G ≅ SL(2,11), p = 11

Normalizers				N_1										N_2									
				P_1										P_2									
p − subgroups of G up to conjugacy in G	11	11	2	3	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	11	11	2	3	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+1·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+1·χ_13+0·χ_14+0·χ_15	22	−22	−2	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$-E(5)-E(5)^4$	$-E(5)^2-E(5)^3$	0	0	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+1·χ_7+1·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+1·χ_15	22	22	1	−2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	1	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	1	1	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+1·χ_10+0·χ_11+1·χ_12+0·χ_13+0·χ_14+0·χ_15	22	−22	1	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	−1	$-E(5)^2-E(5)^3$	$-E(5)-E(5)^4$	$E(12)^7-E(12)^{11}$	$-E(12)^7+E(12)^{11}$	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+1·χ_2+1·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+1·χ_14+0·χ_15	22	22	−2	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	−2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	2	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+1·χ_4+1·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	22	−22	1	0	2	2	−1	−2	−2	$E(12)^7-E(12)^{11}$	$-E(12)^7+E(12)^{11}$	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+1·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+1·χ_14+0·χ_15	22	22	1	−2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	2	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	1	1	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+1·χ_7+0·χ_8+0·χ_9+0·χ_10+1·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	22	−22	−2	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	2	$-E(5)^2-E(5)^3$	$-E(5)-E(5)^4$	0	0	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+1·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+1·χ_15	22	22	1	2	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	1	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	−1	−1	0	0	0	0	0	0	0	0	0	0	0
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+1·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	22	−22	1	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	−1	$-E(5)-E(5)^4$	$-E(5)^2-E(5)^3$	$-E(12)^7+E(12)^{11}$	$E(12)^7-E(12)^{11}$	0	0	0	0	0	0	0	0	0	0	0
1·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	11	11	−1	−1	1	1	−1	1	1	−1	−1	0	0	0	0	0	0	0	0	0	0	0
1·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	1	1	1	1	1	1	1	1	1	1	1	1	1	$E(5)^3$	$E(5)$	$E(5)^4$	$E(5)^2$	$E(5)^4$	$E(5)^2$	$E(5)^3$	$E(5)$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+1·χ_15	12	12	0	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	0	1	1	$E(5)^2$	$E(5)^4$	$E(5)$	$E(5)^3$	$E(5)$	$E(5)^3$	$E(5)^2$	$E(5)^4$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+1·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	12	−12	0	0	2	2	0	−2	−2	0	0	1	−1	$E(5)^4$	$E(5)^2$	$E(5)$	$E(5)^3$	$-E(5)$	$-E(5)^3$	$-E(5)^2$	$-E(5)^4$
0·χ_1+0·χ_2+0·χ_3+1·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+0·χ_14+0·χ_15	12	−12	0	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$-E(5)^2-E(5)^3$	$-E(5)-E(5)^4$	0	0	1	−1	$E(5)^3$	$E(5)$	$E(5)^4$	$E(5)^2$	$-E(5)^4$	$-E(5)^2$	$-E(5)^3$	$-E(5)$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+1·χ_12+0·χ_13+0·χ_14+0·χ_15	12	−12	0	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	$-E(5)^2-E(5)^3$	$-E(5)-E(5)^4$	0	0	1	−1	$E(5)^2$	$E(5)^4$	$E(5)$	$E(5)^3$	$-E(5)$	$-E(5)^3$	$-E(5)^2$	$-E(5)^4$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+0·χ_13+1·χ_14+0·χ_15	12	12	0	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	0	1	1	$E(5)^4$	$E(5)^2$	$E(5)$	$E(5)^3$	$E(5)$	$E(5)^3$	$E(5)^4$	$E(5)^2$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+1·χ_13+0·χ_14+0·χ_15	12	12	0	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$E(5)+E(5)^4$	$E(5)^2+E(5)^3$	0	0	1	1	$E(5)$	$E(5)^3$	$E(5)^2$	$E(5)^4$	$E(5)^2$	$E(5)^4$	$E(5)$	$E(5)^3$
0·χ_1+0·χ_2+0·χ_3+0·χ_4+0·χ_5+0·χ_6+0·χ_7+0·χ_8+0·χ_9+0·χ_10+0·χ_11+0·χ_12+1·χ_13+0·χ_14+0·χ_15	12	−12	0	0	$E(5)^2+E(5)^3$	$E(5)+E(5)^4$	0	$-E(5)-E(5)^4$	$-E(5)^2-E(5)^3$	0	0	1	−1	$E(5)$	$E(5)^2$	$E(5)^3$	$E(5)^4$	$-E(5)^2$	$-E(5)$	$-E(5)^4$	$-E(5)^3$

Representatives n_j: (),

(2, 7)(3, 8)(4, 9)(5, 10)(6, 11)(12, 67)(13, 73)(14, 74)(15, 75)(16, 76)(17, 77)(18, 68)(19, 69)(20, 70)(21, 71)(22, 72)(23, 78)(24, 84)(25, 85)(26, 86)(27, 87)(28, 88)(29, 79)(30, 80)(31, 81)(32, 82)(33, 83)(34, 89)(35, 95)(36, 96)(37, 97)(38, 98)(39, 99)(40, 90)(41, 91)(42, 92)(43, 93)(44, 94)(45,100)(46,106)(47,107)(48,108)(49,109)(50,110)(51,101)(52,102)(53,103)(54,104)(55,105)(56,111)(57,117)(58,118)(59,119)(60,120)(61,121)(62,112)(63,113)(64,114)(65,115)(66,116) ,

(2, 73, 12)(3, 85, 23)(4, 97, 34)(5,109, 45)(6,121, 56)(7, 13, 67)(8, 25, 78)(9, 37, 89)(10, 49,100)(11, 61,111)(14, 84, 18)(15, 93,106)(16,103, 95)(17,119, 40)(19, 32, 51)(20, 39,117)(21, 52, 29)(22, 66, 62)(24, 68, 74)(26, 96, 30)(27,105,118)(28,115,107)(31, 44, 63)(33, 64, 41)(35, 76, 53)(36, 80, 86)(38,108, 42)(43, 46, 75)(47, 88, 65)(48, 92, 98)(50,120, 54)(55, 58, 87)(57, 70, 99)(59, 90, 77)(60,104,110)(69, 82,101)(71,102, 79)(72,116,112)(81, 94,113)(83,114, 91) ,

(2, 12, 7, 67)(3, 23, 8, 78)(4, 34, 9, 89)(5, 45, 10,100)(6, 56, 11,111)(13, 18, 73, 68)(14, 29, 74, 79)(15, 40, 75, 90)(16, 51, 76,101)(17, 62, 77,112)(19, 84, 69, 24)(20, 95, 70, 35)(21,106, 71, 46)(22,117, 72, 57)(26, 96, 30)(27, 18)(15,116,111, 22, 53)(17, 99, 88, 96, 36)(28,115,107)(...)

[... continued permutation representatives ...]

( ),

(2, 7)(3, 8)(4, 9)(5, 10)(6, 11)(12, 67)(13, 73)(14, 74)(15, 75)(16, 76)(17, 77)(18, 68)(19, 69)(20, 70)(21, 72)(23, 78)(24, 84)(25, 85)(26, 86)(27, 87)(28, 88)(29, 79)(30, 80)(31, 81)(32, 82)(33, 83)(34, 89)(35, 95)(36, 96)(37, 97)(38, 98)(39, 99)(40, 90)(41, 91)(42, 92)(43, 93)(44, 94)(45,100)(46,106)(47,107)(48,108)(49,109)(50,110)(51,101)(52,102)(53,103)(54,104)(55,105)(56,111)(57,117)(58,118)(59,119)(60,120)(61,121)(62,112)(63,113)(64,114)(65,115)(66,116) ,

[... further permutation representatives ...]

P_1 = Group([()]) ≅ 1

P_2 = Group([(2,16,26,100,42,65,117,99,47,85,72)(3,28,38,111,54,77,19,101,59,97,84)(4,40,50,12,66,79,31,113,71,109,96)(5,52,62,23,68,91,43,15,83,121,108)(6,64,74,34,80,103,55,27,95,13,120)(7,76,86,45,92,115,57,39,107,25,22)(8,88,98,56,104,17,69,51,119,37,24)(9,90,110,67,116,29,81,63,21,49,36)(10,102,112,78,18,41,93,75,33,61,48)(11,114,14,89,30,53,105,87,35,73,60)]) ≅ C11

N_1 ≅ SL(2,11)
N_2 ≅ C2 x (C11 : C5)