Additional Kapton Insulation on DCA310 Non-lead End Insulators

TS-SSC 91-119
S. Delchamps
June 13, 1991

The initial installation of the non-lead end can of DCA310, with no extra kapton insulator added to the standard end inusulation (3 layers of 5 mil kapton), required only 3400 pump psi. DSA324 required 8750 pump psi. The deflections of the DCA310 non-lead end can 0.5" from the collared coil end were -3, +3, +4, +2, and +3 mils for the "horizontal", "vertical", "135", "45", and pi-tape measurements. (Note the *negative* deflection of the can at the horizontal plane.) DSA324, which had 5 mils of kapton insulation added to the standard end insulation, showed +6, +6, +7, +8, and +5 mils for the same measurements. The dimensions of the DCA310 and DSA324 end insulators are very similar.

The higher pump psi for installation of the DSA324 non-lead end can and the positive and larger deflections of the can at all points of measurement are both indicative of higher pre-load in DSA324. (We do expect the DCA310 can to slide on somewhat more easily than the DSA324 can, since the DCA310 can has a much finer interior polish.)

The DCA310 non-lead end clamp will be re-installed, with 5 mils of kapton taped to the inner surfaces of each of the four G10CR insulators. This should bring about similar end can deflections to DSA324, and the pump psi required for installation will help us set a new lower limit for this quantity.

Distribution: R. Bossert, J. Carson, W Koska, G. Pewitt, J. Strait, M. Wake