061	233,4	-18			2	1
421	0 - PQ	K	220 LUQ TA	220	K	0,900-1,100	Ligado	0 - Normal	1,005	221,1	-39			6	0,98
424	0 - PQ	K	220 PCA AB	220	K	0,900-1,100	Ligado	0 - Normal	1,013	222,9	-38			6	0,99
425	0 - PQ	K	220 PIR B1	220	K	0,900-1,100	Ligado	0 - Normal	1,033	227,3	-36			6	0,98
426	0 - PQ	K	220 VAL	220	K	0,900-1,100	Ligado	0 - Normal	1,04	228,8	-31			6	1,05
427	0 - PQ	K	220 VAQ TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,022	224,8	-28			4	1
430	0 - PQ	K	220 ADM	220	K	0,900-1,100	Ligado	0 - Normal	1,03	226,6	-38	0,8	0,28	6	0,97
434	0 - PQ	K	220 ELA TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,026	225,7	-34			4	1
440	0 - PQ	K	220 BRO	220	K	0,900-1,100	Ligado	0 - Normal	1,028	226,2	-38			6	0,98
446	0 - PQ	K	220 VHA B1	220	K	0,900-1,100	Ligado	0 - Normal	1,016	223,5	-36			6	1
449	0 - PQ	K	220 YZU	220	K	0,900-1,100	Ligado	0 - Normal	1,079	237,4	-14			2	1,06
450	0 - PQ	K	220 SRI	220	K	0,900-1,100	Ligado	0 - Normal	1,075	236,5	-16			2	1
451	0 - PQ	K	220 PBU TA	220	K	0,900-1,100	Ligado	0 - Normal	1,059	233	-18			2	1,08
452	0 - PQ	K	220 CAL B1	220	K	0,900-1,100	Ligado	0 - Normal	1,047	230,3	-20			2	1,07
453	0 - PQ	K	220 NAT TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,039	228,6	-20			3	1,06
454	0 - PQ	K	220 TRI B1	220	K	0,900-1,100	Ligado	0 - Normal	0,955	210,1	-33			3	1,05
456	0 - PQ	K	220 AYO B1	220	K	0,900-1,100	Ligado	0 - Normal	1,069	235,2	-22			3	1,07
457	0 - PQ	K	220 VIN B1	220	K	0,900-1,100	Ligado	0 - Normal	1,059	233	-24			3	1,07
461	0 - PQ	K	220 VAP TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,03	226,6	-34			6	1,02
466	0 - PQ	K	220 SES TA	220	K	0,900-1,100	Ligado	0 - Normal	0,997	219,3	-38			4	1,01
467	0 - PQ	K	220 SRO TA	220	K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-50			4	1,01
468	0 - PQ	K	220 HOR B1	220	K	0,900-1,100	Ligado	0 - Normal	1,064	234,1	-56			5	1,01
469	0 - PQ	K	220 VM1 B1	220	K	0,900-1,100	Ligado	0 - Normal	1,098	241,6	-66			5	1,02
471	0 - PQ	K	220 CCO B1	220	K	0,900-1,100	Ligado	0 - Normal	1,032	227	-51			5	1
472	0 - PQ	K	220 CBA B1	220	K	0,900-1,100	Ligado	0 - Normal	1,023	225,1	-44			5	1
475	0 - PQ	K	220 PPE B1	220	K	0,900-1,100	Ligado	0 - Normal	0,992	218,2	-31			4	1,01
478	0 - PQ	K	220 CAM B2	220	K	0,900-1,100	Ligado	0 - Normal	0,966	212,5	-32			3	1
479	0 - PQ	K	220 LPA B1	220	K	0,900-1,100	Ligado	0 - Normal	1,013	222,9	-74			8	1
480	0 - PQ	K	220 CBO TA	220	K	0,900-1,100	Ligado	0 - Normal	1,028	226,2	-27			3	1,06
482	0 - PQ	K	220 SJB TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,043	229,5	-28			3	1,02
483	0 - PQ	K	220 MD B1	220	K	0,900-1,100	Ligado	0 - Normal	1,073	236,1	-15			2	1,1
484	0 - PQ	K	220 IRY B1	220	K	0,900-1,100	Ligado	0 - Normal	1,027	225,9	-25			2	1,09

485 0 - PQ	K	220 CYO A	220 K	0,900-1,100	Ligado	0 - Normal	1,017	223,7	-31			4	1,02			
487 0 - PQ	K	220 SPA B1	220 K	0,900-1,100	Ligado	0 - Normal	1,049	230,8	-26			3	1,05			
488 0 - PQ	K	220 K30 B1	220 K	0,900-1,100	Ligado	0 - Normal	1,072	235,8	-16			2	1,1			
489 0 - PQ	K	220 PFO TA	220 K	0,900-1,100	Ligado	0 - Normal	1,071	235,6	-16			2	1,09			
491 0 - PQ	K	220 CAT B1	220 K	0,900-1,100	Ligado	0 - Normal	1,028	226,2	-28			2	1,02			
492 0 - PQ	K	220 JEP B1	220 K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-33			2	1			
493 0 - PQ	K	220 CAP TA	220 K	0,900-1,100	Ligado	0 - Normal	1,007	221,5	-38			6	0,98			
496 0 - PQ	K	220 CDO TA	220 K	0,900-1,100	Ligado	2 - Auxiliar	1,049	230,8	-22			2	1,05			
497 0 - PQ	K	220 CZU TA	220 K	0,900-1,100	Ligado	2 - Auxiliar	1,042	229,2	-25			4	1,03			
499 0 - PQ	J	132 COPEL	J	0,900-1,100	Ligado	0 - Normal	1,073	141,6	-15			12	1,09			
505 0 - PQ	0	1 PBO F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,025	1	-42			6	1,03			
506 0 - PQ	0	1 PBO F2		0 0,950-1,050	Ligado	2 - Auxiliar	1,025	1	-42			6	1,03			
509 0 - PQ	0	1 LAM F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,035	1	-42			6	1,02			
510 0 - PQ	0	1 LAM F2		0 0,950-1,050	Ligado	2 - Auxiliar	1,035	1	-42			6	1,02			
511 0 - PQ	0	1 ELA F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,024	1	-40			6	1,02			
513 0 - PQ	0	1 PSA F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,02	1	-43			6	1			
514 0 - PQ	0	1 PSA F2		0 0,950-1,050	Ligado	2 - Auxiliar	1,02	1	-43			6	1			
516 0 - PQ	0	1 BMO F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,035	1	-42			6	1			
518 0 - PQ	0	1 VAU F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,034	1	-43			6	1			
524 0 - PQ	0	1 PCA F1		0 0,950-1,050	Ligado	2 - Auxiliar	1,013	1	-42			6	1			
578 0 - PQ	0	1 LPA F1		0 0,950-1,050	Ligado	2 - Auxiliar	0,968	1	-81			8	1,04			
598 0 - PQ	0	1 VM2 F1	220 K	0,900-1,100	Ligado	2 - Auxiliar	1,01	1	-66			5	1,02			
700 2 - Referência G		18 IPU10G	18 G	0,900-1,100	Ligado	0 - Normal	1,017	18,3	0	6335	700,7	-3600	3600	1	1,02	
730 0 - PQ	K	220 PMA B1	220 K	0,900-1,100	Ligado	0 - Normal	1,03	226,6	-38			10	1			
752 0 - PQ	J	132 CAL B1	132 J	0,900-1,100	Ligado	0 - Normal	0,996	131,5	-22			25	10	9	1	
790 1 - PV	E	13,2 YAC19G	13,2 E	0,900-1,100	Ligado	0 - Normal	1,032	13,6	-11	2707	692	-2360	1780	7	1,03	
800 0 - PQ	N	500 IPU B1	500 N	0,900-1,100	Ligado	0 - Normal	1,035	517,5	-7,2					1	1	
801 0 - PQ	N	500 MD B1	500 N	0,900-1,100	Ligado	0 - Normal	1,035	517,5	-7,4					1	1	
803 0 - PQ	N	500 FOZ B1	500 N	0,900-1,100	Ligado	0 - Normal	1,036	518	-7,8					1	1	
804 0 - PQ	N	500 FOZ B2	500 N	0,900-1,100	Ligado	0 - Normal	1,036	518	-7,8					1538	1	1
826 0 - PQ	N	500 VAL 500	N	0,900-1,100	Ligado	0 - Normal	0,996	498	-29					6	1,05	
846 0 - PQ	N	500 VHA B1	500 N	0,900-1,100	Ligado	0 - Normal	0,971	485,5	-31					6	1,03	
849 0 - PQ	N	500 YZU 500	N	0,900-1,100	Ligado	0 - Normal	1,031	515,5	-9					2	1,06	
856 0 - PQ	N	500 AYO B1	500 N	0,900-1,100	Ligado	0 - Normal	1,035	517,5	-18					3	1,08	

890 0 - PQ	N	500 YAC B1	500 N	0,900-1,100	Ligado	0 - Normal	1,037	518,5	-17		1207	258,6	7	1,03	
1203 0 - PQ	H	23 BPAABC	23 H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-58		68,83	24,08	18	6	1
1204 0 - PQ	H	23 DES A	23 H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-23		40,74	20,37	12	2	1
1207 0 - PQ	H	23 ALT A	23 H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-44		28,62	9,24	6	1	
1209 0 - PQ	H	23 VAU B	23 H	0,900-1,100	Ligado	0 - Normal	0,99	22,8	-47		76,66	56,36	18	6	1
1222 0 - PQ	H	23 REA BMO	H	0,900-1,100	Ligado	2 - Auxiliar	1,029	23,7	-44				6	1	
1224 0 - PQ	H	23 REA PCA	H	0,900-1,100	Ligado	2 - Auxiliar	1,018	23,4	-43				6	1	
1235 0 - PQ	H	23 PAR B	23 H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-45		16,73	5,59	3	6	1
1244 0 - PQ	H	23 LIM AB	23 H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-43		62,83	18,33	3	6	1
1250 0 - PQ	H	23 NAR B	23 H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-32		6,76	3,12	12	2	1
1265 0 - PQ	H	23 VM2 B	23 H	0,900-1,100	Ligado	0 - Normal	1,066	24,5	-69		16,37	4,1	5	1	
1267 0 - PQ	H	23 SRO 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-53		18,42	6,14	3	4	1
1272 0 - PQ	H	23 VRE AB	23 H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-60		23,54	8,24	12	5	1
1275 0 - PQ	H	23 VIL A	23 H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-39		1,69	0,58	3,6	4	1
1277 0 - PQ	H	23 VIL B	23 H	0,900-1,100	Ligado	0 - Normal	1,008	23,2	-39		3,37	1,16	4	1	
1281 0 - PQ	H	23 ACY C	23 H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-20		10,53	3,09	2	1,02	
1291 0 - PQ	H	23 CAT2 A	23 H	0,900-1,100	Ligado	0 - Normal	1,007	23,2	-31		36,88	14,59	24	2	1
1292 0 - PQ	H	23 CUR B	23 H	0,900-1,100	Ligado	0 - Normal	1,008	23,2	-44		7,13	2,61	3	2	1
1300 0 - PQ	I	66 FIC INE	I	0,900-1,100	Ligado	2 - Auxiliar	1,019	67,3	-42				6	1	
1303 0 - PQ	I	66 BPA FIC	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,037	68,4	-43				6	1,02	
1305 0 - PQ	I	66 FIC-CER	I	0,900-1,100	Ligado	2 - Auxiliar	1,046	69	-42				6	1	
1306 0 - PQ	I	66 nPS F1	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,017	67,1	-42				6	1,01	
1308 0 - PQ	I	66 nBS F1	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,017	67,1	-42				6	1,01	
1313 0 - PQ	I	66 nCP F1	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,018	67,2	-43				6	1,01	
1319 0 - PQ	I	66 FIC-INP	I	0,900-1,100	Ligado	2 - Auxiliar	0,986	65,1	-31				2	1	
1322 0 - PQ	I	66 BTW F1	I	0,900-1,100	Ligado	2 - Auxiliar	1,033	68,2	-43				6	1	
1326 0 - PQ	I	66 nBC F1	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,021	67,4	-43				6	1,01	
1331 0 - PQ	I	66 FIC ITG	I	0,900-1,100	Ligado	2 - Auxiliar	1,015	67	-42				6	1	
1337 0 - PQ	I	66 QUI B1 FIC	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,032	68,1	-38				6	0,96	
1338 0 - PQ	I	66 VAP-CAU FIC	I	0,900-1,100	Ligado	2 - Auxiliar	1,035	68,3	-38				6	0,96	
1341 0 - PQ	I	66 CAI	66 I	0,900-1,100	Ligado	0 - Normal	1,015	67	-43		0,58	0,15	6	1,04	
1343 0 - PQ	I	66 nGI F1	66 I	0,900-1,100	Ligado	2 - Auxiliar	1,033	68,2	-42				6	1,03	
1345 0 - PQ	I	66 FIC ACE	I	0,900-1,100	Ligado	2 - Auxiliar	0,961	63,4	-44				6	1,02	
1354 0 - PQ	I	66 TRI-ENC	I	0,900-1,100	Ligado	2 - Auxiliar	1	66	-40				3	1	

1360	0 - PQ	I	66 nTE F1	66	I	0,900-1,100	Ligado	2 - Auxiliar	1,012	66,8	-36				3	1,04			
1365	0 - PQ	I	66 VM2 B1	66	I	0,900-1,100	Ligado	0 - Normal	1,068	70,5	-68				5	1			
1375	0 - PQ	I	66 CLY		I	0,900-1,100	Ligado	0 - Normal	1,01	66,7	-38				4	0,99			
1378	0 - PQ	0	1 FIC CAM-ENC	0	0,950-1,050	Ligado	2 - Auxiliar	0,991	1	-41				34,13	10,24	3	0,92		
1379	0 - PQ	I	66 CHO	66	I	0,900-1,100	Ligado	0 - Normal	0,967	63,8	-81				28,76	12,08	8	1,01	
1382	0 - PQ	I	66 ACY-APR		I	0,900-1,100	Ligado	2 - Auxiliar	0,987	65,1	-17						2	1,07	
1398	0 - PQ	I	66 ACY FIC		I	0,900-1,100	Ligado	2 - Auxiliar	0,961	63,4	-21						2	1	
1400	0 - PQ	K	220 LAM-FIC2	K		0,900-1,100	Ligado	2 - Auxiliar	1,017	223,7	-38						6	1	
1403	0 - PQ	H	23 MCE AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-21				53,49	19,26	24	2	1
1404	0 - PQ	K	220 GUA B2	220	K	0,900-1,100	Ligado	0 - Normal	1,102	242,4	-38						6	1	
1405	0 - PQ	K	220 FIC2-FIC3	K		0,900-1,100	Ligado	2 - Auxiliar	1,017	223,7	-38						6	1	
1406	0 - PQ	K	220 FIC3-FIC4	K		0,900-1,100	Ligado	2 - Auxiliar	1,015	223,3	-38						6	1	
1408	0 - PQ	K	220 FIC3-FIC4	K		0,900-1,100	Ligado	2 - Auxiliar	1,015	223,3	-38						6	1	
1410	0 - PQ	K	220 SAN-FIC1	K		0,900-1,100	Ligado	2 - Auxiliar	1,018	224	-38						6	1	
1411	0 - PQ	K	220 FIC1-LAM	K		0,900-1,100	Ligado	2 - Auxiliar	1,018	224	-38						6	1	
1412	0 - PQ	K	220 GUA-FIC	K		0,900-1,100	Ligado	2 - Auxiliar	1,019	224,2	-38						6	0,97	
1413	0 - PQ	K	220 GUA-FIC1	K		0,900-1,100	Ligado	2 - Auxiliar	1,014	223,1	-38						6	1	
1414	0 - PQ	H	23 REA VEL		H	0,900-1,100	Ligado	2 - Auxiliar	1,005	23,1	-40						6	0,97	
1415	0 - PQ	K	220 LAM-FIC2	K		0,900-1,100	Ligado	2 - Auxiliar	1,014	223,1	-38						6	0,97	
1416	0 - PQ	I	66 nLT F1	66	I	0,900-1,100	Ligado	2 - Auxiliar	1,034	68,2	-42						6	1,02	
1417	0 - PQ	K	220 FIC2-FIC3	K		0,900-1,100	Ligado	2 - Auxiliar	1,014	223,1	-38						6	0,97	
1418	0 - PQ	K	220 VEL F1	K		0,900-1,100	Ligado	2 - Auxiliar	1,02	224,4	-38						6	0,97	
1423	0 - PQ	K	220 PBO-VAU F1	K		0,900-1,100	Ligado	2 - Auxiliar	1,008	221,8	-37						6	1	
1424	0 - PQ	K	220 PBO-VAU F2	K		0,900-1,100	Ligado	2 - Auxiliar	1,005	221,1	-38						6	1	
1425	0 - PQ	K	220 PBO-BMO F1	K		0,900-1,100	Ligado	2 - Auxiliar	1,009	222	-37						6	1	
1426	0 - PQ	K	220 PBO-VAU F4	K		0,900-1,100	Ligado	2 - Auxiliar	1,003	220,7	-38						6	1	
1427	0 - PQ	K	220 PBO-BMO F2	K		0,900-1,100	Ligado	2 - Auxiliar	1,008	221,8	-38						6	1	
1428	0 - PQ	K	220 PBO-BMO F3	K		0,900-1,100	Ligado	2 - Auxiliar	1,007	221,5	-38						6	1	
1430	0 - PQ	K	220 PBO-VAU F3	K		0,900-1,100	Ligado	2 - Auxiliar	1,004	220,9	-38						6	1	
1431	0 - PQ	K	220 VHA- PBO F1	K		0,900-1,100	Ligado	2 - Auxiliar	1,014	223,1	-37						6	1	
1432	0 - PQ	K	220 PBO-PCA F1	K		0,900-1,100	Ligado	2 - Auxiliar	1,013	222,9	-38						6	0,99	
1433	0 - PQ	K	220 PBO-PCA F2	K		0,900-1,100	Ligado	2 - Auxiliar	1,013	222,9	-38						6	0,99	
1434	0 - PQ	K	220 VAL F5		K	0,900-1,100	Ligado	2 - Auxiliar	1,039	228,6	-31						4	1,05	
1435	0 - PQ	K	220 VAL F6		K	0,900-1,100	Ligado	2 - Auxiliar	1,038	228,4	-31						4	1,05	

1440	0 - PQ	0	1 BRO F1	0	0,950-1,050	Ligado	2 - Auxiliar	1,023	1	-42	6	0,98		
1449	0 - PQ	K	220 YZU F1 220	K	0,900-1,100	Ligado	2 - Auxiliar	1,077	236,9	-14	2	1,06		
1450	0 - PQ	K	220 YZU F2 220	K	0,900-1,100	Ligado	2 - Auxiliar	1,077	236,9	-14	4	1,06		
1469	0 - PQ	K	220 VM2 B1 220	K	0,900-1,100	Ligado	0 - Normal	1,098	241,6	-66	5	1,05		
1478	0 - PQ	K	220 CAM F1 220	K	0,900-1,100	Ligado	2 - Auxiliar	0,956	210,3	-33	3	1		
1480	0 - PQ	K	220 CAM F2 220	K	0,900-1,100	Ligado	2 - Auxiliar	0,987	217,1	-30	3	1,06		
1483	0 - PQ	L	241,5 MD F5 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,961	232,1	-14	1	0,93		
1484	0 - PQ	L	241,5 MD F1 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,961	232,1	-14	1	0,93		
1485	0 - PQ	L	241,5 MD F2 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,963	232,6	-14	1	0,93		
1486	0 - PQ	L	241,5 MD F3 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,986	238,1	-7,4	1	0,93		
1487	0 - PQ	L	241,5 MD F4 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,986	238,1	-7,4	1	0,92		
1488	0 - PQ	L	241,5 MD F6 241,5	L	0,900-1,100	Ligado	2 - Auxiliar	0,963	232,6	-14	1	0,93		
1490	0 - PQ	K	220 PIH F1 220	K	0,900-1,100	Ligado	2 - Auxiliar	1,044	229,7	-18	2	1		
1491	0 - PQ	K	220 PIH F2 220	K	0,900-1,100	Ligado	2 - Auxiliar	1,041	229	-19	2	1		
1502	0 - PQ	H	23 REA SLO 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,013	23,3	-43	6	0,98		
1503	0 - PQ	H	23 REA SLO 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,013	23,3	-43	6	0,98		
1504	0 - PQ	H	23 REA SLO 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,013	23,3	-43	6	0,98		
1505	0 - PQ	H	23 REA PBO 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,023	23,5	-43	6	1		
1506	0 - PQ	H	23 REA PBO 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,023	23,5	-43	6	1		
1509	0 - PQ	K	220 ALY 220	K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-38	13,3	3,42	6	0,99
1510	0 - PQ	H	23 REA LAM 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,03	23,7	-43	6	1		
1511	0 - PQ	H	23 REA LAM 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,03	23,7	-43	6	1		
1514	0 - PQ	H	23 REA VEL	H	0,900-1,100	Ligado	2 - Auxiliar	1,005	23,1	-40	6	0,97		
1516	0 - PQ	I	66 MD HER2 66 I	I	0,900-1,100	Ligado	0 - Normal	0,976	64,4	-15	2	1,07		
1517	0 - PQ	I	66 SECCIO 1 66 I	I	0,900-1,100	Ligado	2 - Auxiliar	0,933	61,6	-24	2	1,07		
1518	0 - PQ	H	23 REA LAV 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,018	23,4	-43	6	1		
1519	0 - PQ	H	23 REA LAV 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,018	23,4	-43	6	1		
1521	0 - PQ	H	23 REA LUQ 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,029	23,7	-43	6	1		
1522	0 - PQ	H	23 REA LUQ 3	H	0,900-1,100	Ligado	2 - Auxiliar	1,029	23,7	-43	6	1		
1523	0 - PQ	H	23 REA LUQ 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,029	23,7	-43	6	1		
1525	0 - PQ	0	1 PCA F2	0	0,950-1,050	Ligado	2 - Auxiliar	1,013	1	-42	6	1		
1526	0 - PQ	H	23 REA PCA 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,017	23,4	-43	6	1		
1549	0 - PQ	H	23 REA YZU	H	0,900-1,100	Ligado	2 - Auxiliar	1,242	28,6	-14	2	1,06		
1578	0 - PQ	0	1 LPA F1	0	0,950-1,050	Ligado	2 - Auxiliar	0,968	1	-81	8	1,04		

1584	0 - PQ	H	23 REA APR 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,021	23,5	-20			2	1	
1585	0 - PQ	H	23 REA APR 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,021	23,5	-20			2	1	
1593	0 - PQ	H	23 REA CAP 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,023	23,5	-42			6	1	
1594	0 - PQ	H	23 REA CAP 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,023	23,5	-42			6	1	
1597	0 - PQ	H	23 REA CZU 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,009	23,2	-27			4	1	
1598	0 - PQ	0	1 FIC F1	0	0,950-1,050	Ligado	2 - Auxiliar	1,07	1,1	-68			5	1	
1599	0 - PQ	H	23 REA CZU 2	H	0,900-1,100	Ligado	2 - Auxiliar	1,009	23,2	-27			4	1	
1600	0 - PQ	K	220 VAL F1	K	0,900-1,100	Ligado	2 - Auxiliar	1,039	228,6	-31			4	1,05	
1601	0 - PQ	K	220 VAL F2	K	0,900-1,100	Ligado	2 - Auxiliar	1,04	228,8	-31			4	1,05	
1603	0 - PQ	K	220 VAL F3	K	0,900-1,100	Ligado	2 - Auxiliar	1,039	228,6	-31			4	1,05	
1604	0 - PQ	K	220 VAL F4	K	0,900-1,100	Ligado	2 - Auxiliar	1,04	228,8	-31			4	1,05	
1827	0 - PQ	H	23 REA VAL 2	H	0,900-1,100	Ligado	2 - Auxiliar	0,983	22,6	-32			6	1,05	
1846	0 - PQ	N	500 MD-VHA F1	N	0,900-1,100	Ligado	2 - Auxiliar	0,975	487,5	-29			6	1,03	
1856	0 - PQ	N	500 AYO-VHA F1	N	0,900-1,100	Ligado	2 - Auxiliar	0,985	492,5	-31			6	1,03	
2208	0 - PQ	H	23 REP A 23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-48	60,51	19,62	18	6	1
2209	0 - PQ	H	23 VAU B2 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47	38,33	28,18	6	6	1
2210	0 - PQ	H	23 SAN B 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-45	91,86	26,58	24	6	1
2211	0 - PQ	H	23 GDI A 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-46	37,12	12,38	12	6	1
2218	0 - PQ	H	23 LAV A 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-47	104	29,96	18	6	1
2222	0 - PQ	H	23 BMO AB 23	H	0,900-1,100	Ligado	0 - Normal	1,022	23,5	-46	70,57	22,9	12	6	1
2226	0 - PQ	H	23 BCP B1 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-46	24,71		6	6	1
2238	0 - PQ	H	23 CAU AB 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-41	4,36	1,73	1,2	6	1
2246	0 - PQ	H	23 CNU AB 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-50	46,67	15,35	9	6	1
2250	0 - PQ	H	23 SRI 23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-19	36,43	11,71	24	2	1
2266	0 - PQ	H	23 IRO A 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-41	18,2	8,09	4	1	
2270	0 - PQ	H	23 FRA AB 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-38	17,13	4,61	6	3	1
2271	0 - PQ	H	23 CCO AB 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-54	24,42	8,14	6	5	1
2272	0 - PQ	H	23 CBA 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-45	5,6	1,4	6	5	1
2275	0 - PQ	H	23 PPE A 23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-34	41,25	17,16	6	4	1
2281	0 - PQ	H	23 ACY A 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-18	21,59	6,33	6	2	1,02
2287	0 - PQ	H	23 SIG 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-30	21,94	7,21	3	1	
2289	0 - PQ	H	23 PFO B 23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-21	15,7	7,71	6	2	1,02
2292	0 - PQ	H	23 JEP A 23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-36	22,98	10,95	6	2	1
2297	0 - PQ	H	23 ABA A 23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-34	20,6	6,69	4	1	

2304	0 - PQ	I	66 DES B1	66	I	0,900-1,100	Ligado	0 - Normal	0,96	63,4	-18			2	1	
2308	0 - PQ	I	66 REP B1	66	I	0,900-1,100	Ligado	0 - Normal	1,019	67,3	-43			6	1,01	
2309	0 - PQ	I	66 VAU B1	66	I	0,900-1,100	Ligado	0 - Normal	1,035	68,3	-43			6	1	
2311	0 - PQ	I	66 GDI B1	66	I	0,900-1,100	Ligado	0 - Normal	1,018	67,2	-43			6	1	
2343	0 - PQ	H	23 GHN 23		H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-44	15,4	3,08	6	1	
2345	0 - PQ	I	66 ACE B1	66	I	0,900-1,100	Ligado	0 - Normal	0,961	63,4	-44			6	1	
2346	0 - PQ	I	66 VMC		I	0,900-1,100	Ligado	0 - Normal	0,951	62,8	-44	5	1,67	6	1	
2372	0 - PQ	H	23 CON B	23	H	0,900-1,100	Ligado	0 - Normal	1,01	23,2	-66	42,18	13,38	12	5	1
2379	0 - PQ	I	66 FER	66	I	0,900-1,100	Ligado	2 - Auxiliar	0,978	64,5	-80	21	5,46	8	1,01	
2409	0 - PQ	K	220 VAU B1	220	K	0,900-1,100	Ligado	0 - Normal	1,002	220,4	-38			6	1	
2418	0 - PQ	K	220 LAV TA	220	K	0,900-1,100	Ligado	0 - Normal	1,012	222,6	-39			6	1	
2484	0 - PQ	K	220 APR 220		K	0,900-1,100	Ligado	0 - Normal	1,071	235,6	-16			2	1	
2485	0 - PQ	K	220 CYO A	220	K	0,900-1,100	Ligado	0 - Normal	1,017	223,7	-31			4	1,02	
2487	0 - PQ	K	220 SIG TA	220	K	0,900-1,100	Ligado	2 - Auxiliar	1,045	229,9	-27			3	1,05	
2491	0 - PQ	H	23 SGA A	23	H	0,900-1,100	Ligado	0 - Normal	1,008	23,2	-31	24,45	10,64	6	2	1
3309	0 - PQ	I	66 SICBRAS	66	I	0,900-1,100	Ligado	0 - Normal	1,027	67,8	-38			6	1	
3326	0 - PQ	I	66 BCP B1	66	I	0,900-1,100	Ligado	0 - Normal	1,02	67,3	-43			6	1,01	
3346	0 - PQ	I	66 CNU B1	66	I	0,900-1,100	Ligado	0 - Normal	0,952	62,8	-44			6	1	
3370	0 - PQ	I	66 FRA B1	66	I	0,900-1,100	Ligado	0 - Normal	1,008	66,5	-36			3	1	
3371	0 - PQ	I	66 CCO B1	66	I	0,900-1,100	Ligado	0 - Normal	1,05	69,3	-54			5	0,86	
3372	0 - PQ	I	66 VRE B1	66	I	0,900-1,100	Ligado	0 - Normal	1,02	67,3	-60			5	1	
3375	0 - PQ	I	66 PPE B1	66	I	0,900-1,100	Ligado	0 - Normal	1,014	66,9	-38			4	1	
3379	0 - PQ	I	66 LPA B3	66	I	0,900-1,100	Ligado	0 - Normal	0,968	63,9	-81			8	1	
3403	0 - PQ	I	66 MCE B1	66	I	0,900-1,100	Ligado	0 - Normal	0,983	64,9	-18			2	1	
3503	0 - PQ	I	66 BTW F2		I	0,900-1,100	Ligado	2 - Auxiliar	1,032	68,1	-43			6	1	
4222	0 - PQ	K	220 BMO B1	220	K	0,900-1,100	Ligado	0 - Normal	1,007	221,5	-38			6	1	
4227	0 - PQ	H	23 VAQ A	23	H	0,900-1,100	Ligado	0 - Normal	1,007	23,2	-30	15,52	7,76	6	4	1
4295	0 - PQ	H	23 PIH AB	23	H	0,900-1,100	Ligado	0 - Normal	1,009	23,2	-22	32,94	10,52	2	1	
4307	0 - PQ	I	66 ALT B1	66	I	0,900-1,100	Ligado	0 - Normal	1,035	68,3	-42			6	1	
4322	0 - PQ	I	66 BMO B1	66	I	0,900-1,100	Ligado	0 - Normal	1,035	68,3	-42			6	1	
4395	0 - PQ	I	66 PIH B1	66	I	0,900-1,100	Ligado	0 - Normal	0,961	63,4	-22			2	1	
4403	0 - PQ	K	220 SLO STATCON		K	0,900-1,100	Ligado	0 - Normal	1,083	238,3	-39			6	0,98	
4407	0 - PQ	0	1 ALT F1		0	0,950-1,050	Ligado	2 - Auxiliar	1,035	1	-42			6	1	
4444	0 - PQ	K	220 CMY B1	220	K	0,900-1,100	Ligado	0 - Normal	1,015	223,3	-37	4,8	1,53	6	1	

4466	0 - PQ	K	220 IRO TA	220 K	0,900-1,100	Ligado	0 - Normal	0,993	218,5	-39			4	1,01		
4468	0 - PQ	K	220 HOR comp	22 K	0,900-1,100	Ligado	0 - Normal	1,11	244,2	-56			5	1		
4472	0 - PQ	K	220 VRE B1	220 K	0,900-1,100	Ligado	0 - Normal	1,062	233,6	-57			5	1		
4485	0 - PQ	K	220 SICBRAS	220 K	0,900-1,100	Ligado	0 - Normal	1,017	223,7	-38			6	1		
4491	0 - PQ	K	220 SGA B1	220 K	0,900-1,100	Ligado	0 - Normal	1,024	225,3	-29			2	1,02		
4495	0 - PQ	K	220 PIH B1	220 K	0,900-1,100	Ligado	0 - Normal	1,041	229	-19			2	1		
4497	0 - PQ	K	220 ABA TA	220 K	0,900-1,100	Ligado	0 - Normal	0,987	217,1	-32			4	1,03		
5410	0 - PQ	H	23 REA SAN 1	H	0,900-1,100	Ligado	2 - Auxiliar	1,01	23,2	-42			6	1		
182	1- PV	F	13,8 ACY G2	13.8 F	0,900-1,100	Desligado	0 - Normal	1,045	14,4	-12	47	28,04	-35	35	2	1,03
181	1- PV	F	13,8 ACY G1	13.8 F	0,900-1,100	Desligado	0 - Normal	1,045	14,4	-12	47	28,04	-35	35	2	1,03