

The group  $G$  is isomorphic to the group labelled by [ 336, 114 ] in the Small Groups library.  
 Ordinary character table of  $G \cong \text{SL}(2,7)$ :

	1a	2a	4a	3a	6a	8a	8b	7a	14a	7b	14b
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$	3	3	-1	0	0	1	1	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
$\chi_3$	3	3	-1	0	0	1	1	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
$\chi_4$	6	6	2	0	0	0	0	-1	-1	-1	-1
$\chi_5$	7	7	-1	1	1	-1	-1	0	0	0	0
$\chi_6$	8	8	0	-1	-1	0	0	1	1	1	1
$\chi_7$	4	-4	0	1	-1	0	0	$-E(7) - E(7)^2 - E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$-E(7)^3 - E(7)^5 - E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
$\chi_8$	4	-4	0	1	-1	0	0	$-E(7)^3 - E(7)^5 - E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$-E(7) - E(7)^2 - E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
$\chi_9$	6	-6	0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	-1	1
$\chi_{10}$	6	-6	0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-1	1	-1	1
$\chi_{11}$	8	-8	0	-1	1	0	0	1	-1	1	-1

Trivial source character table of  $G \cong \text{SL}(2,7)$  at  $p = 3$ :

Normalisers $N_i$	$N_1$												$N_2$						
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$												$P_2$						
Representatives $n_j \in N_i$	1a	7a			7b			4a	8a	8b	14a	14b			2a	1a	4a	2a	4b
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	9	2			2			1	1	1	2	2			9	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	3	$E(7) + E(7)^2 + E(7)^4$			$E(7)^3 + E(7)^5 + E(7)^6$			-1	1	1	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$			3	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	3	$E(7)^3 + E(7)^5 + E(7)^6$			$E(7) + E(7)^2 + E(7)^4$			-1	1	1	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$			3	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	-1			-1			2	0	0	-1	-1			6	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	15	1			1			-1	-1	-1	1	1			15	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	12	$-2 * E(7) - 2 * E(7)^2 - E(7)^3 - 2 * E(7)^4 - E(7)^5 - E(7)^6$			$-E(7) - E(7)^2 - 2 * E(7)^3 - E(7)^4 - 2 * E(7)^5 - 2 * E(7)^6$			0	0	0	$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + 2 * E(7)^6$			-12	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	12	$-E(7) - E(7)^2 - 2 * E(7)^3 - E(7)^4 - 2 * E(7)^5 - 2 * E(7)^6$			$-2 * E(7) - 2 * E(7)^2 - E(7)^3 - 2 * E(7)^4 - E(7)^5 - E(7)^6$			0	0	0	$E(7) + E(7)^2 + 2 * E(7)^3 + E(7)^4 + 2 * E(7)^5 + E(7)^6$	$2 * E(7) + 2 * E(7)^2 + E(7)^3 + 2 * E(7)^4 + E(7)^5 + E(7)^6$			-12	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	-1			-1			0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	1	-6			-6	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	-1			-1			0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	1	-6			-6	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	1			1			1	1	1	1	1			1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	7	0			0			-1	-1	-1	0	0			7	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	4	$-E(7) - E(7)^2 - E(7)^4$			$-E(7)^3 - E(7)^5 - E(7)^6$			0	0	0	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$			-4	1	$E(4)$	-1	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	4	$-E(7)^3 - E(7)^5 - E(7)^6$			$-E(7) - E(7)^2 - E(7)^4$			0	0	0	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$			-4	1	$-E(4)$	-1	$E(4)$

$$P_1 = \text{Group}([()]) \cong 1$$

$$P_2 = \text{Group}([(5, 14, 12)(6, 13, 9)(7, 16, 11)(8, 15, 10)]) \cong \text{C3}$$

$$N_1 = \text{Group}([(1, 2, 4, 3)(5, 9, 7, 10)(6, 11, 8, 12)(13, 16, 15, 14), (2, 5, 6)(3, 7, 8)(9, 13, 14)(10, 15, 16)]) \cong \text{SL}(2,7)$$

$$N_2 = \text{Group}([(5, 14, 12)(6, 13, 9)(7, 16, 11)(8, 15, 10), (1, 2, 4, 3)(5, 6, 7, 8)(9, 16, 10, 14)(11, 15, 12, 13)]) \cong \text{C3 : C4}$$

$$N_1 = \text{Group}([(1, 2, 4, 3)(5, 9, 7, 10)(6, 11, 8, 12)(13, 16, 15, 14), (2, 5, 6)(3, 7, 8)(9, 13, 14)(10, 15, 16)]) \cong$$