The group G is isomorphic to the group labelled by [672, 1045] in the Small Groups library. Ordinary character table of  $G \cong C2$ . (PSL(3,2): C2) = SL(2,7). C2:

1.0	$\frac{1}{i}$ $\frac{1}{2}e^{i}$	a = 4a	3a	6a	8a		7a	14a	4 <i>b</i>	12a	12b	16a	16b	16c	16d
$\gamma_1$ 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$ 1	1	1	1	1	1	1	1	1	_1	_1 _1	_1 _1	_1 _1	_1 _1	_1 _1	_1 _1
$\chi_3$	6	-2	0	0	$\stackrel{\circ}{2}$	2	-1	-1	0	0	0	0	0	0	0
$\chi_4$ 6	6	2	0	0	0	0	-1	-1	0	0	0	$E(8) - E(8)^3$	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	$-E(8) + E(8)^3$
$\chi_5$ 6	6	2	0	0	0	0	-1	-1	0	0	0	$-E(8) + E(8)^3$	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	$E(8) - E(8)^3$
$\frac{\chi_6}{\chi_6}$ 7	7	-1	1	1	-1	-1	0	0	1	1	1	-1	-1	-1	-1
$\chi_7$ 7	7	-1	1	1	-1	-1	0	0	-1	-1	-1	1	1	1	1
$\chi_8$ 8	8	0	-1	-1	0	0	1	1	2	-1	-1	0	0	0	0
$\frac{\chi_9}{\chi_9}$   8	8	0	-1	-1	0	0	1	1	-2	1	1	0	0	0	0
$\chi_{10}$ 8	_	8 0	2	-2	0	0	1	-1	0	0	0	0	0	0	0
$\chi_{11}$ 6	_	6 0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	0	0	0	$E(16) - E(16)^7$	$-E(16) + E(16)^7$	$E(16)^3 - E(16)^5$	$-E(16)^3 + E(16)^3$
$\chi_{12}$ 6	_	6 0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	0	0	0	$-\dot{E}(16) + \dot{E}(16)^7$	$E(16) - E(16)^{7}$	$-\dot{E}(16)^3 + \dot{E}(16)^5$	$E(16)^{3} - E(16)^{5}$
$\chi_{13}$ 6	_	6 0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^{3}$	-1	1	0	0	0	$-E(16)^3 + E(16)^5$	$E(16)^3 - E(16)^5$	$E(16) - E(16)^{7}$	$-\dot{E}(16) + \dot{E}(16)^7$
$\chi_{14} \mid \epsilon$	_	6 0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-1	1	0	0	0	$E(16)^{3} - E(16)^{5}$	$-\dot{E}(16)^3 + \dot{E}(16)^5$	$-E(16) + E(16)^7$	$E(16) - E(16)^{7}$
$\chi_{15}$ 8	_	8 0	-1	1	0	0	1	-1	0	$-E(12)^7 + E(12)^{11}$	$E(12)^7 - E(12)^{11}$	0	0	0	0
$\chi_{16}$ 8	_	8 0	-1	1	0	0	1	-1	0	$E(12)^{7} - E(12)^{11}$	$-E(12)^7 + E(12)^{11}$	0	0	0	0

Trivial source character table of $G \cong \mathbb{C}2$ . $(PSL(3,2):\mathbb{C}2) = SL(2,7)$ . $\mathbb{C}2$ at $p=2$ :																	
Normalisers $N_i$		$N_1$			$N_2$		$N_3$	Λ	$V_4$	$N_5$	$N_6$	Λ	$\sqrt{7}$	$N_8$	$N_9$	$N_{10}$	$N_{11}$
p-subgroups of $G$ up to conjugacy in $G$		$P_1$			$P_2$		$P_3$	P	4	$P_5$	$P_6$	P	7	$P_8$	$P_9$	$P_{10}$	$P_{11}$
Representatives $n_j \in N_i$	1a	3a	7a	1a	3a	7a	1a	1a	3a	1a	1a	1a	3a	1a	1a	1a	1 <i>a</i>
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	32	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	64	4	-6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16}$	32	-4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	16	4	2	16	4	2	0	0	0	0	0	0	0	0	0	0	0
	32	2	-3	32	2	-3	0	0	0	0	0	0	0	0	0	0	0
	16	-2	2	16	-2	2	0	0	0	0	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	40	4	-2	40	4	-2	8	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	8	2	1	8	2	1	0	2	2	0	0	0	0	0	0	0	0
	8	-1	1	8	-1	1	0	2	-1	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	20	2	-1	20	2	-1	4	2	2	2	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 2 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	52	4	-4	52	4	-4	4	0	0	0	4	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	28	4	0	28	4	0	4	0	0	0	0	2	2	0	0	0	0
$ \begin{vmatrix} 0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \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} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} \end{vmatrix} $	12	0	-2	12	0	-2	4	0	0	0	0	2	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	26	2	-2	26	2	-2	2	2	2	2	2	0	0	2	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	2	2	2	2	2	2	2	0	0	0	2	2	2	0	2	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	26	2	-2	26	2	-2	2	0	0	0	2	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	-						1						- '				

 $P_5 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(31,32), \\ (1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30), \\ (1,24,25)(2,24,2$ 

 $P_{10} = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,2,2,2,3,28,5,21)(6,24,29,8,26,23,30)(9,12,14,31,10,11,16,32)]) \\ \cong C16 - C16 -$ 

 $P_{11} = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,14,15)(17,12)(13,14,15)(17,12)(13,14,15)(17,12)(17,1$ 

 $N_2 = Group([(1,2,4,3)(5,9,7,10)(6,11,8,12)(13,21,15,22)(14,23,16,24)(17,25,19,26)(18,27,20,28)(29,31,30,32),(2,5,6)(3,7,8)(9,13,14)(10,15,16)(11,17,18)(12,19,20)(21,26,29)(22,25,30)]) \cong C2 \cdot (PSL(3,2) : C2) = SL(2,7) \cdot C2 \cdot (PSL(3,2) : C2) = SL(2,7) \cdot C2 \cdot (PSL(3,2) : C3) = SL(2,7) \cdot C3 \cdot (PSL$ 

 $N_3 = Group([(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,17,12)(9,21,10,22)(13,23,15,24)(14,28,16,27)(17,26,19,25)(18,30,20,29)]) \\ = Q32 - Q3$ 

 $N_4 = Group([(1,26,4,25)(2,9,3,10)(5,14,7,16)(6,18,8,20)(11,21,12,22)(13,29,15,30)(17,24,19,23)(27,32,28,31),(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(21,21,22)(23,24)(25,26)(27,28)(29,30)(21,21,22,21)(27,31,28,32),(1,4,25,16,24)(11,27,12,28)(14,26,16,25)(18,30,20,29)(21,31,22,32)] \\ \cong C3:Q8$ 

 $N_5 = Group([(1,26,4,25)(2,9,3,10)(5,14,7,16)(6,18,8,20)(11,21,22)(13,29,15,30)(17,24,19,23)(27,32,28,31),(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30),(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,20,10)(11,21,12,22)(13,29,15,30)(17,24,19,23)(27,32,28,31),(1,13,4,15)(27,32,28,28,31),(1,13,4,15)(27,32,28,28,28),(1,13,4,15)(27,32,28,28),(1,13,28,28,28),(1,13,28,28,28),(1$  $N_6 = Group([(1,18,13,17,4,20,15,19)(2,27,7,22,3,28,5,21)(6,25,24,29,8,26,23,30)(9,12,14,31,10,11,16,32),(1,2,2,28,13,7,19,21,4,3,18,27,15,5,17,22)(6,9,26,11,24,14,31,10,11,16,32),(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,23,28)(25,29,28),(1,13,23,28)(25,29,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28)$ 

 $N_{11} = Group([(1,10,4,9)(2,8,3,6)(5,23,7,24)(11,17,12,19)(13,14,15,16)(14,28)(27,22,28)(25,29,26,30), (1,26,4,25)(27,29,28,29,28), (1,26,4,25)(27,29,28,29,28), (1,26,4,25)(27,29,28,29), (1,26,4,25)(27,29,28,29), (1,26,4,25$