

The group  $G$  is isomorphic to the group labelled by [ 48, 28 ] in the Small Groups library.  
 Ordinary character table of  $G \cong C2 . S4 = \text{SL}(2,3) . C2$ :

	$1a$	$2a$	$4a$	$3a$	$6a$	$4b$	$8a$	$8b$
$\chi_1$	1	1	1	1	1	1	1	1
$\chi_2$	1	1	1	1	1	-1	-1	-1
$\chi_3$	2	2	2	-1	-1	0	0	0
$\chi_4$	3	3	-1	0	0	-1	1	1
$\chi_5$	3	3	-1	0	0	1	-1	-1
$\chi_6$	2	-2	0	-1	1	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$
$\chi_7$	2	-2	0	-1	1	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$
$\chi_8$	4	-4	0	1	-1	0	0	0

Trivial source character table of  $G \cong C2 . S4 = \text{SL}(2,3) . C2$  at  $p = 3$ :

Normalisers $N_i$	$N_1$						$N_2$			
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$						$P_2$			
Representatives $n_j \in N_i$	$1a$	$4b$	$4a$	$2a$	$8a$	$8b$	$1a$	$4a$	$2a$	$4b$
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	3	-1	3	3	-1	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	3	1	3	3	1	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	3	-1	-1	3	1	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	3	1	-1	3	-1	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8$	6	0	0	-6	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8$	6	0	0	-6	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8$	1	-1	1	1	-1	-1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8$	4	0	0	-4	0	0	1	$E(4)$	-1	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8$	4	0	0	-4	0	0	1	$-E(4)$	-1	$E(4)$

$P_1 = \text{Group}([\langle \rangle]) \cong 1$   
 $P_2 = \text{Group}([(1, 11, 3)(2, 18, 7)(4, 47, 30)(5, 40, 28)(6, 27, 14)(8, 48, 37)(9, 44, 35)(10, 34, 21)(12, 31, 41)(13, 16, 39)(15, 26, 29)(17, 25, 42)(19, 38, 45)(20, 23, 43)(22, 33, 36)(24, 32, 46)]) \cong C3$

$N_1 = \text{Group}([(1, 2, 6, 10)(3, 18, 14, 34)(4, 9, 16, 24)(5, 8, 17, 23)(7, 27, 21, 11)(12, 33, 29, 45)(13, 32, 30, 44)(15, 38, 31, 22)(19, 41, 36, 26)(20, 40, 37, 25)(28, 48, 42, 43)(35, 39, 46, 47), (1, 3, 11)(2, 7, 18)(4, 30, 47)(5, 28, 40)(6, 14, 27)(8, 37, 48)(9, 35, 44)(10, 21, 34)(12, 41, 31)(13, 39, 16)(15, 29, 26)(17, 42, 25)(19, 45, 38)(20, 43, 23)(22, 36, 33)(24, 46, 32), (1, 4, 6, 16)(2, 8, 10, 23)(3, 12, 14, 29)(5, 31, 17, 15)(7, 19, 21, 36)(9, 38, 24, 22)(11, 25, 27, 40)(13, 42, 30, 28)(18, 32, 34, 44)(20, 46, 37, 35)(26, 47, 41, 39)(33, 48, 45, 43), (1, 5, 6, 17)(2, 9, 10, 24)(3, 13, 14, 30)(4, 15, 16, 31)(7, 20, 21, 37)(8, 22, 23, 38)(11, 26, 27, 41)(12, 28, 29, 42)(18, 33, 34, 45)(19, 35, 36, 46)(25, 39, 40, 47)(32, 43, 44, 48), (1, 6)(2, 10)(3, 14)(4, 16)(5, 17)(7, 21)(8, 23)(9, 24)(11, 27)(12, 29)(13, 30)(15, 31)(18, 34)(19, 36)(20, 37)(22, 38)(25, 40)(26, 41)(28, 42)(32, 44)(33, 45)(35, 46)(39, 47)(43, 48)]) \cong C2 . S4 = \text{SL}(2,3) . C2$   
 $N_2 = \text{Group}([(1, 11, 3)(2, 18, 7)(4, 47, 30)(5, 40, 28)(6, 27, 14)(8, 48, 37)(9, 44, 35)(10, 34, 21)(12, 31, 41)(13, 16, 39)(15, 26, 29)(17, 25, 42)(19, 38, 45)(20, 23, 43)(22, 33, 36)(24, 32, 46), (1, 2, 6, 10)(3, 18, 14, 34)(4, 9, 16, 24)(5, 8, 17, 23)(7, 27, 21, 11)(12, 33, 29, 45)(13, 32, 30, 44)(15, 38, 31, 22)(19, 41, 36, 26)(20, 40, 37, 25)(28, 48, 42, 43)(35, 39, 46, 47)]) \cong C3 : C4$