

The group  $G$  is isomorphic to the group labelled by [ 24, 7 ] in the Small Groups library.  
 Ordinary character table of  $G \cong C_2 \times (C_3 : C_4)$ :

	1a	4a	2a	2b	3a	4b	4c	2c	6a	6b	4d	6c
$\chi_1$	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
$\chi_3$	1	-1	1	1	1	-1	-1	1	1	1	-1	1
$\chi_4$	1	1	-1	1	1	-1	1	-1	-1	1	-1	-1
$\chi_5$	1	$-E(4)$	-1	-1	1	$E(4)$	$E(4)$	1	-1	-1	$-E(4)$	1
$\chi_6$	1	$E(4)$	-1	-1	1	$-E(4)$	$-E(4)$	1	-1	-1	$E(4)$	1
$\chi_7$	1	$-E(4)$	1	-1	1	$-E(4)$	$E(4)$	-1	1	-1	$E(4)$	-1
$\chi_8$	1	$E(4)$	1	-1	1	$E(4)$	$-E(4)$	-1	1	-1	$-E(4)$	-1
$\chi_9$	2	0	-2	-2	-1	0	0	2	1	1	0	-1
$\chi_{10}$	2	0	-2	2	-1	0	0	-2	1	-1	0	1
$\chi_{11}$	2	0	2	-2	-1	0	0	-2	-1	1	0	1
$\chi_{12}$	2	0	2	2	-1	0	0	2	-1	-1	0	-1

Trivial source character table of  $G \cong C_2 \times (C_3 : C_4)$  at  $p = 3$ :

Normalisers $N_i$	$N_1$							$N_2$								
	$P_1$							$P_2$								
	1a	4a	2a	2b	4b	4c	2c	4d	1a	2a	4a	2b	4b	2c	4c	4d
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	3	1	3	3	1	1	3	1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	-1	-3	3	1	-1	-3	1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	3	-1	3	3	-1	-1	3	-1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	1	-3	3	-1	1	-3	-1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	$-E(4)$	-3	-3	$E(4)$	$E(4)$	3	$-E(4)$	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	$E(4)$	-3	-3	$-E(4)$	$-E(4)$	3	$E(4)$	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	$-E(4)$	3	-3	$-E(4)$	$E(4)$	-3	$E(4)$	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	$E(4)$	3	-3	$E(4)$	$-E(4)$	-3	$-E(4)$	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	-1	1	-1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	-1	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	-1	-1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	-1	-1	1	1	-1	-1	1	-1	-1	1	1	-1	-1	-1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	$-E(4)$	1	-1	$-E(4)$	$E(4)$	-1	$E(4)$	1	1	$-E(4)$	-1	$-E(4)$	-1	$E(4)$	$E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	$E(4)$	1	-1	$E(4)$	$-E(4)$	-1	$-E(4)$	1	1	$E(4)$	-1	$E(4)$	-1	$-E(4)$	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	$E(4)$	-1	-1	$-E(4)$	$-E(4)$	1	$E(4)$	1	-1	$E(4)$	-1	$-E(4)$	1	$E(4)$	$E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	$-E(4)$	-1	-1	$E(4)$	$E(4)$	1	$-E(4)$	1	-1	$-E(4)$	-1	$E(4)$	1	$E(4)$	$-E(4)$

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

$$P_2 = \text{Group}([(1, 12, 5)(2, 16, 8)(3, 18, 10)(4, 19, 11)(6, 21, 14)(7, 22, 15)(9, 23, 17)(13, 24, 20)]) \cong C_3$$

$$N_1 = \text{Group}([(1, 2, 4, 7)(3, 6, 9, 13)(5, 16, 11, 22)(8, 19, 15, 12)(10, 21, 17, 24)(14, 23, 20, 18), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong C_2 \times (C_3 : C_4)$$

$$N_2 = \text{Group}([(1, 12, 5)(2, 16, 8)(3, 18, 10)(4, 19, 11)(6, 21, 14)(7, 22, 15)(9, 23, 17)(13, 24, 20), (1, 2, 4, 7)(3, 6, 9, 13)(5, 16, 11, 22)(8, 19, 15, 12)(10, 21, 17, 24)(14, 23, 20, 18), (1, 3)(2, 6)(4, 9)(5, 10)(7, 13)(8, 14)(11, 17)(12, 18)(15, 20)(16, 21)(19, 23)(22, 24)]) \cong C_2 \times (C_3 : C_4)$$