Number of vertices $n = 6$.
Adjacencies of Graph

1. vertex 1 adjacent to 3 4 5 6

2. vertex 2 adjacent to 3 4 5 6

3. vertex 3 adjacent to 1 2 4 5 6

4. vertex 4 adjacent to 1 2 3 5 6

5. vertex 5 adjacent to 1 2 3 4 6

6. vertex 6 adjacent to 1 2 3 4 5

Size of automorphism group of the graph=48
Full group: $|Aut(polytope)| = 1536$
Restricted group: $|Aut(G) \times switch| = 1536$
Number of orbits for the full group : 4
List of orbits of facets for the full group: Total number of orbits $= 4$ Total number of facets $= 224$

1. Inequality 1 with incidence 24 and stabilizer of size 96. Orbit size is 16

(1,3) : 0	(1,4) : 0	(1,5) : 0	(1,6) : 0	(2,3) : 0	(2,4) : 0
(2,5) : 0	(2,6) : 0	(3,4) : 1	(3,5) : -1	(3,6) : 0	(4,5) : 1
(4,6) : 0	(5,6) : 0				

2. Inequality 2 with incidence 24 and stabilizer of size 32. Orbit size is 48

(1,3) : 0	(1,4) : 1	(1,5) : 0	(1,6) : -1	(2,3) : 0	(2,4) : 0
(2,5) : 0	(2,6) : 0	(3,4) : 0	(3,5) : 0	(3,6) : 0	(4,5) : 0
(4,6) : 1	(5,6) : 0				

3. Inequality 3 with incidence 20 and stabilizer of size 48. Orbit size is 32

(1,3) : 0	(1,4) : 0	(1,5) : 0	(1,6) : 0	(2,3) : -1	(2,4) : 1
(2,5) : -1	(2,6) : 1	(3,4) : 1	(3,5) : -1	(3,6) : 1	(4,5) : 1
(4,6) : -1	(5,6) : 1				

4. Inequality 4 with incidence 14 and stabilizer of size 12. Orbit size is 128

(1,3) : 1	(1,4) : -1	(1,5) : -1	(1,6) : 1	(2,3) : -1	(2,4) : 1
(2,5) : 1	(2,6) : 1	(3,4) : 1	(3,5) : 1	(3,6) : 0	(4,5) : -1
(4,6) : 0	(5,6) : 0				