DCA313 Return End
Extra Kapton

TS-SSC 91-154
S. Delchamps
August 6, 1991

At positions .25", 1.0", 2.0", and 3.0" measured from the end of the collar laminations, the interior diameter of the collet insulators[1] for the return end of DCA313 is significantly smaller than for magnets DCA310 - 312. The table below shows the diameters in mils measured between quadrants pairs I - III and II - IV, the nominal dimension 3948 mils having been subtracted. (Magnet 311 shows abnormally small dimensions for the II - IV measurement.)

Magnet Name	DCA310		DCA311		DCA312		DCA313	
	I-III	II-IV	I-III	II-IV	I-III	II-IV	I-III	II-IV
0.25	0	-2	0	-9	-2	-3	-5	-10
1.0	-4	-5	-4	-8	+2	+1	-10	-12
2.0	-2	-1	-2	-8	+2	+1	-7	-9
3.0	-1	+2	-1	-5	+1	+2	-5	-6
4.0	+4	+6	+2	-3	+1	+3	-4	-4
5.0	+4	+6	+3	-2	+2	+3	-3	-2
6.0	+5	+8	-12	+1	+2	+3	-2	-1

Table 1. Deviations of the Collet Insulator Inner Diameters from Nominal Diameter 3.948"

Since the measured inner diameter in the coil straight section region is significantly smaller for these insulators, and since the Cordax measurements[2] of these parts show them to be in general much closer to the specified drawing dimensions (see 0102-MB-292085, 292087, 292088, and 292089), I recommend proceeding with an installation using only the nominal kapton insulator layers around the end clamp region.

Distribution:
J. Carson
R. Bossert
S. Gourlay
W. Koska
J. Strait
M. Wake

---

[1]Traveller 0102-ES-298290 Rev. B, step 1.11.
[2]Routing forms no. 44288, 44289, 44286, 44287.