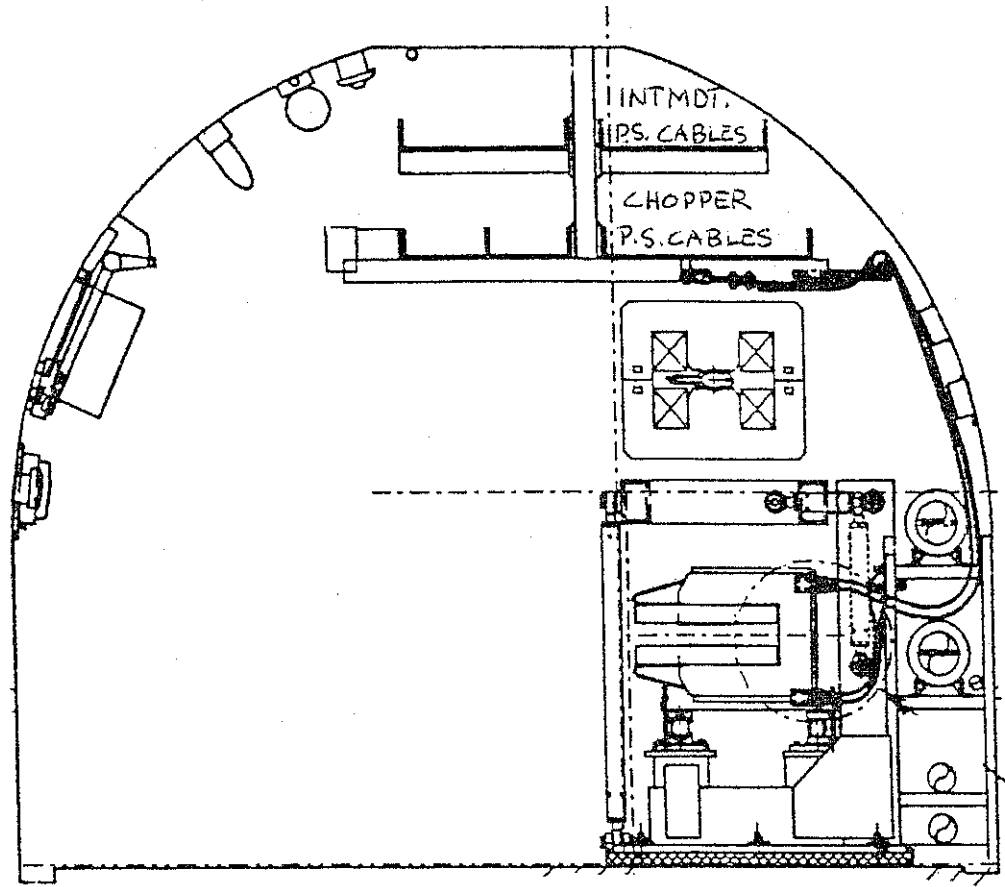
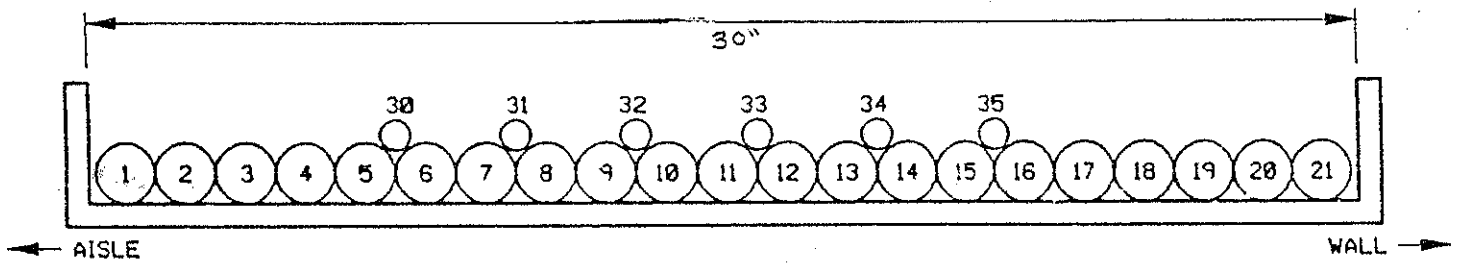


HER & LER Chopper-Powered Magnet Strings

Information about the water-cooled cables and dry cables for those circuits
(Illustrations are from ID-342-725-13)



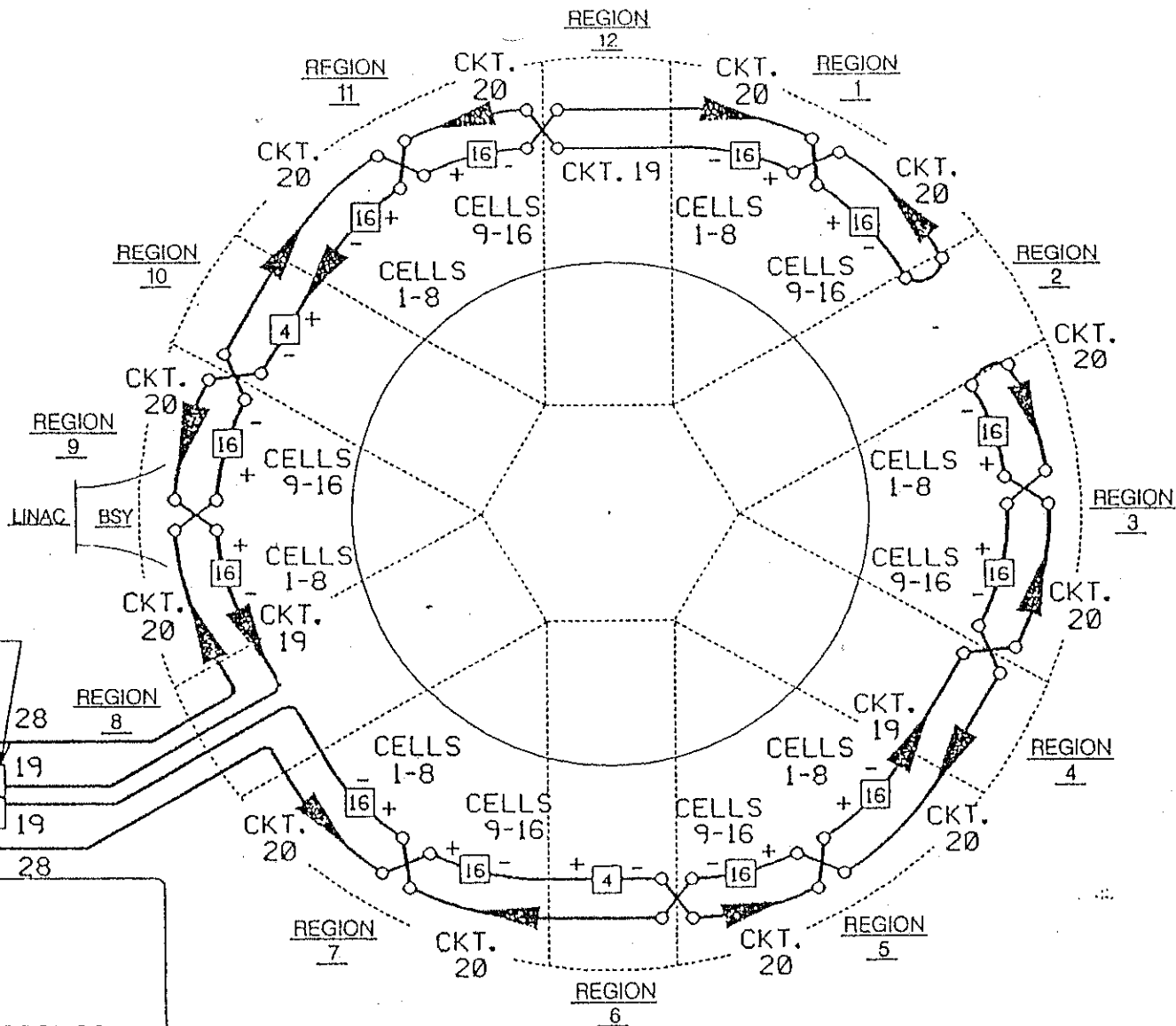
Tunnel Section (Typical for any arc)



BUSES 1 THROUGH 21:
 POSITION AS SHOWN
 INDIVIDUAL AMPACITY = 1KA
 SOLID ALUMINUM, 1" O.D. WITH AN INTERNAL $\frac{3}{8}$ " CONTINUOUS WATER PASSAGE.

BUSES 30 THROUGH 35
 POSITIONED RANDOMLY ON TOP OF THE ALUMINUM BUSES
 INDIVIDUAL AMPACITY = 300 AMPS
 ALUMINUM MCM 350

Chopper-powered magnet circuit cable tray cross-section & bus configuration



NOTE 2

BLDG 685

4 CHOPPER 1 19

4 CHOPPER 1 19

NORTH B1, B2
RACKS: 08CM62 & 08CM63

SOUTH B1, B2
RACKS: 08CM65 & 08CM66
N & S TRANSDUCTOR,
RACK: 08CM64

2. REFERENCE BEND MAGNETS.

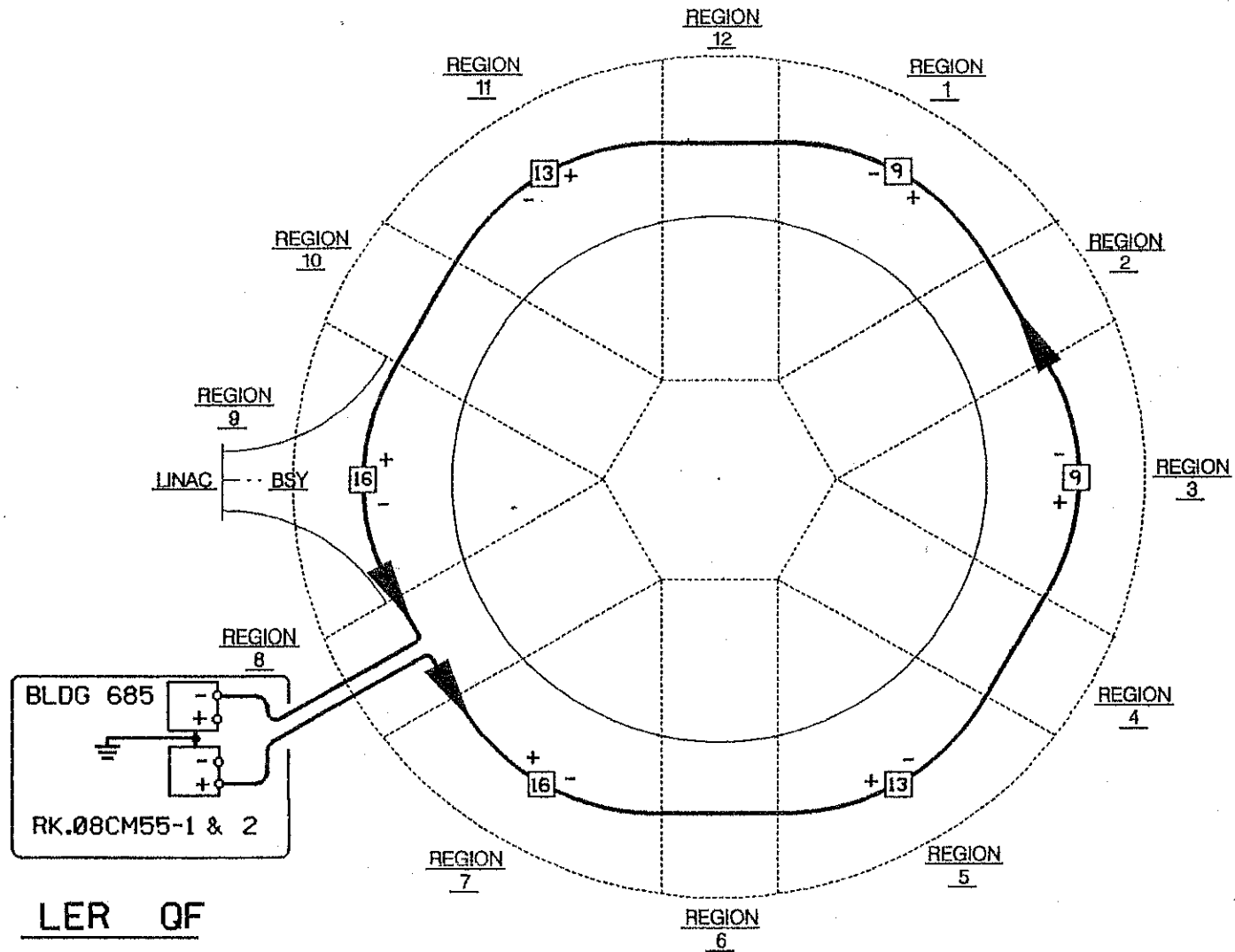
LER B1, B2

WATER-COOLED CABLE
CIRCUITS: 19 & 20
CURRENT 651A
TOTAL * MAGNET { 101 (NORTH LOOP)
101 (SOUTH LOOP)

MAGNET LOCATIONS

REGIONS 1, 3, 5, 7, 9, & 11 CELL 1 THRU CELL 16: ONE B1 MAGNET
ONE B2 MAGNET

REGIONS 6 - 4 MAGNETS
REGION 10 - 4 MAGNETS
BLDG. 685 - 2 REFERENCE BEND MAGNETS:
ONE FOR REGIONS 1, 9 & 11 (NORTH BEND LOOP)
ONE FOR REGIONS 3, 5 & 7 (SOUTH BEND LOOP)



LER QF

WATER-COOLED CABLE

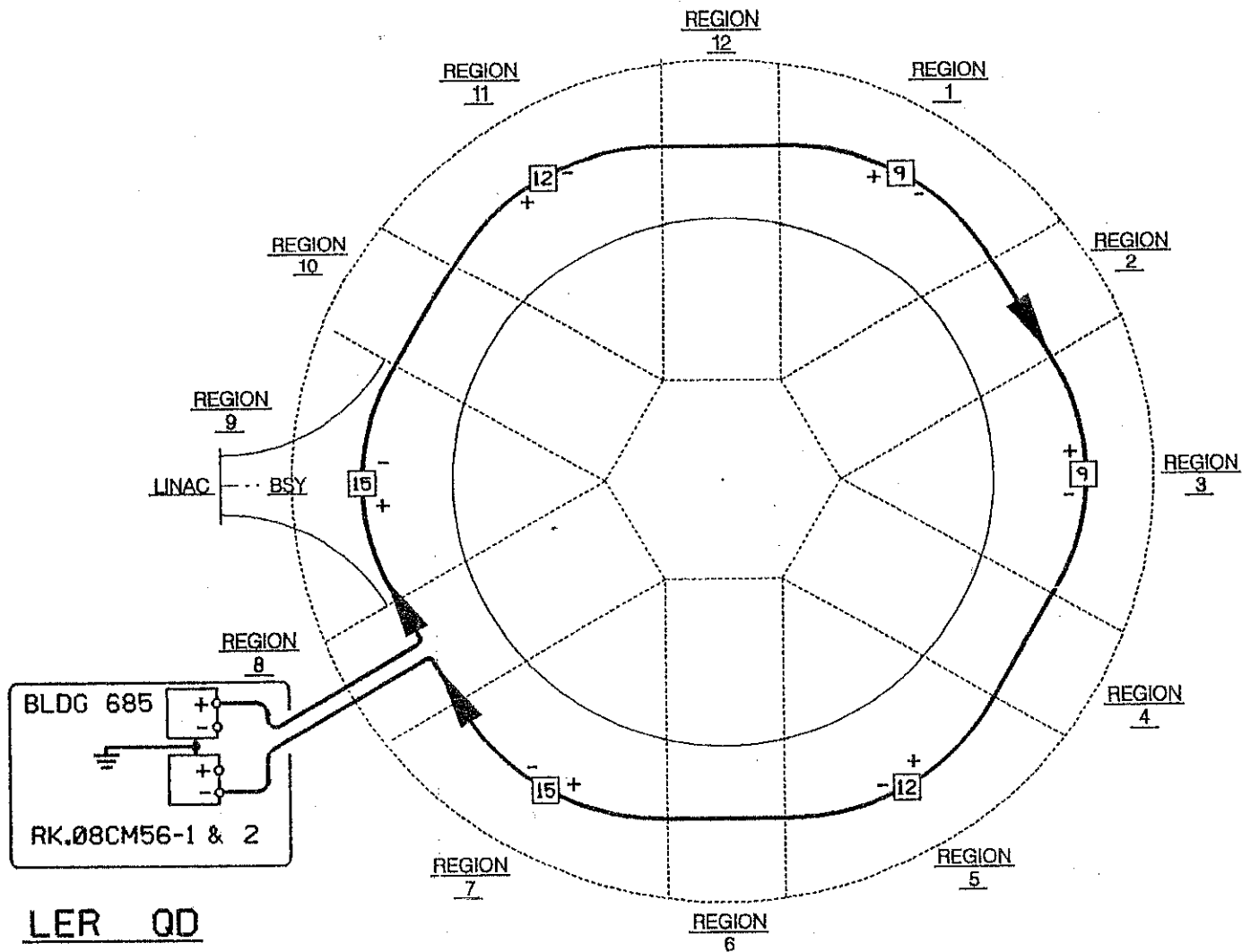
CIRCUIT: *8

CURRENT 341A

TOTAL * MAGNETS: 76

MAGNET LOCATIONS

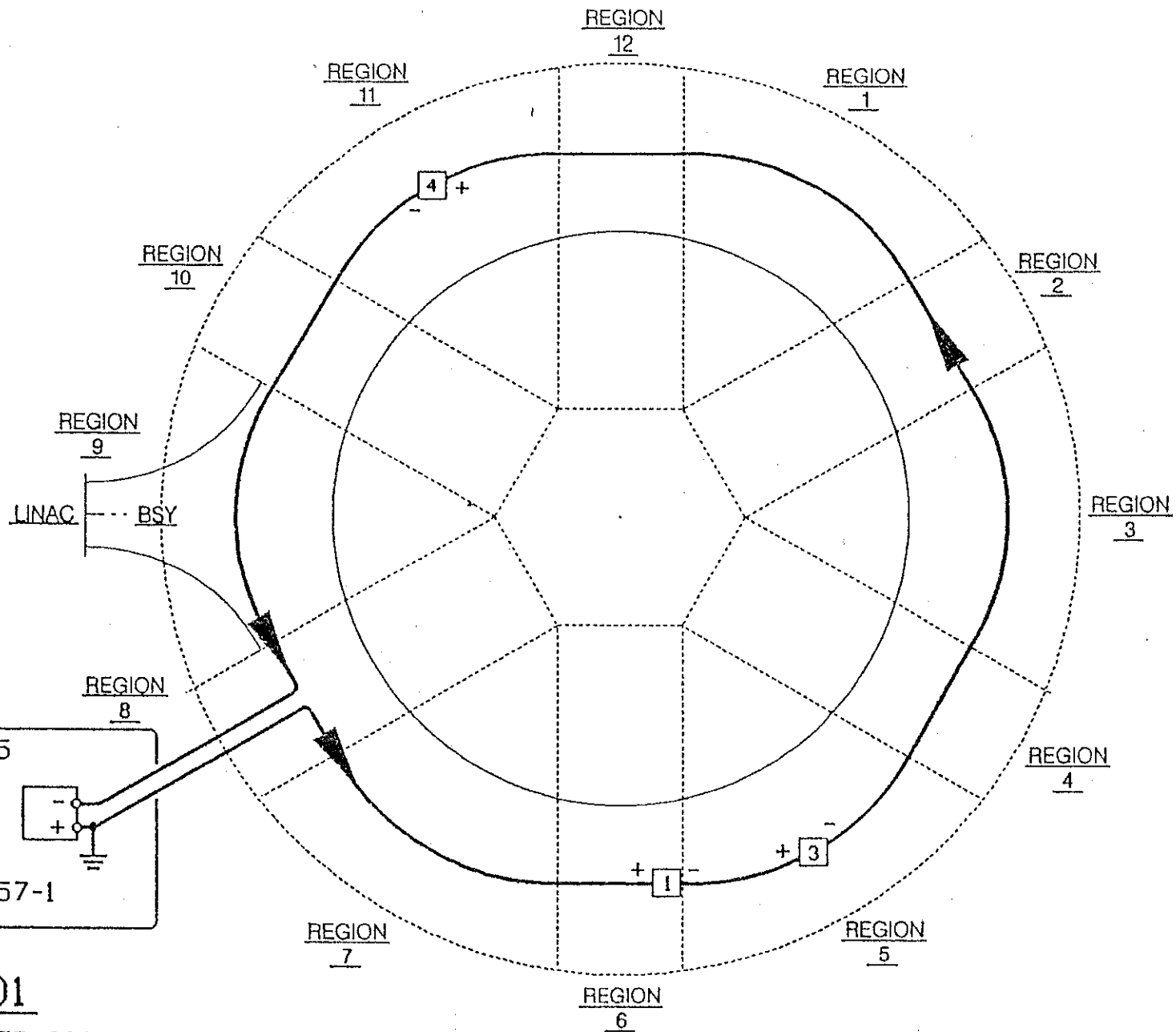
- REGIONS 1 & 3: CELL 4 THRU CELL 13
- REGION 5: CELL 4 THRU CELL 16
- REGIONS 7 & 9: CELL 1 THRU CELL 16
- REGION 11: CELL 1 THRU CELL 13



LER QD
 WATER-COOLED CABLE
 CIRCUIT: *10
 CURRENT 336A
 TOTAL * MAGNETS: 72

MAGNET LOCATIONS

- REGION 1: CELL 5 THRU CELL 14
- REGION 3: CELL 4 THRU CELL 13
- REGION 5: CELL 5 THRU CELL 16
- REGIONS 7&9: CELL 2 THRU CELL 16
- REGION 11: CELL 1 THRU CELL 12



LER SD1

CABLE: WATER-COOLED

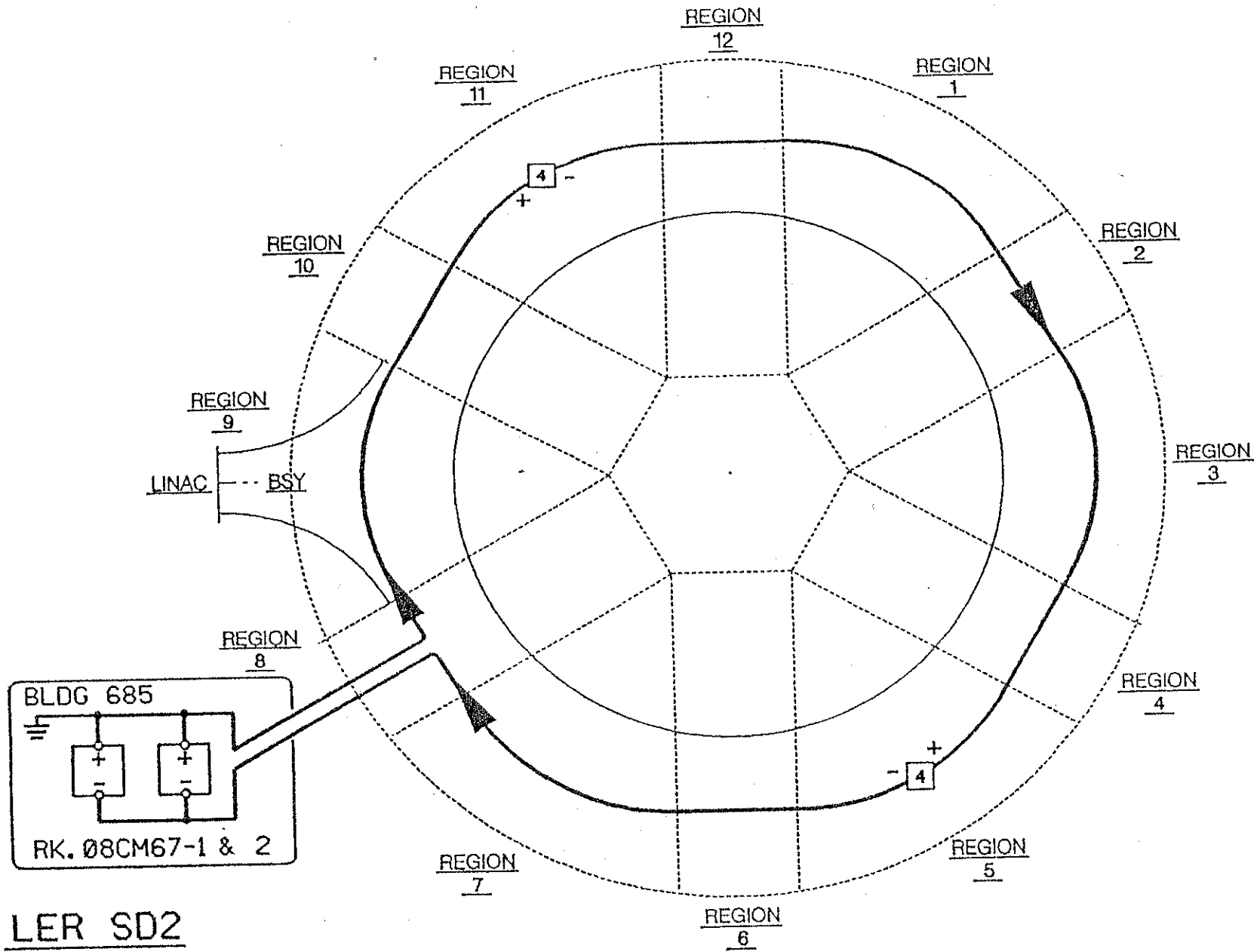
CIRCUIT: *7

CURRENT 282A

TOTAL * MAGNETS: 8

MAGNET LOCATIONS

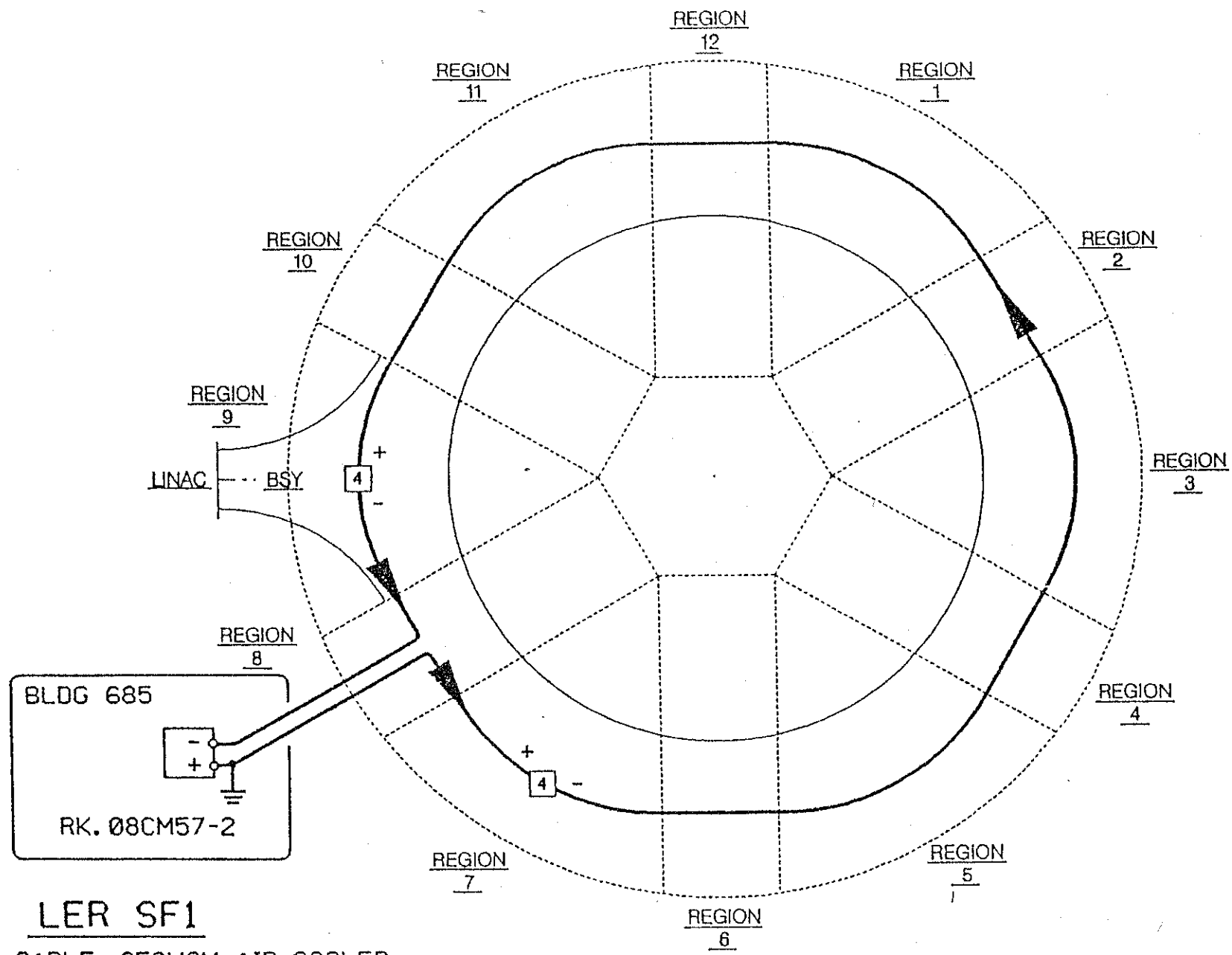
REGION	5 :	CELLS 6, 8 & 15
REGION	6 :	CELL 1
REGION	11 :	CELLS 1, 3, 10 & 12



LER SD2
 CABLE: WATER-COOLED
 CIRCUIT: #21
 CURRENT 408A
 TOTAL * MAGNETS: 8

MAGNET LOCATIONS

- REGION 5 : CELLS 9, 11, 12 & 14
- REGION 11 : CELLS 4, 6, 7 & 9



LER SF1

CABLE: 35ØMCM, AIR-COOLED
 CIRCUIT: *33
 CURRENT 137A
 TOTAL * MAGNETS: 8

MAGNET LOCATIONS

REGIONS 7 : CELLS 2, 4, 11 & 12
 REGION 9 : CELLS 4, 6, 13 & 15