

Restaurador de Tensão

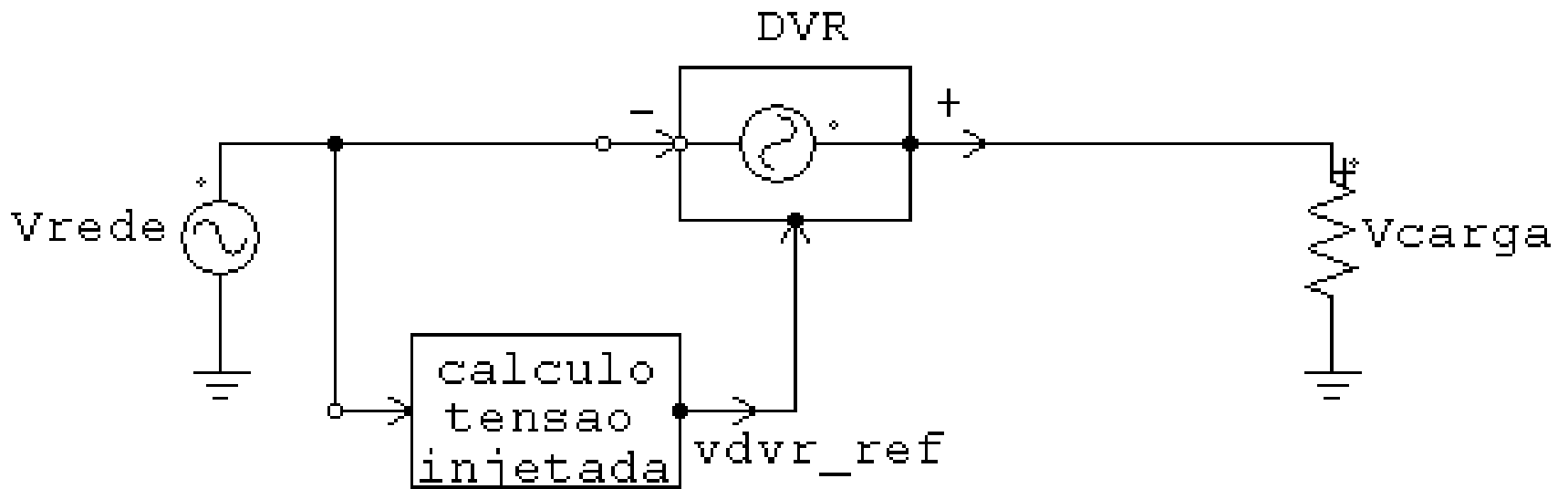


Fig. 1 - Diagrama de blocos simplificado do DVR

Formas de onda da tensão na rede (V_{rede}), tensão injetada pelo dvr (V_{dvr_ref}) e tensão na carga (V_{carga}) durante a ocorrência de afundamento

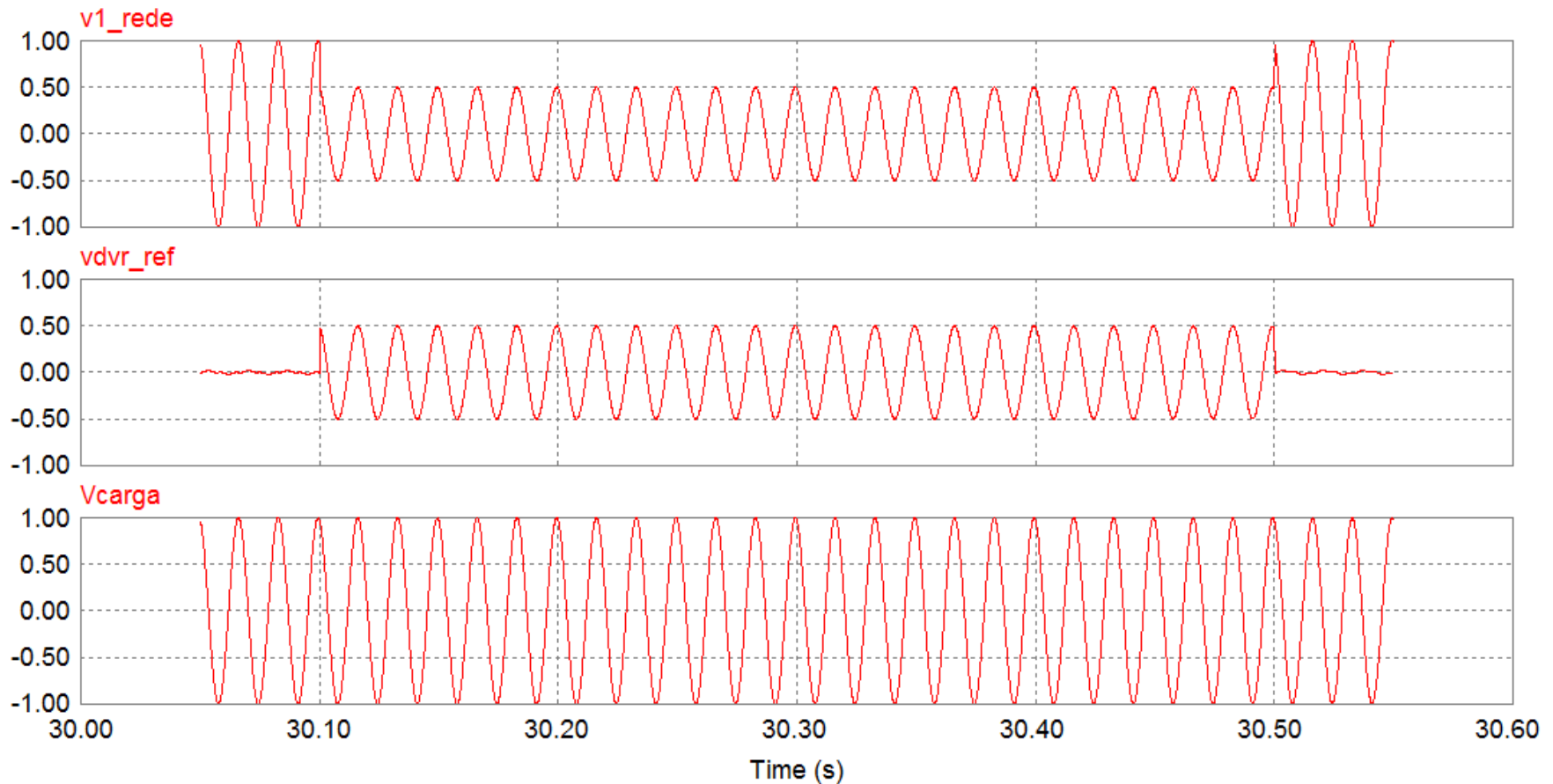
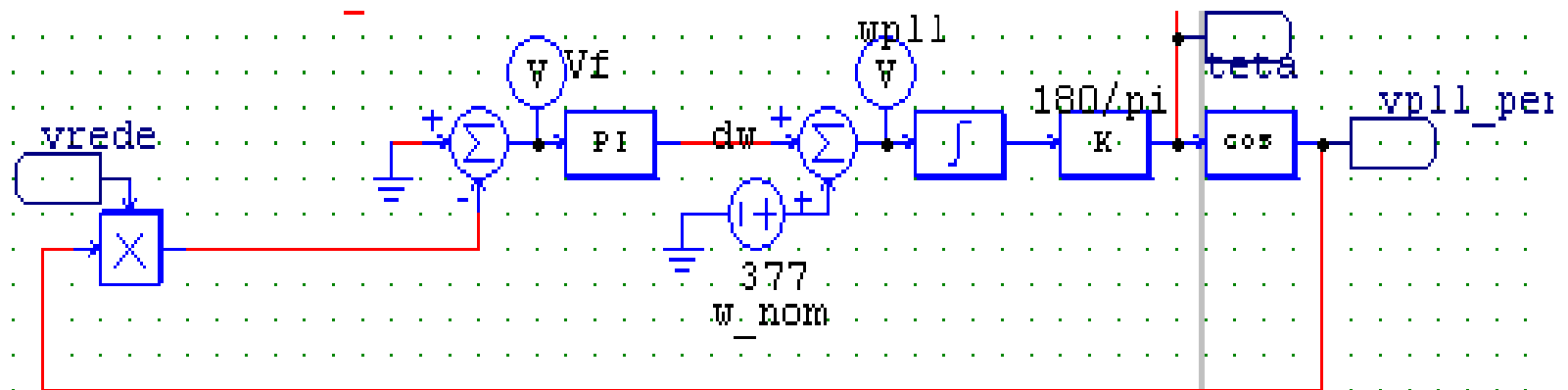


Diagrama de blocos do PLL empregado



detector de fase

controlador

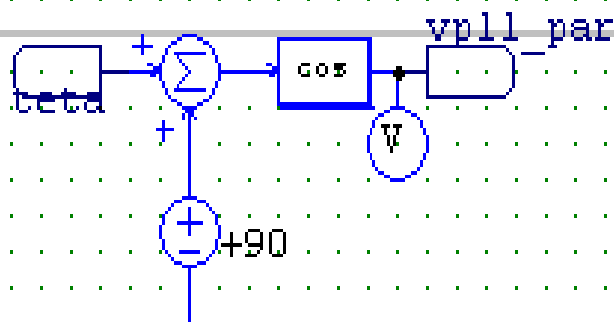
voltage controlled
oscillator (VCO)

impõe $v_f=0$

(gera v_{pll_per}

ortogonal
à fundamental de v_{rede})

gera sinal c amplitude
unitaria de frequencia w_{pll}



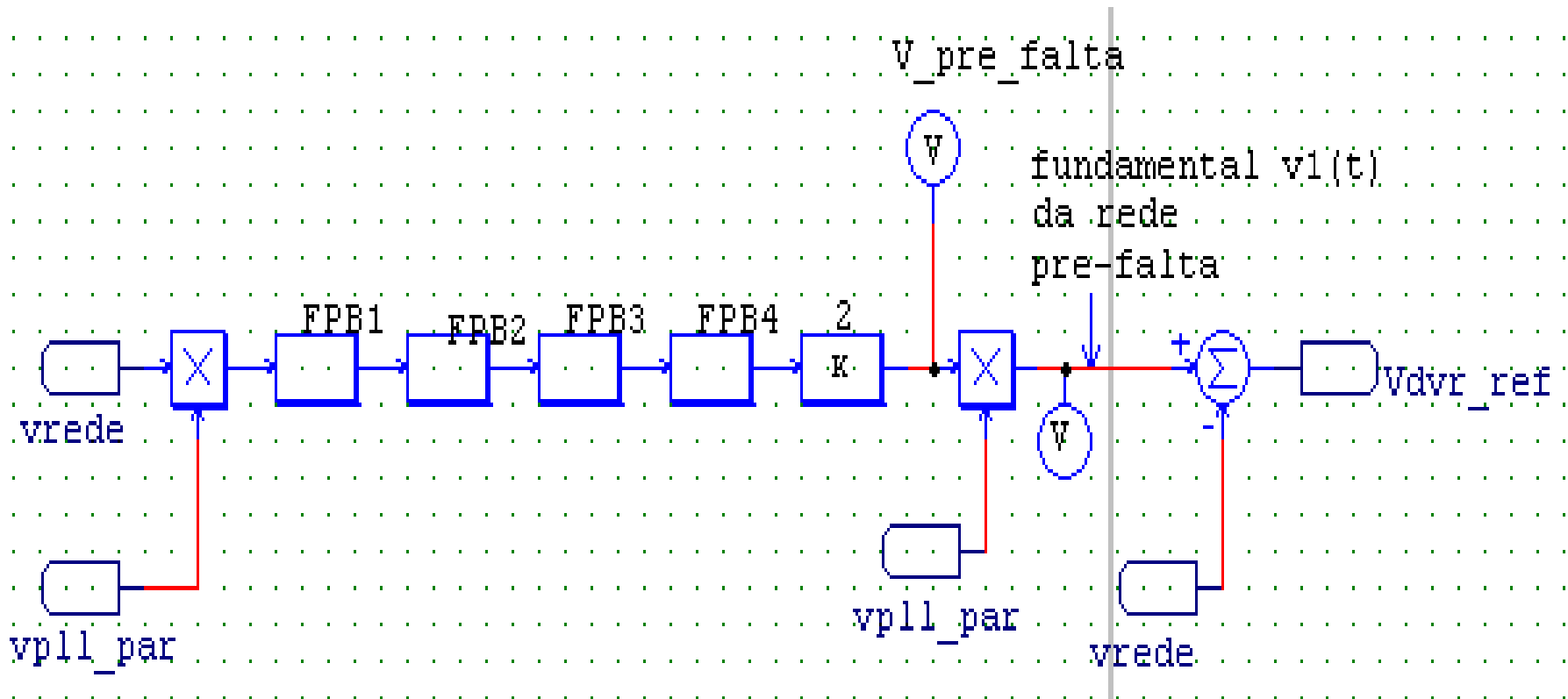
apêndice do PLL

gera sinal c amplitude

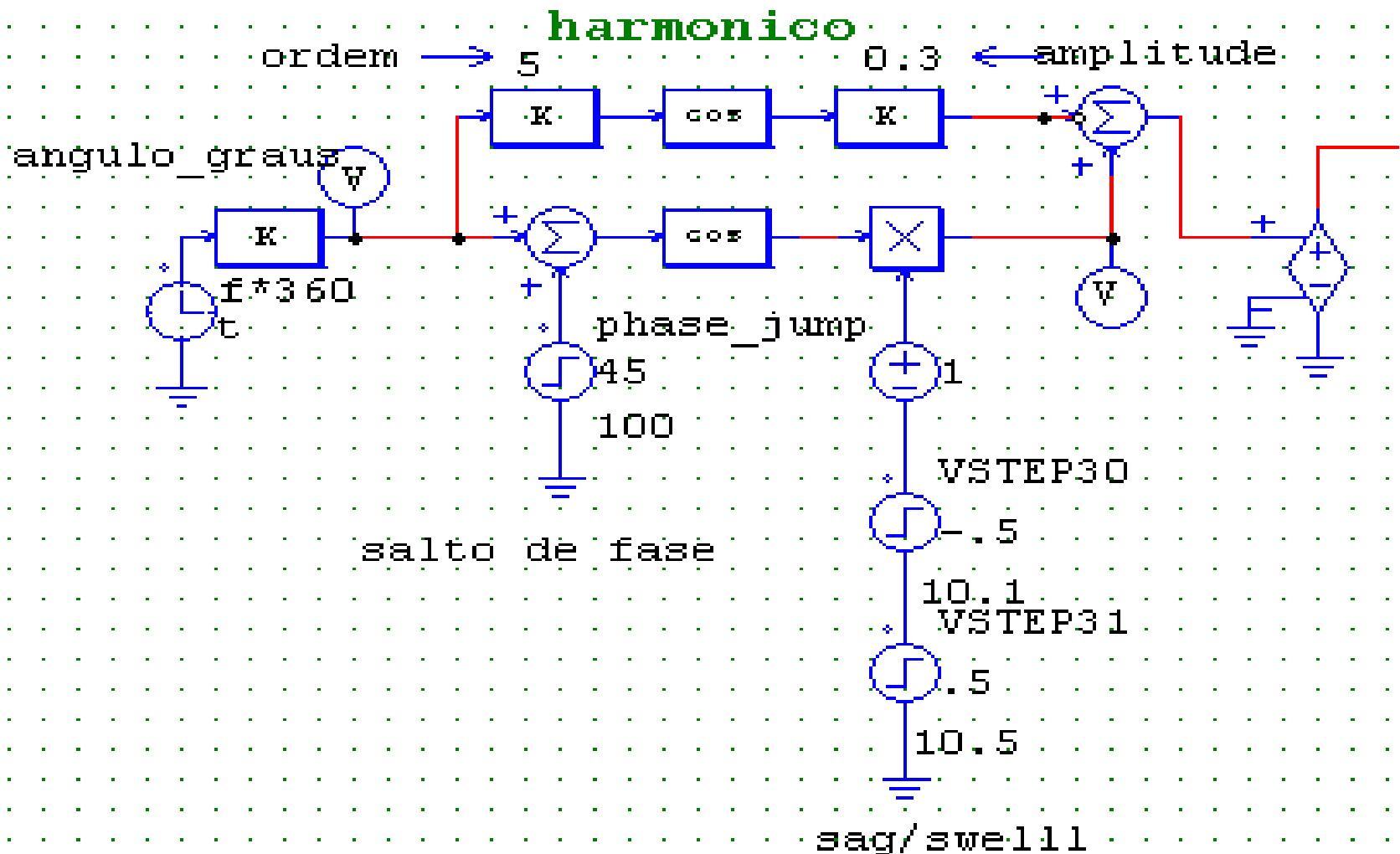
unitaria em fase

com a fundamental de v_{rede}

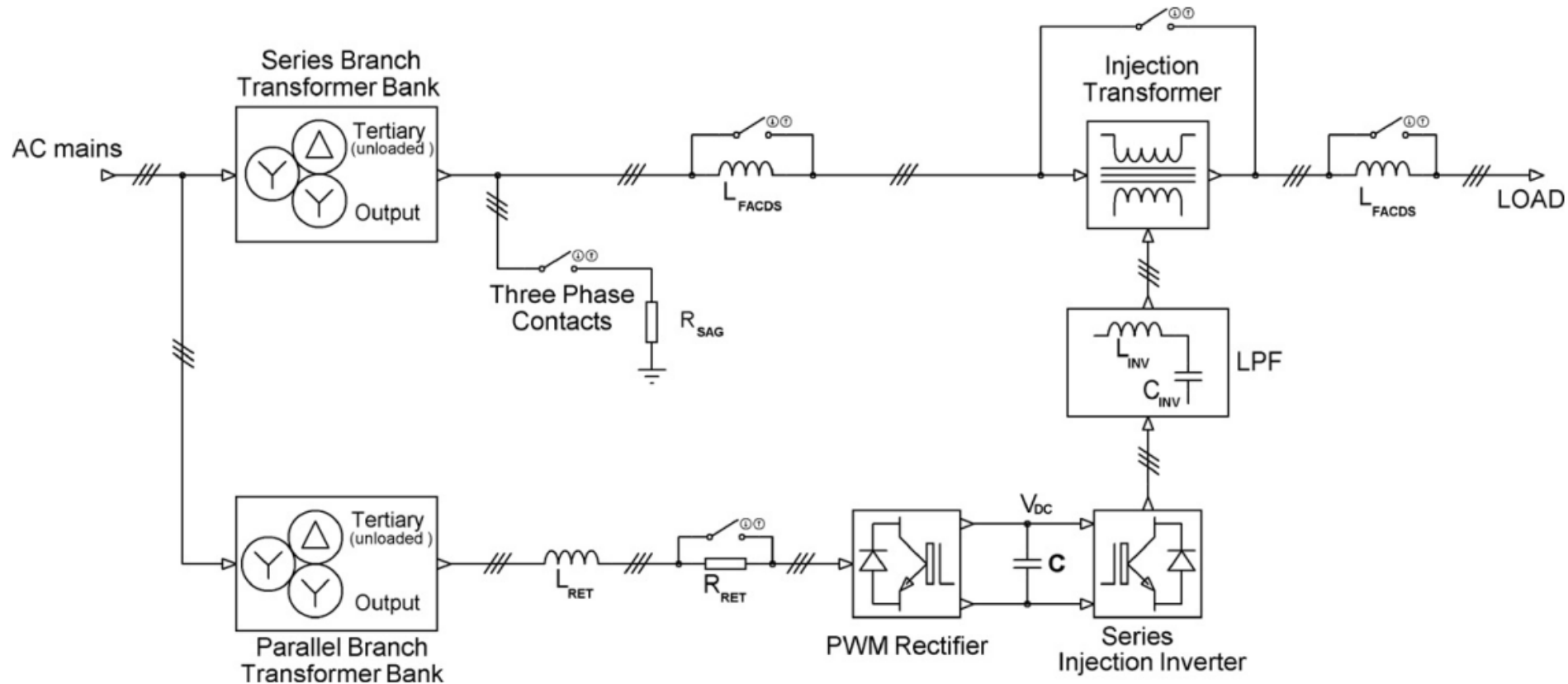
Diagrama de blocos do calculador do sinal de referência do DVR (Vdvr_ref)



Gerador de Vrede



DVR trifásico – diagrama de blocos



Formas de onda experimentais

B. Vairamohan et al. / Electric Power Systems Research 81 (2011) 1215–1226

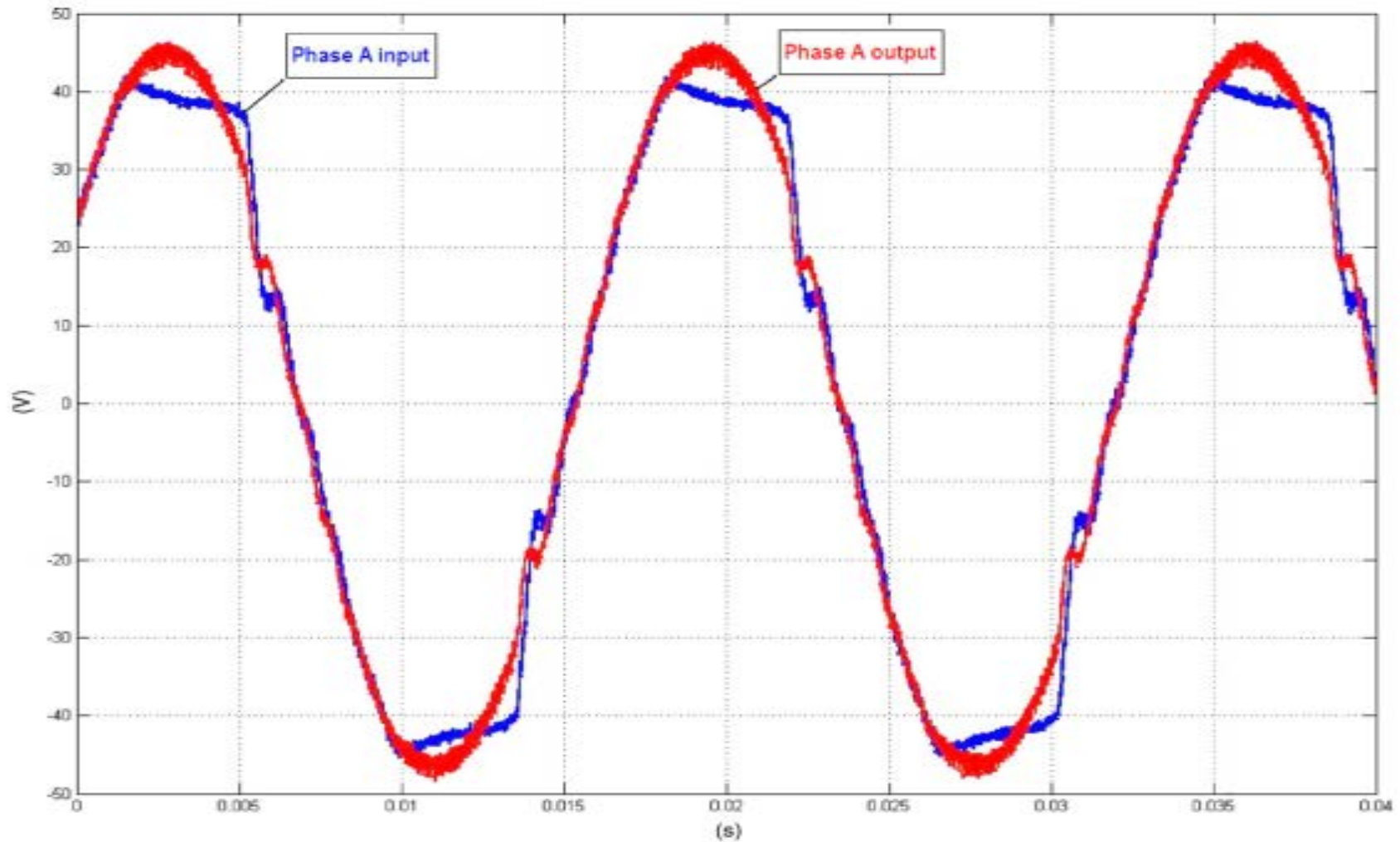


Fig. 3. Voltage harmonics compensation (phase A) on the load. Scales in volts and seconds.

Formas de onda experimentais

B. Vairamohan et al. / Electric Power Systems Research 81 (2011) 1215–1226

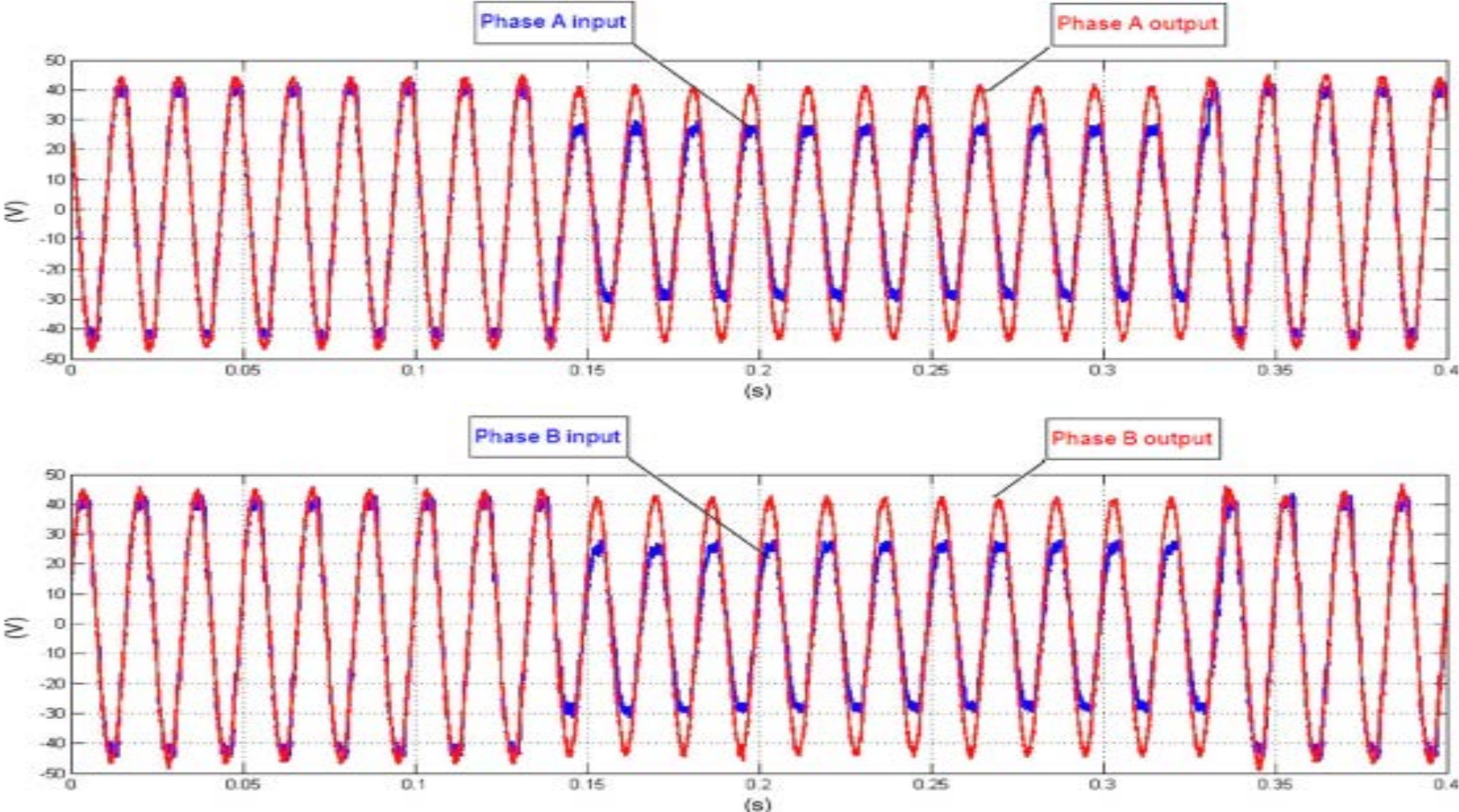


Fig. 4. Three-phase sag to 65% compensation (showing only phases A and B) with resistive load $R = 22 \Omega$. Scales in volts and seconds.