

# **ACTUALIZACIÓN ESQUEMAS DE RECHAZO DE CARGA POR MÍNIMA FRECUENCIA Y DE RECHAZO DE GENERACIÓN POR SOBREFRECUENCIA**

## **ANEXO 11**

### **AJUSTE RELÉS DE FRECUENCIA**

## 11.1 INTRODUCCIÓN

En este anexo se presentan todos los relés de frecuencia que fueron creados en la base de datos del DigSilent para el modelado del SEIN. Adicionalmente, se presentan los ajustes para los relés de rechazo de carga y desconexión de equipos por baja frecuencia y gradiente.

El esquema completo esta conformado por siete etapas de actuación. No todas las barras tienen carga a desconectar en las siete etapas, razón por la cual el número de etapas de cada relé puede ser diferente.

## 11.2 RELÉS DE RECHAZO DE CARGA POR BAJA FRECUENCIA

**Tabla A11.1. Relés de rechazo de carga.**

Relé	Carga DIG	Etapas						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Acer20	ACER20	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Acers10	ACERS10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Agua23	AGUA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Alto60	ALTO60	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Alto10	ALTOL10	59.8	-0.65	0.15	59	0.15	1.1	1.1
rdf Anda10	ANDA10	59.8	-1.4	0.4	59	0.15	4.2	4.2
rdf Anda23	ANDA23	59.8	-1.4	0.4	59	0.15	4.2	4.2
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0
rdf Antuq2.4	ANTUQ2.4	59.8	-0.65	0.15	59	0.15	58.8	58.8
rdf Antuq50	ANTUQ50	59.8	-0.65	0.15	59	0.15	1.2	1.2
rdf Arca33	ARCA33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Ares4	ARES4	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0
rdf Auca23	AUCA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Aya10	AYA10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Aya23	AYA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	59.8	-1.1	0.15	59	0.15	60.3	60.3
rdf Bal10	BAL10	0	0	0	0	0	0.0	0.0
rdf Barr10	BARR10	0	0	0	0	0	0.0	0.0
rf Barsi10	BARSI10	0	0	0	59	0.15	0.0	26.6
rdf Bconc6	BCONC6	0	0	0	0	0	0.0	0.0
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Cach23	CACH23	59.8	-1.1	0.15	59	0.15	4.2	4.2
rf Cajam10	CAJAM10	0	0	0	0	0	0.0	0.0
rdf Callal23	CALLAL23	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Cang23	CANG23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Cant10	CANT10	0	0	0	0	0	0.0	0.0
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Carhua23	CARHUA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rf Carhz13	CARHZ13	0	0	0	0	0	0.0	0.0
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	59.8	-1.4	0.4	59	0.15	29.1	29.1
rdf Cauda23	CAUDA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rf Caudi10	CAUDI10	0	0	0	59	0.15	0.0	9.9
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa1						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Cayll10	CAYLL10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Cerve10	CERVE10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Cfra2	CFRA2	0	0	0	0	0	0.0	0.0
rdf Chal10	CHAL10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Chapr2	CHAPR2	59.8	-0.7	0.15	59	0.16	33.5	33.5
rf Chava10	CHAVA10	0	0	0	59	0.15	0.0	8.4
rdf Chavg3	CHAVG3	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Chicl10	CHICL10	0	0	0	0	0	0.0	0.0
rdf Chicn10	CHICN10	0	0	0	0	0	0.0	0.0
rdf Chil10	CHIL10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rf Chin13	CHIN13	0	0	0	59	0.15	0.0	4.6
rdf Chinch10	CHINCH10	0	0	0	0	0	0.0	0.0
rf Chis13	CHIS13	0	0	0	0	0	0.0	0.0
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	59.8	-0.65	0.15	59	0.15	56.6	56.6
rdf Cobri10	COBRI10	59.8	-0.65	0.15	59	0.15	0.2	0.2
rdf Comba24	COMBA24	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Conce13	CONCE13	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Cond44	COND44	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Cypru10	CYPRU10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Duvaz50	DUVAZ50	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Huanu10	HUANU10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Huanu23	HUANU23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Huarl10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Hveli10	HVELI10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	59.8	-1.1	0.15	59	0.15	93.9	93.9
rdf Infan10	INFAN10	59.8	-0.65	0.15	0	0	81.9	0.0
rdf Inge23	INGE23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Jauja13	JAUJA13	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Jesus10	JESUS10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Lima10	LIMA10	0	0	0	0	0	0.0	0.0
rdf Mach10	MACH10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Macha23	MACHA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Majes10	MAJES10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Mala10	MALA10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Malacas	MALACAS	0	0	0	0	0	0.0	0.0
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	59.8	-1.4	0.4	59	0.15	94.6	94.6
rdf Maran10	MARAN10	0	0	0	59	0.15	0.0	8.2
rdf Mayup	MAYUP	59.8	-0.7	0.15	59	0.16	70.8	70.8
rdf Mills14	MILLS14	59.8	-1.1	0.15	59	0.15	7.6	7.6
rdf Milpo13	MILPO13	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Miron10	MIRON10	0	0	0	59	0.15	0.0	4.2
rdf Moll33	MOLL33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Moll66	MOLL66	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Moly33	MOLY33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa1						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	0	0	0.0	0.0
rdf Onu50	ONU50	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Oquen10	OQUEN10	0	0	0	0	0	0.0	0.0
rdf Oroy50	OROY50	59.8	-0.7	0.15	59	0.16	46.1	46.1
rdf P_exis	P_EXIS	59.8	-1.4	0.4	59	0.15	4.2	4.2
rdf Paca6a	PACA6A	59.8	-1.4	0.4	59	0.15	4.2	4.2
rdf Paca6b	PACA6B	59.8	-1.4	0.4	59	0.15	4.2	4.2
rf Pacas10	PACAS10	0	0	0	59	0.15	0.0	37.4
rdf Pacha10	PACHA10	59.8	-0.7	0.15	59	0.15	99.3	99.3
rdf Pacha50	PACHA50	0	0	0	0	0	0.0	0.0
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paita60	PAITA60	0	0	0	0	0	0.0	0.0
rdf Pajue23	PAJUE23	59.8	-1.4	0.4	59	0.15	4.2	4.2
rf Pall10	PALL10	0	0	0	59	0.15	0.0	81.1
rdf Pamp33	PAMP33	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Pando10	PANDO10	0	0	0	59	0.15	0.0	14.5
rdf Parag12	PARAG12	59.8	-0.7	0.15	59	0.16	4.8	4.8
rdf Pedre10	PEDRE10	59.8	-0.65	0.15	59	0.15	28.1	28.1
rdf Persh10	PERSH10	0	0	0	0	0	0.0	0.0
rdf Pindu10	PINDU10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Piura10	PIURA10	0	0	0	0	0	0.0	0.0
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	59	0.15	0.0	38.2
rdf Pqib10	PQIB10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Pqind10	PQIND10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Prim10	PRIM10	0	0	0	0	0	0.0	0.0
rdf Pucal10	PUCAL10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Puen10	PUEN10	0	0	0	0	0	0.0	0.0
rdf Puno10	PUNO10	0	0	0	0	0	0.0	0.0
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Quen10	QUEN10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Quen33	QUEN33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Quilla10	QUILLA10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Racchi10	RACCHI10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Racchi33	RACCHI33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Repa10	REPA10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Repa23	REPA23	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Ron1	RON1	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	0	0	0	0	0	0.0	0.0
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	59	0.15	0.0	11.6
rdf Smari23	SMARI23	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Snico13	SNICO13	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Soca33	SOCA33	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Sraf460	SRAF460	59.8	-1.1	0.15	59	0.15	6.4	6.4
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	0	0	0	0	0	0.0	0.0
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	0	0	0	59	0.15	0.0	8.7
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa1						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Tarma10	TARMA10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Tarma23	TARMA23	59.8	-0.65	0.15	59	0.15	4.2	4.2
rf Tg4_ts	TG4_TS	0	0	0	0	0	0.0	0.0
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	0	0	0	0	0	0.0	0.0
rdf Tinta10	TINTA10	59.8	-1.1	0.15	59	0.15	12.6	12.6
rdf Tmari10	TMARI10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	59.8	-1.4	0.4	59	0.15	96.1	96.1
rdf Tvalle10	TVALLE10	0	0	0	0	0	0.0	0.0
rdf Uchu33	UCHU33	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Venta10	VENTA10	0	0	0	0	0	0.0	0.0
rdf Villac10	VILLAC10	59.8	-0.65	0.15	59	0.15	4.2	4.2
rdf Vmar10	VMAR10	59.8	-0.7	0.15	59	0.15	14.3	14.3
rdf Vsalv10	VSALV10	59.8	-0.7	0.15	59	0.15	71.1	71.1
rdf Yar10a	YAR10A	59.8	-1.1	0.15	59	0.15	78.8	78.8
rdf Yar10b	YAR10B	0	0	0	0	0	0.0	0.0
rdf Yura10	YURA10	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Yura6	YURA6	59.8	-1.1	0.15	59	0.15	4.2	4.2
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	59.8	-1.4	0.4	59	0.15	35.1	35.1

Rele	Carga DIG	Etapa2						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Acer20	ACER20	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Acers10	ACERS10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Agua23	AGUA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Alto60	ALTO60	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Altol10	ALTOL10	59.8	-0.65	0.15	58.9	0.15	2.0	2.0
rdf Anda10	ANDA10	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rdf Anda23	ANDA23	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rdf Antau23	ANTAU23	59.8	-1.1	0.15	58.9	0.15	93.8	93.8
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	59.8	-0.65	0.15	58.9	0.15	2.2	2.2
rdf Arca33	ARCA33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Ares4	ARES4	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Atac04	ATAC04	59.8	-0.65	0.15	58.9	0.15	95.6	95.6
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0
rdf Auca23	AUCA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Aya10	AYA10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Aya23	AYA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Ayav10	AYAV10	59.8	-1.1	0.15	58.9	0.15	94.4	94.4
rdf Ayav23	AYAV23	59.8	-1.1	0.15	58.9	0.15	100.0	100.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0
rdf Bal10	BAL10	0	0	0	0	0	0.0	0.0
rdf Barr10	BARR10	59.8	-0.7	0.15	58.9	0.15	29.3	29.3
rf Barsi10	BARSI10	0	0	0	0	0	0.0	0.0
rdf Bconc6	BCONC6	0	0	0	0	0	0.0	0.0
rdf Boti13	BOTI13	59.8	-1.1	0.15	58.9	0.15	10.1	10.1
rdf Cach10	CACH10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Cach23	CACH23	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rf Cajam10	CAJAM10	0	0	0	0	0	0.0	0.0
rdf Callal23	CALLAL23	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Cang23	CANG23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Cant10	CANT10	0	0	0	58.9	0.15	0.0	25.1
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Carhua23	CARHUA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8

Rele	Carga DIG	Etapa2						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rf Carhz13	CARHZ13	0	0	0	58.9	0.15	0.0	52.0
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	0	0	0	0	0	0.0	0.0
rdf Cauda23	CAUDA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rf Caudi10	CAUDI10	0	0	0	58.9	0.15	0.0	14.0
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0
rdf Cayll10	CAYLL10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Cerve10	CERVE10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Cfra2	CFRA2	59.8	-0.65	0.15	58.9	0.15	13.2	13.2
rdf Chal10	CHAL10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Chapr2	CHAPR2	0	0	0	0	0	0.0	0.0
rf Chava10	CHAVA10	0	0	0	58.9	0.15	0.0	21.9
rdf Chavg3	CHAVG3	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Chicl10	CHICL10	0	0	0	0	0	0.0	0.0
rdf Chicn10	CHICN10	59.8	-1.4	0.4	58.9	0.15	9.7	9.7
rdf Chil10	CHIL10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rf Chin13	CHIN13	0	0	0	58.9	0.15	0.0	15.3
rdf Chinch10	CHINCH10	0	0	0	0	0	0.0	0.0
rf Chis13	CHIS13	0	0	0	0	0	0.0	0.0
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	59.8	-0.65	0.15	58.9	0.15	37.7	37.7
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Conce13	CONCE13	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Cond44	COND44	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Cypru10	CYPRU10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Duvaz50	DUVAZ50	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Huanu10	HUANU10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Huanu23	HUANU23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Huarl10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Hveli10	HVELI10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	59.8	-1.4	0.4	58.9	0.15	96.1	96.1
rdf Illimo23	ILLIMO23	59.8	-1.4	0.4	58.9	0.15	93.8	93.8
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0
rdf Inge23	INGE23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Jauja13	JAUJA13	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Jesus10	JESUS10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rf Jica10	JICA10	0	0	0	58.9	0.15	0.0	93.2
rdf Junin	JUNIN	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Lafund	LAFUND	59.8	-0.65	0.15	58.9	0.15	98.2	98.2
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	58.9	0.15	0.0	93.2
rdf Laza10	LAZA10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Lima10	LIMA10	0	0	0	0	0	0.0	0.0
rdf Mach10	MACH10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Macha23	MACHA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Majes10	MAJES10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Mala10	MALA10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Malacas	MALACAS	59.8	-1.4	0.4	58.9	0.15	56.5	56.5
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	59.8	-0.65	0.15	0	0	75.8	0.0
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	59.8	-1.1	0.15	58.9	0.15	13.4	13.4

Rele	Carga DIG	Etapa2						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Milpo13	MILPO13	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Miron10	MIRON10	0	0	0	58.9	0.15	0.0	6.2
rdf Moll33	MOLL33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Moll66	MOLL66	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Moly33	MOLY33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0
rdf Motup10	MOTUP10	59.8	-1.4	0.4	58.9	0.15	28.3	28.3
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	0	0	0.0	0.0
rdf Onu50	ONU50	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Oquen10	OQUEN10	0	0	0	0	0	0.0	0.0
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rdf Paca6a	PACA6A	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rdf Paca6b	PACA6B	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rf Pacas10	PACAS10	0	0	0	58.9	0.15	0.0	59.9
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	0	0	0	0	0	0.0	0.0
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paita60	PAITA60	0	0	0	0	0	0.0	0.0
rdf Pajue23	PAJUE23	59.8	-1.4	0.4	58.9	0.15	7.8	7.8
rf Pall10	PALL10	0	0	0	58.9	0.15	0.0	12.3
rdf Pamp33	PAMP33	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Pando10	PANDO10	0	0	0	58.9	0.15	0.0	5.5
rdf Parag12	PARAG12	0	0	0	0	0	0.0	0.0
rdf Pedre10	PEDRE10	58.9	-0.65	0.15	58.9	0.15	28.1	28.1
rdf Persh10	PERSH10	0	0	0	58.9	0.15	0.0	18.7
rdf Pindu10	PINDU10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Piura10	PIURA10	59.8	-1.4	0.4	58.9	0.15	2.9	2.9
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	58.9	0.15	0.0	16.5
rdf Pqib10	PQIB10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Pqind10	PQIND10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Prim10	PRIM10	0	0	0	0	0	0.0	0.0
rdf Pucal10	PUCAL10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Puen10	PUEN10	0	0	0	0	0	0.0	0.0
rdf Puno10	PUNO10	59.8	-0.65	0.15	58.9	0.15	2.8	2.8
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Quen10	QUEN10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Quen33	QUEN33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Quilla10	QUILLA10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Racchi10	RACCHI10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Racchi33	RACCHI33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Repa10	REPA10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Repa23	REPA23	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Ron1	RON1	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Sala10	SALA10	59.8	-0.7	0.15	58.9	0.15	82.6	82.6
rdf Sale10	SALE10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	59.8	-1.4	0.4	58.9	0.15	27.9	27.9
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0
rdf Sjuan10	SJUAN10	59.8	-0.7	0.15	58.9	0.15	99.2	99.2
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	58.9	0.15	0.0	16.2
rdf Smari23	SMARI23	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Snico13	SNICO13	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Soca33	SOCA33	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Sraf460	SRAF460	59.8	-1.1	0.15	58.9	0.15	22.0	22.0
rdf Sros10	SROS10	59.8	-0.65	0.15	0	0	67.0	0.0

Rele	Carga DIG	Etapa2						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Sulla10	SULLA10	0	0	0	0	0	0.0	0.0
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	0	0	0	58.9	0.15	0.0	16.3
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	59.8	-1.1	0.15	58.9	0.15	3.9	3.9
rdf Tarma10	TARMA10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Tarma23	TARMA23	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rf Tg4 ts	TG4_TS	0	0	0	58.9	0.15	0.0	9.3
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	0	0	0	0	0	0.0	0.0
rdf Tinta10	TINTA10	59.8	-1.1	0.15	58.9	0.15	12.6	12.6
rdf Tmari10	TMARI10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	0	0	0	0	0	0.0	0.0
rdf Uchu33	UCHU33	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Venta10	VENTA10	0	0	0	0	0	0.0	0.0
rdf Villac10	VILLAC10	59.8	-0.65	0.15	58.9	0.15	7.8	7.8
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	59.8	-1.1	0.15	58.9	0.15	21.2	21.2
rdf Yar10b	YAR10B	59.8	-1.1	0.15	58.9	0.15	90.0	90.0
rdf Yura10	YURA10	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Yura6	YURA6	59.8	-1.1	0.15	58.9	0.15	7.8	7.8
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa3						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Acer20	ACER20	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Acers10	ACERS10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Agua23	AGUA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Alto60	ALTO60	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Alto10	ALTOL10	59.8	-0.65	0.15	58.8	0.15	2.5	2.5
rdf Anda10	ANDA10	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rdf Anda23	ANDA23	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	59.8	-0.65	0.15	58.8	0.15	2.9	2.9
rdf Arca33	ARCA33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Ares4	ARES4	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0
rdf Auca23	AUCA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Aya10	AYA10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Aya23	AYA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0
rdf Bal10	BAL10	59.8	-0.7	0.15	58.8	0.15	45.5	45.5
rdf Barr10	BARR10	59.8	-0.7	0.15	58.8	0.15	0.0	0.0
rf Barsi10	BARS10	0	0	0	58.8	0.15	0.0	4.6
rdf Bconc6	BCONC6	59.8	-1.1	0.15	58.8	0.15	18.1	18.1
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0

Rele	Carga DIG	Etapa3						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Cach23	CACH23	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rf Cajam10	CAJAM10	0	0	0	58.8	0.15	0.0	25.1
rdf Callal23	CALLAL23	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Cang23	CANG23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Cant10	CANT10	0	0	0	58.8	0.15	0.0	30.9
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Carhua23	CARHUA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rf Carhz13	CARHZ13	0	0	0	0	0	0.0	0.0
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	0	0	0	0	0	0.0	0.0
rdf Cauda23	CAUDA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rf Caudi10	CAUDI10	0	0	0	58.8	0.15	0.0	36.2
rdf Cayal23	CAYAL23	59.8	-1.8	0.4	58.8	0.15	95.6	95.6
rdf Cayll10	CAYLL10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Cerve10	CERVE10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Cfra2	CFRA2	59.8	-0.65	0.15	58.8	0.15	24.3	24.3
rdf Chal10	CHAL10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Chapr2	CHAPR2	0	0	0	0	0	0.0	0.0
rf Chava10	CHAVA10	0	0	0	58.8	0.15	0.0	9.2
rdf Chavg3	CHAVG3	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Chicl10	CHICL10	59.8	-1.8	0.4	58.8	0.15	9.9	9.9
rdf Chicn10	CHICN10	0	0	0	0	0	0.0	0.0
rdf Chil10	CHIL10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rf Chin13	CHIN13	0	0	0	58.8	0.15	0.0	19.6
rdf Chinch10	CHINCH10	0	0	0	0	0	0.0	0.0
rf Chis13	CHIS13	0	0	0	0	0	0.0	0.0
rdf Chorr10	CHORR10	59.8	-0.7	0.15	58.8	0.15	95.3	95.3
rdf Cnor4.16	CNOR4.16	0	0	0	0	0	0.0	0.0
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Conce13	CONCE13	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Cond44	COND44	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Cypru10	CYPRU10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Duvaz50	DUVAZ50	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Huanu10	HUANU10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Huanu23	HUANU23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Huarl10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Hveli10	HVELI10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0
rdf Inge23	INGE23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Jauja13	JAUJA13	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Jesus10	JESUS10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0
rdf Lamba10	LAMBA10	59.8	-1.8	0.4	58.8	0.15	85.6	85.6
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Lima10	LIMA10	59.8	-0.7	0.15	58.8	0.15	17.9	17.9
rdf Mach10	MACH10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Macha23	MACHA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0

Rele	Carga DIG	Etapa3						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Majes10	MAJES10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Mala10	MALA10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Malacas	MALACAS	59.8	-1.8	0.4	58.8	0.15	29.1	29.1
rdf Manc10	MANC10	59.8	-1.8	0.4	58.8	0.15	91.8	91.8
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	0	0	0	58.8	0.15	0.0	28.3
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	59.8	-1.1	0.15	58.8	0.15	18.8	18.8
rdf Milpo13	MILPO13	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Miron10	MIRON10	0	0	0	58.8	0.15	0.0	21.4
rdf Moll33	MOLL33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Moll66	MOLL66	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Moly33	MOLY33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	0	0	0.0	0.0
rdf Onu50	ONU50	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Oquen10	OQUEN10	0	0	0	58.8	0.15	0.0	9.0
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rdf Paca6a	PACA6A	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rdf Paca6b	PACA6B	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rf Pacas10	PACAS10	0	0	0	0	0	0.0	0.0
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	0	0	0	0	0	0.0	0.0
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paita60	PAITA60	59.8	-1.8	0.4	58.8	0.15	5.2	5.2
rdf Pajue23	PAJUE23	59.8	-1.8	0.4	58.8	0.15	10.0	10.0
rf Pall10	PALL10	0	0	0	0	0	0.0	0.0
rdf Pamp33	PAMP33	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Pando10	PANDO10	0	0	0	58.8	0.15	0.0	15.7
rdf Parag12	PARAG12	0	0	0	0	0	0.0	0.0
rdf Pedre10	PEDRE10	59.8	-0.65	0.15	58.8	0.15	41.8	41.8
rdf Persh10	PERSH10	59.8	-0.65	0.15	58.8	0.15	93.3	33.9
rdf Pindu10	PINDU10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Piura10	PIURA10	0	0	0	0	0	0.0	0.0
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	58.8	0.15	0.0	40.9
rdf Pqib10	PQIB10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Pqind10	PQIND10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Prim10	PRIM10	0	0	0	0	0	0.0	0.0
rdf Pucal10	PUCAL10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Puen10	PUEN10	59.8	-0.7	0.15	58.8	0.15	13.8	13.8
rdf Puno10	PUNO10	0	0	0	0	0	0.0	0.0
rdf Pushb69	PUSHB69	59.8	-1.1	0.15	58.8	0.15	93.2	93.2
rdf Pzinc11	PZINC11	59.8	-0.7	0.15	58.8	0.16	32.6	32.6
rdf Que33pm	QUE33PM	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Quen10	QUEN10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Quen33	QUEN33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Quilla10	QUILLA10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Racchi10	RACCHI10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Racchi33	RACCHI33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Repa10	REPA10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Repa23	REPA23	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Ron1	RON1	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Sbart10	SBART10	59.8	-0.7	0.15	58.8	0.15	64.3	64.3
rdf Sepo10A	SEPO10A	59.8	-1.8	0.4	58.8	0.15	31.2	31.2
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa3						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	58.8	0.15	0.0	4.6
rdf Smari23	SMARI23	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Snico13	SNICO13	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Soca33	SOCA33	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Sraf460	SRAF460	59.8	-1.1	0.15	58.8	0.15	16.0	16.0
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	59.8	-1.8	0.4	58.8	0.15	23.8	23.8
rdf Tac-1	TAC-1	59.8	-1.1	0.15	58.8	0.15	87.0	87.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	0	0	0	58.8	0.15	0.0	20.6
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	59.8	-1.1	0.15	58.8	0.15	24.6	24.6
rdf Tarma10	TARMA10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Tarma23	TARMA23	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rf Tg4_ts	TG4_TS	0	0	0	58.8	0.15	0.0	14.9
rf Ticap13	TICAP13	0	0	0	58.8	0.15	0.0	46.8
rdf Tint416	TINT416	0	0	0	0	0	0.0	0.0
rdf Tinta10	TINTA10	59.8	-1.1	0.15	58.8	0.15	8.9	8.9
rdf Tmari10	TMARI10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	59.8	-0.65	0.15	0	0	78.2	0.0
rdf Uchu33	UCHU33	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Venta10	VENTA10	59.8	-0.65	0.15	0	0	84.9	0.0
rdf Villac10	VILLAC10	59.8	-0.65	0.15	58.8	0.15	10.0	10.0
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	0	0	0	0	0	0.0	0.0
rdf Yar10b	YAR10B	0	0	0	0	0	0.0	0.0
rdf Yura10	YURA10	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Yura6	YURA6	59.8	-1.1	0.15	58.8	0.15	10.0	10.0
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	59.8	-1.8	0.4	58.8	0.15	30.1	30.1

Rele	Carga DIG	Etapa4						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Acer20	ACER20	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Acers10	ACERS10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Agua23	AGUA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Alto60	ALTO60	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Altol10	ALTOL10	59.8	-1.1	0.15	58.7	0.15	2.5	2.5
rdf Anda10	ANDA10	0	0	0	58.7	0.15	0.0	10.0
rdf Anda23	ANDA23	0	0	0	58.7	0.15	0.0	10.0
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	59.8	-1.1	0.15	58.7	0.15	2.9	2.9
rdf Arca33	ARCA33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Ares4	ARES4	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	59.8	-1.1	0.15	58.7	0.15	98.4	98.4
rdf Auca23	AUCA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Aya10	AYA10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Aya23	AYA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa4						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Bal10	BAL10	59.8	-1.1	0.15	58.7	0.15	19.8	19.8
rdf Barr10	BARR10	0	0	0	0	0	0.0	0.0
rf Barsi10	BARS10	0	0	0	58.7	0.15	0.0	11.7
rdf Bconc6	BCONC6	59.8	-1.5	0.15	58.7	0.15	20.9	20.9
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Cach23	CACH23	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rf Cajam10	CAJAM10	0	0	0	58.7	0.15	0.0	27.0
rdf Callal23	CALLAL23	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Cang23	CANG23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Cant10	CANT10	59.8	-1.1	0.15	58.7	0.15	83.7	13.2
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Carhua23	CARHUA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rf Carhz13	CARHZ13	0	0	0	58.7	0.15	0.0	43.9
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	0	0	0	58.7	0.15	0.0	70.8
rdf Cauda23	CAUDA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rf Caudi10	CAUDI10	0	0	0	58.7	0.15	0.0	13.7
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0
rdf Cayll10	CAYLL10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Cerve10	CERVE10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Cfra2	CFRA2	59.8	-1.1	0.15	58.7	0.15	22.7	22.7
rdf Chal10	CHAL10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Chapr2	CHAPR2	0	0	0	0	0	0.0	0.0
rf Chava10	CHAVA10	0	0	0	58.7	0.15	0.0	12.8
rdf Chavg3	CHAVG3	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Chicl10	CHICL10	0	0	0	0	0	0.0	0.0
rdf Chicn10	CHICN10	0	0	0	58.7	0.15	0.0	19.1
rdf Chil10	CHIL10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rf Chin13	CHIN13	0	0	0	58.7	0.15	0.0	24.0
rdf Chinch10	CHINCH10	59.8	-1.1	0.15	58.7	0.15	27.2	27.2
rf Chis13	CHIS13	0	0	0	0	0	0.0	0.0
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	0	0	0	0	0	0.0	0.0
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Conce13	CONCE13	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Cond44	COND44	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Cpied12	CPIED12	59.8	-1.2	0.15	58.7	0.16	96.0	96.0
rdf Cverd23	CVERD23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Cypru10	CYPRU10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Duvaz50	DUVAZ50	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Exc2.4	EXC2.4	59.8	-1.2	0.15	58.7	0.16	36.2	36.2
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Huanu10	HUANU10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Huanu23	HUANU23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Huar10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Hveli10	HVELI10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0
rdf Inge23	INGE23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Jauja13	JAUJA13	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Jesus10	JESUS10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa4						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Lima10	LIMA10	59.8	-1.1	0.15	58.7	0.15	25.8	25.8
rdf Mach10	MACH10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Macha23	MACHA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Majes10	MAJES10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Mala10	MALA10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Malacas	MALACAS	0	0	0	0	0	0.0	0.0
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	0	0	0	58.7	0.15	0.0	29.4
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	59.8	-1.5	0.15	58.7	0.15	15.7	15.7
rdf Milpo13	MILPO13	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Miron10	MIRON10	0	0	0	58.7	0.15	0.0	12.7
rdf Moll33	MOLL33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Moll66	MOLL66	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Moly33	MOLY33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	59.8	-1.1	0.15	58.7	0.15	88.4	88.4
rdf Mrico23	MRICO23	59.8	-1.1	0.15	58.7	0.15	37.4	37.4
rf Nara10	NARA10	0	0	0	58.7	0.15	0.0	42.1
rdf Onu50	ONU50	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Oquen10	OQUEN10	0	0	0	0	0	0.0	0.0
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	0	0	0	58.7	0.15	0.0	10.0
rdf Paca6a	PACA6A	0	0	0	58.7	0.15	0.0	10.0
rdf Paca6b	PACA6B	0	0	0	58.7	0.15	0.0	10.0
rf Pacas10	PACAS10	0	0	0	0	0	0.0	0.0
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	0	0	0	0	0	0.0	0.0
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paíta60	PAITA60	0	0	0	58.7	0.15	0.0	9.8
rdf Pajue23	PAJUE23	0	0	0	58.7	0.15	0.0	10.0
rf Pall10	PALL10	0	0	0	0	0	0.0	0.0
rdf Pamp33	PAMP33	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Pando10	PANDO10	59.8	-1.1	0.15	58.7	0.15	85.7	19.5
rdf Parag12	PARAG12	59.8	-1.2	0.15	58.7	0.16	17.9	17.9
rdf Pedre10	PEDRE10	0	0	0	0	0	0.0	0.0
rdf Persh10	PERSH10	0	0	0	58.7	0.15	0.0	28.8
rdf Pindu10	PINDU10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Piura10	PIURA10	0	0	0	58.7	0.15	0.0	13.6
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0
rf Pomal23	POMAL23	0	0	0	58.7	0.15	0.0	82.3
rf Porve10	PORVE10	0	0	0	0	0	0.0	0.0
rdf Pqib10	PQIB10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Pqind10	PQIND10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Prim10	PRIM10	0	0	0	0	0	0.0	0.0
rdf Pucal10	PUCAL10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Puen10	PUEN10	0	0	0	0	0	0.0	0.0
rdf Puno10	PUNO10	0	0	0	0	0	0.0	0.0
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Quen10	QUEN10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Quen33	QUEN33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Quilla10	QUILLA10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Racchi10	RACCHI10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Racchi33	RACCHI33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Repa10	REPA10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Repa23	REPA23	59.8	-1.5	0.15	58.7	0.15	10.0	10.0

Rele	Carga DIG	Etapa4						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Ron1	RON1	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	0	0	0	0	0	0.0	0.0
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	58.7	0.15	0.0	34.2
rdf Smari23	SMARI23	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Snico13	SNICO13	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Socas33	SOCA33	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Sraf460	SRAF460	59.8	-1.5	0.15	58.7	0.15	32.9	32.9
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	0	0	0	0	0	0.0	0.0
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	59.8	-1.1	0.15	58.7	0.15	54.2	11.2
rdf Tacpi10	TACPI10	59.8	-1.5	0.15	58.7	0.15	56.4	56.4
rdf Tapar10	TAPAR10	0	0	0	0	0	0.0	0.0
rdf Tarma10	TARMA10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Tarma23	TARMA23	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rf Tg4_ts	TG4_TS	0	0	0	58.7	0.15	0.0	22.4
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	0	0	0	0	0	0.0	0.0
rdf Tinta10	TINTA10	59.8	-1.5	0.15	58.7	0.15	8.4	8.4
rdf Tmari10	TMARI10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	0	0	0	0	0	0.0	0.0
rdf Uchu33	UCHU33	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Venta10	VENTA10	0	0	0	0	0	0.0	0.0
rdf Villac10	VILLAC10	59.8	-1.1	0.15	58.7	0.15	10.0	10.0
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	0	0	0	0	0	0.0	0.0
rdf Yar10b	YAR10B	0	0	0	0	0	0.0	0.0
rdf Yura10	YURA10	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Yura6	YURA6	59.8	-1.5	0.15	58.7	0.15	10.0	10.0
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa5						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Acer20	ACER20	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Acers10	ACERS10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Agua23	AGUA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Alto60	ALTO60	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Alto10	ALTOL10	59.8	-1.4	0.15	58.6	0.15	2.0	2.0
rdf Anda10	ANDA10	0	0	0	58.6	0.15	0.0	8.0
rdf Anda23	ANDA23	0	0	0	58.6	0.15	0.0	8.0
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	59.8	-1.4	0.15	58.6	0.15	2.3	2.3
rdf Arca33	ARCA33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Ares4	ARES4	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa5						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Auca23	AUCA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Aya10	AYA10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Aya23	AYA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0
rdf Bal10	BAL10	0	0	0	0	0	0.0	0.0
rdf Barr10	BARR10	0	0	0	0	0	0.0	0.0
rf Barsi10	BARS10	0	0	0	0	0	0.0	0.0
rdf Bconc6	BCONC6	59.8	-2.1	0.15	58.6	0.15	40.0	40.0
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Cach23	CACH23	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rf Cajam10	CAJAM10	0	0	0	0	0	0.0	0.0
rdf Callal23	CALLAL23	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Cang23	CANG23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Cant10	CANT10	0	0	0	0	0	0.0	0.0
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Carhua23	CARHUA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rf Carhz13	CARHZ13	0	0	0	0	0	0.0	0.0
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	0	0	0	0	0	0.0	0.0
rdf Cauda23	CAUDA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rf Caudi10	CAUDI10	0	0	0	58.6	0.15	0.0	22.2
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0
rdf Cayll10	CAYLL10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Cerve10	CERVE10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Cfra2	CFRA2	59.8	-1.4	0.15	58.6	0.15	22.5	22.5
rdf Chal10	CHAL10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Chapr2	CHAPR2	59.8	-1.4	0.15	58.6	0.16	62.8	62.8
rf Chava10	CHAVA10	0	0	0	58.6	0.15	0.0	14.1
rdf Chavg3	CHAVG3	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Chicl10	CHICL10	0	0	0	58.6	0.15	0.0	14.7
rdf Chicn10	CHICN10	0	0	0	58.6	0.15	0.0	9.8
rdf Chil10	CHIL10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rf Chin13	CHIN13	0	0	0	58.6	0.15	0.0	21.3
rdf Chinch10	CHINCH10	59.8	-1.4	0.15	58.6	0.15	30.7	30.7
rf Chis13	CHIS13	0	0	0	0	0	0.0	0.0
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	0	0	0	0	0	0.0	0.0
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Conce13	CONCE13	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Cond44	COND44	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Cypru10	CYPRU10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Duvaz50	DUVAZ50	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Huanu10	HUANU10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Huanu23	HUANU23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Huarl10	HUARL10	59.8	-1.4	0.15	0	0	67.5	0.0
rdf Huayu10	HUAYU10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Hveli10	HVELI10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa5						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Inge23	INGE23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Jauja13	JAUA13	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Jesus10	JESUS10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Lima10	LIMA10	0	0	0	0	0	0.0	0.0
rdf Mach10	MACH10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Macha23	MACHA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Majes10	MAJES10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Mala10	MALA10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Malacas	MALACAS	0	0	0	0	0	0.0	0.0
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	0	0	0	58.6	0.15	0.0	12.6
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	0	0	0	0	0	0.0	0.0
rdf Milpo13	MILPO13	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Miron10	MIRON10	59.8	-1.4	0.15	58.6	0.15	97.7	14.7
rdf Moll33	MOLL33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Moll66	MOLL66	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Moly33	MOLY33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	58.6	0.15	0.0	31.1
rdf Onu50	ONU50	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Oquen10	OQUEN10	0	0	0	58.6	0.15	0.0	34.7
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	0	0	0	58.6	0.15	0.0	8.0
rdf Paca6a	PACA6A	0	0	0	58.6	0.15	0.0	8.0
rdf Paca6b	PACA6B	0	0	0	58.6	0.15	0.0	8.0
rf Pacas10	PACAS10	0	0	0	0	0	0.0	0.0
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	59.8	-1.4	0.15	58.6	0.16	49.2	49.2
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paita60	PAITA60	0	0	0	58.6	0.15	0.0	4.6
rdf Pajue23	PAJUE23	0	0	0	58.6	0.15	0.0	8.0
rf Pall10	PALL10	0	0	0	0	0	0.0	0.0
rdf Pamp33	PAMP33	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Pando10	PANDO10	0	0	0	0	0	0.0	0.0
rdf Parag12	PARAG12	0	0	0	0	0	0.0	0.0
rdf Pedre10	PEDRE10	0	0	0	0	0	0.0	0.0
rdf Persh10	PERSH10	0	0	0	0	0	0.0	0.0
rdf Pindu10	PINDU10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Piura10	PIURA10	0	0	0	58.6	0.15	0.0	12.9
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	0	0	0.0	0.0
rdf Pqib10	PQIB10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Pqind10	PQIND10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Prim10	PRIM10	59.8	-1.4	0.15	58.6	0.15	50.8	50.8
rdf Pucal10	PUCAL10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Puen10	PUEN10	59.8	-1.4	0.15	58.6	0.15	51.3	51.3
rdf Puno10	PUNO10	0	0	0	0	0	0.0	0.0
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Quen10	QUEN10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0

Rele	Carga DIG	Etapa5						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Quen33	QUEN33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Quilla10	QUILLA10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Racchi10	RACCHI10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Racchi33	RACCHI33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Repa10	REPA10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Repa23	REPA23	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Ron1	RON1	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	0	0	0	0	0	0.0	0.0
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	58.6	0.15	0.0	4.4
rdf Smari23	SMARI23	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Snico13	SNICO13	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Soca33	SOCA33	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Sraf460	SRAF460	59.8	-2.1	0.15	58.6	0.15	20.9	20.9
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	0	0	0	58.6	0.15	0.0	35.2
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	59.8	-2.1	0.15	58.6	0.15	83.9	83.9
rdf Tacn10	TACN10	0	0	0	0	0	0.0	0.0
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	59.8	-2.1	0.15	58.6	0.15	19.7	19.7
rdf Tarma10	TARMA10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Tarma23	TARMA23	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rf Tg4_ts	TG4_TS	0	0	0	58.6	0.15	0.0	25.8
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	59.8	-2.1	0.15	58.6	0.15	43.8	43.8
rdf Tinta10	TINTA10	0	0	0	0	0	0.0	0.0
rdf Tmari10	TMARI10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	0	0	0	58.6	0.15	0.0	29.4
rdf Uchu33	UCHU33	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Venta10	VENTA10	0	0	0	58.6	0.15	0.0	32.6
rdf Villac10	VILLAC10	59.8	-1.4	0.15	58.6	0.15	8.0	8.0
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	0	0	0	0	0	0.0	0.0
rdf Yar10b	YAR10B	0	0	0	0	0	0.0	0.0
rdf Yura10	YURA10	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Yura6	YURA6	59.8	-2.1	0.15	58.6	0.15	8.0	8.0
rdf Zapall10	ZAPALL10	59.8	-1.4	0.15	58.6	0.15	100.0	92.5
rdf Zaru10	ZARU10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa6						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	0	0	0	58.5	0.15	0.0	5.5
rdf Acer20	ACER20	0	0	0	58.5	0.15	0.0	5.5
rdf Acers10	ACERS10	0	0	0	58.5	0.15	0.0	5.5
rdf Agua23	AGUA23	0	0	0	58.5	0.15	0.0	5.5
rdf Alto60	ALTO60	0	0	0	58.5	0.15	0.0	5.5
rdf Alto10	ALTOL10	0	0	0	58.5	0.15	0.0	1.4
rdf Anda10	ANDA10	0	0	0	58.5	0.15	0.0	5.5
rdf Anda23	ANDA23	0	0	0	58.5	0.15	0.0	5.5
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa6						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	0	0	0	58.5	0.15	0.0	63.2
rdf Arca33	ARCA33	0	0	0	58.5	0.15	0.0	5.5
rdf Ares4	ARES4	0	0	0	58.5	0.15	0.0	5.5
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0
rdf Auca23	AUCA23	0	0	0	58.5	0.15	0.0	5.5
rdf Aya10	AYA10	0	0	0	58.5	0.15	0.0	5.5
rdf Aya23	AYA23	0	0	0	58.5	0.15	0.0	5.5
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0
rdf Bal10	BAL10	0	0	0	0	0	0.0	0.0
rdf Barr10	BARR10	0	0	0	0	0	0.0	0.0
rf Barsi10	BARSI10	0	0	0	58.5	0.15	0.0	26.3
rdf Bconc6	BCONC6	0	0	0	58.5	0.15	0.0	19.3
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	0	0	0	58.5	0.15	0.0	5.5
rdf Cach23	CACH23	0	0	0	58.5	0.15	0.0	5.5
rf Cajam10	CAJAM10	0	0	0	0	0	0.0	0.0
rdf Callal23	CALLAL23	0	0	0	58.5	0.15	0.0	5.5
rdf Cang23	CANG23	0	0	0	58.5	0.15	0.0	5.5
rdf Cant10	CANT10	0	0	0	0	0	0.0	0.0
rf Carh23	CARH23	0	0	0	58.5	0.15	0.0	97.5
rdf Carhua13	CARHUA13	0	0	0	58.5	0.15	0.0	5.5
rdf Carhua23	CARHUA23	0	0	0	58.5	0.15	0.0	5.5
rf Carhz13	CARHZ13	0	0	0	0	0	0.0	0.0
rf Carme10	CARME10	0	0	0	58.5	0.15	0.0	98.0
rdf Casti10	CASTI10	0	0	0	0	0	0.0	0.0
rdf Cauda23	CAUDA23	0	0	0	58.5	0.15	0.0	5.5
rf Caudi10	CAUDI10	0	0	0	0	0	0.0	0.0
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0
rdf Cayll10	CAYLL10	0	0	0	58.5	0.15	0.0	5.5
rdf Cerve10	CERVE10	0	0	0	58.5	0.15	0.0	5.5
rdf Cfra2	CFRA2	0	0	0	58.5	0.15	0.0	10.6
rdf Chal10	CHAL10	0	0	0	58.5	0.15	0.0	5.5
rdf Chapr2	CHAPR2	0	0	0	0	0	0.0	0.0
rf Chava10	CHAVA10	0	0	0	58.5	0.15	0.0	11.5
rdf Chavg3	CHAVG3	0	0	0	58.5	0.15	0.0	5.5
rdf Chicl10	CHICL10	0	0	0	0	0	0.0	0.0
rdf Chicn10	CHICN10	0	0	0	0	0	0.0	0.0
rdf Chil10	CHIL10	0	0	0	58.5	0.15	0.0	5.5
rf Chin13	CHIN13	0	0	0	0	0	0.0	0.0
rdf Chinch10	CHINCH10	0	0	0	58.5	0.15	0.0	40.3
rf Chis13	CHIS13	0	0	0	58.5	0.15	0.0	11.3
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	0	0	0	0	0	0.0	0.0
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	0	0	0	58.5	0.15	0.0	5.5
rdf Conce13	CONCE13	0	0	0	58.5	0.15	0.0	5.5
rdf Cond44	COND44	0	0	0	58.5	0.15	0.0	5.5
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	0	0	0	58.5	0.15	0.0	5.5
rdf Cypru10	CYPRU10	0	0	0	58.5	0.15	0.0	5.5
rdf Duvaz50	DUVAZ50	0	0	0	58.5	0.15	0.0	5.5
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	0	0	0.0	0.0
rdf Huant10	HUANT10	0	0	0	58.5	0.15	0.0	5.5
rdf Huanu10	HUANU10	0	0	0	58.5	0.15	0.0	5.5
rdf Huanu23	HUANU23	0	0	0	58.5	0.15	0.0	5.5
rdf Huarl10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	0	0	0	58.5	0.15	0.0	5.5
rdf Hveli10	HVELI10	0	0	0	58.5	0.15	0.0	5.5

Rele	Carga DIG	Etapa6						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rf Ica10	ICA10	0	0	0	0	0	0.0	0.0
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	58.5	0.15	0.0	14.4
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0
rdf Inge23	INGE23	0	0	0	58.5	0.15	0.0	5.5
rdf Jauja13	JAUJA13	0	0	0	58.5	0.15	0.0	5.5
rdf Jesus10	JESUS10	0	0	0	58.5	0.15	0.0	5.5
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	0	0	0	58.5	0.15	0.0	5.5
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	0	0	0	58.5	0.15	0.0	5.5
rdf Lima10	LIMA10	0	0	0	0	0	0.0	0.0
rdf Mach10	MACH10	0	0	0	58.5	0.15	0.0	5.5
rdf Macha23	MACHA23	0	0	0	58.5	0.15	0.0	5.5
rdf Majes10	MAJES10	0	0	0	58.5	0.15	0.0	5.5
rdf Mala10	MALA10	0	0	0	58.5	0.15	0.0	5.5
rdf Malacas	MALACAS	0	0	0	0	0	0.0	0.0
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	0	0	0	0	0	0.0	0.0
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	0	0	0	0	0	0.0	0.0
rdf Milpo13	MILPO13	0	0	0	58.5	0.15	0.0	5.5
rdf Miron10	MIRON10	0	0	0	58.5	0.15	0.0	9.9
rdf Moll33	MOLL33	0	0	0	58.5	0.15	0.0	5.5
rdf Moll66	MOLL66	0	0	0	58.5	0.15	0.0	5.5
rdf Moly33	MOLY33	0	0	0	58.5	0.15	0.0	5.5
rdf Moq10	MOQ10	0	0	0	0	0	0.0	0.0
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	58.5	0.15	0.0	22.1
rdf Onu50	ONU50	0	0	0	58.5	0.15	0.0	5.5
rdf Oquen10	OQUEN10	0	0	0	58.5	0.15	0.0	5.0
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	0	0	0	58.5	0.15	0.0	5.5
rdf Paca6a	PACA6A	0	0	0	58.5	0.15	0.0	5.5
rdf Paca6b	PACA6B	0	0	0	58.5	0.15	0.0	5.5
rf Pacas10	PACAS10	0	0	0	0	0	0.0	0.0
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	0	0	0	58.5	0.16	0.0	26.9
rf Pacif10	PACIF10	0	0	0	0	0	0.0	0.0
rdf Paita60	PAITA60	0	0	0	0	0	0.0	0.0
rdf Pajue23	PAJUE23	0	0	0	58.5	0.15	0.0	5.5
rf Pall10	PALL10	0	0	0	0	0	0.0	0.0
rdf Pamp33	PAMP33	0	0	0	58.5	0.15	0.0	5.5
rdf Pando10	PANDO10	0	0	0	58.5	0.15	0.0	20.3
rdf Parag12	PARAG12	0	0	0	0	0	0.0	0.0
rdf Pedre10	PEDRE10	0	0	0	0	0	0.0	0.0
rdf Persh10	PERSH10	0	0	0	0	0	0.0	0.0
rdf Pindu10	PINDU10	0	0	0	58.5	0.15	0.0	5.5
rdf Piura10	PIURA10	0	0	0	0	0	0.0	0.0
rf Plan10	PLAN10	0	0	0	58.5	0.15	0.0	100.0
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	0	0	0.0	0.0
rdf Pqib10	PQIB10	0	0	0	58.5	0.15	0.0	5.5
rdf Pqind10	PQIND10	0	0	0	58.5	0.15	0.0	5.5
rdf Prim10	PRIM10	0	0	0	58.5	0.15	0.0	12.3
rdf Pucal10	PUCAL10	0	0	0	58.5	0.15	0.0	5.5

Rele	Carga DIG	Etapa6						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Puen10	PUEN10	0	0	0	0	0	0.0	0.0
rdf Puno10	PUNO10	0	0	0	58.5	0.15	0.0	28.1
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	0	0	0	58.5	0.15	0.0	5.5
rdf Quen10	QUEN10	0	0	0	58.5	0.15	0.0	5.5
rdf Quen33	QUEN33	0	0	0	58.5	0.15	0.0	5.5
rdf Quilla10	QUILLA10	0	0	0	58.5	0.15	0.0	5.5
rdf Racchi10	RACCHI10	0	0	0	58.5	0.15	0.0	5.5
rdf Racchi33	RACCHI33	0	0	0	58.5	0.15	0.0	5.5
rdf Repa10	REPA10	0	0	0	58.5	0.15	0.0	5.5
rdf Repa23	REPA23	0	0	0	58.5	0.15	0.0	5.5
rdf Ron1	RON1	0	0	0	58.5	0.15	0.0	5.5
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	0	0	0	58.5	0.15	0.0	5.5
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	0	0	0	0	0	0.0	0.0
rf Shelby	SHELBY	0	0	0	0	0	0.0	0.0
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	0	0	0.0	0.0
rf Smari10	SMARI10	0	0	0	58.5	0.15	0.0	24.2
rdf Smari23	SMARI23	0	0	0	58.5	0.15	0.0	5.5
rdf Snico13	SNICO13	0	0	0	58.5	0.15	0.0	5.5
rdf Soca33	SOCA33	0	0	0	58.5	0.15	0.0	5.5
rdf Sraf460	SRAF460	0	0	0	58.5	0.15	0.0	1.3
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	0	0	0	58.5	0.15	0.0	41.1
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	0	0	0	0	0	0.0	0.0
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	0	0	0	0	0	0.0	0.0
rdf Tarma10	TARMA10	0	0	0	58.5	0.15	0.0	5.5
rdf Tarma23	TARMA23	0	0	0	58.5	0.15	0.0	5.5
rf Tg4_ts	TG4_TS	0	0	0	58.5	0.15	0.0	11.6
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	0	0	0	58.5	0.15	0.0	10.0
rdf Tinta10	TINTA10	0	0	0	0	0	0.0	0.0
rdf Tmari10	TMARI10	0	0	0	58.5	0.15	0.0	5.5
rf Toca23	TOCA23	0	0	0	58.5	0.15	0.0	98.4
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	0	0	0	0	0	0.0	0.0
rdf Uchu33	UCHU33	0	0	0	58.5	0.15	0.0	5.5
rdf Venta10	VENTA10	0	0	0	0	0	0.0	0.0
rdf Villac10	VILLAC10	0	0	0	58.5	0.15	0.0	5.5
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	0	0	0	0	0	0.0	0.0
rdf Yar10b	YAR10B	0	0	0	58.5	0.15	0.0	10.0
rdf Yura10	YURA10	0	0	0	58.5	0.15	0.0	5.5
rdf Yura6	YURA6	0	0	0	58.5	0.15	0.0	5.5
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa7						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Aban13	ABAN13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Acer20	ACER20	59.7	99	15	58.4	0.15	2.5	2.5
rdf Acers10	ACERS10	59.7	99	15	58.4	0.15	2.5	2.5

Rele	Carga DIG	Etapa7						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Agua23	AGUA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Alto60	ALTO60	59.7	99	15	58.4	0.15	2.5	2.5
rdf Alto10	ALTOL10	59.7	99	15	58.4	0.15	1.4	72.8
rdf Anda10	ANDA10	0	0	0	58.4	0.15	0.0	2.5
rdf Anda23	ANDA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Antau23	ANTAU23	0	0	0	0	0	0.0	0.0
rdf Antuq2.4	ANTUQ2.4	0	0	0	0	0	0.0	0.0
rdf Antuq50	ANTUQ50	59.7	99	15	58.4	0.15	2.1	0.7
rdf Arca33	ARCA33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Ares4	ARES4	59.7	99	15	58.4	0.15	2.5	2.5
rdf Atac04	ATAC04	0	0	0	0	0	0.0	0.0
rdf Atoc10	ATOC10	0	0	0	0	0	0.0	0.0
rdf Auca23	AUCA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Aya10	AYA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Aya23	AYA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Ayav10	AYAV10	0	0	0	0	0	0.0	0.0
rdf Ayav23	AYAV23	0	0	0	0	0	0.0	0.0
rdf Azang23	AZANG23	0	0	0	0	0	0.0	0.0
rdf Bal10	BAL10	0	0	0	0	0	0.0	0.0
rdf Barr10	BARR10	0	0	0	0	0	0.0	0.0
rf Barsi10	BARSI10	0	0	0	58.4	0.15	0.0	6.4
rdf Bconc6	BCONC6	0	0	0	58.4	0.15	0.0	1.6
rdf Boti13	BOTI13	0	0	0	0	0	0.0	0.0
rdf Cach10	CACH10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cach23	CACH23	59.7	99	15	58.4	0.15	2.5	2.5
rf Cajam10	CAJAM10	0	0	0	0	0	0.0	0.0
rdf Callal23	CALLAL23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cang23	CANG23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cant10	CANT10	0	0	0	0	0	0.0	0.0
rf Carh23	CARH23	0	0	0	0	0	0.0	0.0
rdf Carhua13	CARHUA13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Carhua23	CARHUA23	59.7	99	15	58.4	0.15	2.5	2.5
rf Carhz13	CARHZ13	0	0	0	0	0	0.0	0.0
rf Carme10	CARME10	0	0	0	0	0	0.0	0.0
rdf Casti10	CASTI10	0	0	0	0	0	0.0	0.0
rdf Cauda23	CAUDA23	59.7	99	15	58.4	0.15	2.5	2.5
rf Caudi10	CAUDI10	0	0	0	0	0	0.0	0.0
rdf Cayal23	CAYAL23	0	0	0	0	0	0.0	0.0
rdf Cayll10	CAYLL10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cerve10	CERVE10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cfra2	CFRA2	0	0	0	0	0	0.0	0.0
rdf Chal10	CHAL10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Chapr2	CHAPR2	0	0	0	0	0	0.0	0.0
rf Chava10	CHAVA10	0	0	0	0	0	0.0	0.0
rdf Chavg3	CHAVG3	59.7	99	15	58.4	0.15	2.5	2.5
rdf Chic10	CHICL10	0	0	0	0	0	0.0	0.0
rdf Chicn10	CHICN10	0	0	0	58.4	0.15	0.0	12.7
rdf Chil10	CHIL10	59.7	99	15	58.4	0.15	2.5	2.5
rf Chin13	CHIN13	0	0	0	0	0	0.0	0.0
rdf Chinch10	CHINCH10	0	0	0	0	0	0.0	0.0
rf Chis13	CHIS13	0	0	0	58.4	0.15	0.0	10.3
rdf Chorr10	CHORR10	0	0	0	0	0	0.0	0.0
rdf Cnor4.16	CNOR4.16	0	0	0	0	0	0.0	0.0
rdf Cobri10	COBRI10	0	0	0	0	0	0.0	0.0
rdf Comba24	COMBA24	59.7	99	15	58.4	0.15	2.5	2.5
rdf Conce13	CONCE13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cond44	COND44	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cpied12	CPIED12	0	0	0	0	0	0.0	0.0
rdf Cverd23	CVERD23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Cypru10	CYPRU10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Duvaz50	DUVAZ50	59.7	99	15	58.4	0.15	2.5	2.5
rdf Exc2.4	EXC2.4	0	0	0	0	0	0.0	0.0
rf Hcho10	HCHO10	0	0	0	58.4	0.15	0.0	22.0

Rele	Carga DIG	Etapa7						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rdf Huant10	HUANT10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Huanu10	HUANU10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Huanu23	HUANU23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Huarl10	HUARL10	0	0	0	0	0	0.0	0.0
rdf Huayu10	HUAYU10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Hveli10	HVELI10	59.7	99	15	58.4	0.15	2.5	2.5
rf Ica10	ICA10	0	0	0	58.4	0.15	0.0	38.3
rdf Illimo10	ILLIMO10	0	0	0	0	0	0.0	0.0
rdf Illimo23	ILLIMO23	0	0	0	0	0	0.0	0.0
rf Ilo10	ILO10	0	0	0	0	0	0.0	0.0
rdf Ilotv2	ILOTV2	0	0	0	0	0	0.0	0.0
rdf Infan10	INFAN10	0	0	0	0	0	0.0	0.0
rdf Inge23	INGE23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Jauja13	JAUJA13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Jesus10	JESUS10	59.7	99	15	58.4	0.15	2.5	2.5
rf Jica10	JICA10	0	0	0	0	0	0.0	0.0
rdf Junin	JUNIN	59.7	99	15	58.4	0.15	2.5	2.5
rdf Lafund	LAFUND	0	0	0	0	0	0.0	0.0
rdf Lamba10	LAMBA10	0	0	0	0	0	0.0	0.0
rf Lapa13	LAPA13	0	0	0	0	0	0.0	0.0
rdf Laza10	LAZA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Lima10	LIMA10	0	0	0	0	0	0.0	0.0
rdf Mach10	MACH10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Macha23	MACHA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Majes10	MAJES10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Mala10	MALA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Malacas	MALACAS	0	0	0	0	0	0.0	0.0
rdf Manc10	MANC10	0	0	0	0	0	0.0	0.0
rdf Manc23	MANC23	0	0	0	0	0	0.0	0.0
rdf Maran10	MARAN10	0	0	0	0	0	0.0	0.0
rdf Mayup	MAYUP	0	0	0	0	0	0.0	0.0
rdf Mills14	MILLS14	0	0	0	0	0	0.0	0.0
rdf Milpo13	MILPO13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Miron10	MIRON10	0	0	0	58.4	0.15	0.0	9.5
rdf Moll33	MOLL33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Moll66	MOLL66	59.7	99	15	58.4	0.15	2.5	2.5
rdf Moly33	MOLY33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Moq10	MOQ10	0	0	0	58.4	0.15	0.0	34.7
rdf Motup10	MOTUP10	0	0	0	0	0	0.0	0.0
rdf Mrico10	MRICO10	0	0	0	0	0	0.0	0.0
rdf Mrico23	MRICO23	0	0	0	0	0	0.0	0.0
rf Nara10	NARA10	0	0	0	0	0	0.0	0.0
rdf Onu50	ONU50	59.7	99	15	58.4	0.15	2.5	2.5
rdf Oquen10	OQUEN10	0	0	0	58.4	0.15	0.0	18.5
rdf Oroy50	OROY50	0	0	0	0	0	0.0	0.0
rdf P_exis	P_EXIS	0	0	0	58.4	0.15	0.0	2.5
rdf Paca6a	PACA6A	0	0	0	58.4	0.15	0.0	2.5
rdf Paca6b	PACA6B	0	0	0	58.4	0.15	0.0	2.5
rf Pacas10	PACAS10	0	0	0	0	0	0.0	0.0
rdf Pacha10	PACHA10	0	0	0	0	0	0.0	0.0
rdf Pacha50	PACHA50	0	0	0	0	0	0.0	0.0
rf Pacif10	PACIF10	0	0	0	58.4	0.15	0.0	100.0
rdf Paita60	PAITA60	0	0	0	58.4	0.15	0.0	1.6
rdf Pajue23	PAJUE23	0	0	0	58.4	0.15	0.0	2.5
rf Pall10	PALL10	0	0	0	0	0	0.0	0.0
rdf Pamp33	PAMP33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Pando10	PANDO10	0	0	0	0	0	0.0	0.0
rdf Parag12	PARAG12	0	0	0	0	0	0.0	0.0
rdf Pedre10	PEDRE10	0	0	0	0	0	0.0	0.0
rdf Persh10	PERSH10	0	0	0	0	0	0.0	0.0
rdf Pindu10	PINDU10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Piura10	PIURA10	0	0	0	58.4	0.15	0.0	11.1
rf Plan10	PLAN10	0	0	0	0	0	0.0	0.0

Rele	Carga DIG	Etapa7						
		Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)	Carga Gradiente (%)	Carga Frecuencia (%)
rf Pomal23	POMAL23	0	0	0	0	0	0.0	0.0
rf Porve10	PORVE10	0	0	0	0	0	0.0	0.0
rdf Pqib10	PQIB10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Pqind10	PQIND10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Prim10	PRIM10	0	0	0	58.4	0.15	0.0	18.0
rdf Pucal10	PUCAL10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Puen10	PUEN10	0	0	0	0	0	0.0	0.0
rdf Puno10	PUNO10	0	0	0	58.4	0.15	0.0	13.1
rdf Pushb69	PUSHB69	0	0	0	0	0	0.0	0.0
rdf Pzinc11	PZINC11	0	0	0	0	0	0.0	0.0
rdf Que33pm	QUE33PM	59.7	99	15	58.4	0.15	2.5	2.5
rdf Quen10	QUEN10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Quen33	QUEN33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Quilla10	QUILLA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Racchi10	RACCHI10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Racchi33	RACCHI33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Repa10	REPA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Repa23	REPA23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Ron1	RON1	59.7	99	15	58.4	0.15	2.5	2.5
rdf Sala10	SALA10	0	0	0	0	0	0.0	0.0
rdf Sale10	SALE10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Sbart10	SBART10	0	0	0	0	0	0.0	0.0
rdf Sepo10A	SEPO10A	0	0	0	0	0	0.0	0.0
rf Shelby	SHELBY	0	0	0	58.4	0.15	0.0	96.4
rdf Sjuan10	SJUAN10	0	0	0	0	0	0.0	0.0
rf Smarg10	SMARG10	0	0	0	58.4	0.15	0.0	90.9
rf Smari10	SMARI10	0	0	0	0	0	0.0	0.0
rdf Smari23	SMARI23	59.7	99	15	58.4	0.15	2.5	2.5
rdf Snico13	SNICO13	59.7	99	15	58.4	0.15	2.5	2.5
rdf Soca33	SOCA33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Sraf460	SRAF460	0	0	0	0	0	0.0	0.0
rdf Sros10	SROS10	0	0	0	0	0	0.0	0.0
rdf Sulla10	SULLA10	0	0	0	0	0	0.0	0.0
rdf Tac-1	TAC-1	0	0	0	0	0	0.0	0.0
rdf Tac-3	TAC-3	0	0	0	0	0	0.0	0.0
rdf Tacn10	TACN10	0	0	0	0	0	0.0	0.0
rdf Tacpi10	TACPI10	0	0	0	0	0	0.0	0.0
rdf Tapar10	TAPAR10	0	0	0	0	0	0.0	0.0
rdf Tarma10	TARMA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Tarma23	TARMA23	59.7	99	15	58.4	0.15	2.5	2.5
rf Tg4_ts	TG4_TS	0	0	0	0	0	0.0	0.0
rf Ticap13	TICAP13	0	0	0	0	0	0.0	0.0
rdf Tint416	TINT416	0	0	0	58.4	0.15	0.0	15.6
rdf Tinta10	TINTA10	0	0	0	0	0	0.0	0.0
rdf Tmari10	TMARI10	59.7	99	15	58.4	0.15	2.5	2.5
rf Toca23	TOCA23	0	0	0	0	0	0.0	0.0
rdf Tuman23	TUMAN23	0	0	0	0	0	0.0	0.0
rdf Tvalle10	TVALLE10	0	0	0	0	0	0.0	0.0
rdf Uchu33	UCHU33	59.7	99	15	58.4	0.15	2.5	2.5
rdf Venta10	VENTA10	0	0	0	0	0	0.0	0.0
rdf Villac10	VILLAC10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Vmar10	VMAR10	0	0	0	0	0	0.0	0.0
rdf Vsalv10	VSALV10	0	0	0	0	0	0.0	0.0
rdf Yar10a	YAR10A	0	0	0	0	0	0.0	0.0
rdf Yar10b	YAR10B	0	0	0	0	0	0.0	0.0
rdf Yura10	YURA10	59.7	99	15	58.4	0.15	2.5	2.5
rdf Yura6	YURA6	59.7	99	15	58.4	0.15	2.5	2.5
rdf Zapall10	ZAPALL10	0	0	0	0	0	0.0	0.0
rdf Zaru10	ZARU10	0	0	0	0	0	0.0	0.0

## 11.3. RELÉS DE DESCONEXION DE EQUIPOS POR BAJA FRECUENCIA Y/O GRADIENTE

Tabla A11.2 Relés de baja frecuencia y gradiente para desconexión de condensadores.

Rele	Condensador DIG	Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)
rdf_Cp aren13.8	Cp aren13.8	59.8	-1.8	0.15	58.8	0.4
rdf_Cp bal10	Cp bal10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp barr10	Cp barr10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp Caja60	Cp Caja60	59.8	-0.65	0.15	58.7	0.15
rdf_Cp cant10	Cp cant10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp cas50	Cp cas50	59.8	-0.65	0.15	58.7	0.15
rdf_Cp chiclan1	Cp chiclan1	59.8	-1.8	0.15	58.8	0.4
rdf_Cp chimbo11	Cp chimbo11	59.8	-1.8	0.15	58.8	0.4
rdf_Cp chorr10	Cp chorr10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp doloresp	Cp doloresp	59.8	-1.1	0.15	58.7	0.4
rdf_Cp galvez	Cp galvez	59.8	-0.65	0.15	58.7	0.15
rdf_Cp Huacho 10	Cp Huacho 10	59.8	-1.8	0.15	58.8	0.4
rdf_Cp huanu10	Cp huanu10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp huar10	Cp huar10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp infan10	Cp infan10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp juliaca7	Cp juliaca7	59.8	-1.1	0.15	58.7	0.4
rdf_Cp lima10	Cp lima10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp lixi14	Cp lixi14	59.8	-1.1	0.15	58.7	0.4
rdf_Cp maran10	Cp maran10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp milpo_50	Cp milpo_50	59.8	-0.65	0.15	58.7	0.15
rdf_Cp miron10	Cp miron10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp motup60	Cp motup60	59.8	-1.8	0.15	58.8	0.4
rdf_Cp oquen10	Cp oquen10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp oroyan50	Cp oroyan50	59.8	-0.65	0.15	58.7	0.15
rdf_Cp paca6a	Cp paca6a	59.8	-1.8	0.15	58.8	0.4
rdf_Cp paca6b	Cp paca6b	59.8	-1.8	0.15	58.8	0.4
rdf_Cp pacha50	Cp pacha50	59.8	-0.65	0.15	58.7	0.15
rdf_Cp paita10	Cp paita10	59.8	-1.8	0.15	58.8	0.4
rdf_Cp pando10	Cp pando10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp parags50	Cp parags50	59.8	-0.65	0.15	58.7	0.15
rdf_Cp persh10	Cp persh10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp plan10	Cp plan10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp prim10	Cp prim10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp rilo10	Cp rilo10	59.8	-1.1	0.15	58.7	0.4
rdf_Cp sala10	Cp sala10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp sisid10	Cp sisid10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp sjuan	Cp sjuan	59.8	-0.65	0.15	58.7	0.15
rdf_Cp sjuan60_2	Cp sjuan60_2	59.8	-0.65	0.15	58.7	0.15
rdf_Cp sjuan60_3	Cp sjuan60_3	59.8	-0.65	0.15	58.7	0.15
rdf_Cp sros10	Cp sros10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp tacn10	Cp tacn10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp tacna_17	Cp tacna_17	59.8	-1.1	0.15	58.7	0.4
rdf_Cp tmari10	Cp tmari10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp tvalle10	Cp tvalle10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp venta10	Cp venta10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp vmar10	Cp vmar10	59.8	-0.65	0.15	58.7	0.15
rdf_Cp yar10a	Cp yar10a	59.8	-1.1	0.15	58.7	0.4
rdf_Cp yar10b	Cp yar10b	59.8	-1.1	0.15	58.7	0.4
rdf_Cp yura6	Cp yura6	59.8	-1.1	0.15	58.7	0.4
rdf_Cp zapall10	Cp zapall10	59.8	-0.65	0.15	58.7	0.15

**Tabla A11.3 Relés de baja frecuencia y gradiente para desconexión de líneas.**

Relé	Línea	Umbral Gradiente (Hz)	Gradiente (Hz/Seg)	Retardo Gradiente (Seg)	Umbral Frecuencia (Hz)	Retardo Frecuencia (Seg)
rdf_lne MOQ_SOC_22	Moquegua - Socabaya 2	59.8	-1.5	0.4	58.5	0.15
rdf_lne MOQ_ILO_22	Moquegua - Ilo 2	59.8	-1.5	0.4	58.5	0.15
rdf_lne COT_SOC_22	Cotaruse - Socabaya 2	59.8	-1.5	0.4	58.5	0.15
rdf_lne ZOR-MCH-21	Zorritos - Machala	59.8	-1.1	0.15	59	0.15
rdf_lne PUN_ILAVE_81	Tototani - Ilave	59.8	-1.5	0.15	58.7	0.15