Experimental Study of a Wide-Aperture X-Band Klystron with RF Absorbing Drift Tubes, G.V. DOLBILOV, N.I. AZORSKY, A.A. FATEEV, I.I. GOLUBEV, N.I. LEBEDEV, V.A. PETROV, V.S. SHVETSOV, M.V. YURKOV, JINR (DUBNA), V.E. BALAKIN, S.YU. KAZAKOV, V.E. TERYAEV, V.F. VOGEL, BINP (PROTVINO) - Results of experimental study of a wide-aperture relativistic klystron for VLEPP are presented. The main features of the klystron are: high gain, use of PPM focusing system and high ratio $a/\lambda = 0.7$. Investigations have been performed using the driving beam of the JINR LIA-3000 induction accelerator (E = 1 MeV, I = 250 A, τ = 250 ns). To suppress self excitation parasitic modes we have developed technique of RF absorbing drift tubes. As a result, all parasitic modes of self-excitation have been suppressed and we have obtained designed parameters of the klystron: RF output power 100 MW, power gain 80 dB, efficiency 40%.