The group G is isomorphic to the group labelled by [48, 41] in the Small Groups library.
Ordinary character table of $G \cong$ (C4 x S3) : C2:

	1a	2a	4a	4b	2b	3a	4c	2c	4d	12a	12b	6a	2d	4e	12c
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	−1	−1	−1	1	1	1	1	1	−1	−1	1	−1	1	1
χ_3	1	−1	−1	1	1	1	1	−1	−1	−1	1	1	1	1	−1
χ_4	1	−1	1	−1	1	1	−1	1	−1	1	−1	1	1	−1	−1
χ_5	1	−1	1	1	1	1	−1	−1	1	1	1	−1	−1	1	1
χ_6	1	1	−1	−1	1	1	−1	−1	1	−1	−1	1	1	−1	1
χ_7	1	1	−1	1	1	1	−1	1	−1	−1	1	1	−1	−1	−1
χ_8	1	1	1	−1	1	1	1	−1	−1	1	−1	1	−1	1	−1
χ_9	2	0	−2	−2	2	−1	0	0	2	1	1	−1	0	0	−1
χ_{10}	2	0	−2	2	2	−1	0	0	−2	1	−1	−1	0	0	1
χ_{11}	2	0	2	−2	2	−1	0	0	−2	−1	1	−1	0	0	1
χ_{12}	2	0	2	2	2	−1	0	0	2	−1	−1	−1	0	0	−1
χ_{13}	2	0	0	0	−2	2	$-2*E(4)$	0	0	0	0	−2	0	$2*E(4)$	0
χ_{14}	2	0	0	0	−2	2	$2*E(4)$	0	0	0	0	−2	0	$-2*E(4)$	0
χ_{15}	4	0	0	0	−4	−2	0	0	0	0	0	2	0	0	0

Trivial source character table of $G \cong$ (C4 x S3) : C2 at $p = 3$:

Normalisers N_i	N_1										N_2									
3-subgroups of G up to conjugacy in G	P_1										P_2									
Representative $u_j \in N_i$	1a	2a	4a	4b	2b	4c	2c	4d	2d	4e	1a	4b	4a	2a	4d	2c	4e	4c	2b	2d
$1 \cdot \chi_{11} + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	1	3	3	3	1	1	3	1	1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	−1	3	3	3	−1	−1	3	−1	−1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	−1	−3	−3	3	1	1	3	−1	1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	1	−3	−3	3	−1	−1	3	1	−1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	−1	3	−3	3	−1	1	−3	−1	1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	3	1	3	−3	3	1	−1	−3	−1	1	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	6	0	0	0	−6	$-2*E(4)$	0	0	0	$2*E(4)$	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15}$	6	0	0	0	−6	$2*E(4)$	0	0	0	$-2*E(4)$	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15}$	1	1	1	−1	1	−1	−1	−1	−1	−1	1	−1	1	1	−1	−1	1	1	−1	−1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	−1	1	1	1	1	−1	1	1	−1	1	1	−1	−1	−1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	−1	−1	1	1	1	−1	−1	1	1	1	−1	−1	−1	1	1	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	−1	1	−1	1	1	1	1	−1	1	1	1	−1	1	1	−1	1	1	−1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15}$	1	−1	1	1	1	−1	−1	1	1	−1	1	1	−1	−1	−1	1	1	1	−1	−1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	−1	1	−1	1	−1	1	−1	1	−1	1	−1	1	−1	1	−1	1	−1	1	−1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	1	1	−1	−1	1	−1	−1	1	1	−1	1	1	−1	−1	1	1	−1	−1	−1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15}$	2	0	0	0	−2	$-2*E(4)$	0	0	0	$2*E(4)$	2	0	0	0	0	$2*E(4)$	$-2*E(4)$	-2	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15}$	2	0	0	0	−2	$2*E(4)$	0	0	0	$-2*E(4)$	2	0	0	0	0	$-2*E(4)$	$2*E(4)$	-2	0	

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

$N_1 = Group([\,1, 2\,)(3, 7\,)(4, 21\,)(5, 9\,)(6, 24\,)(8, 14\,)(10, 17\,)(11, 32\,)(12, 19\,)(13, 35\,)(15, 46\,)(16, 38\,)(18, 25\,)(20, 28\,)(22, 42\,)(23, 31\,)(26, 48\,)(27, 45\,)(29, 37\,)(30, 36\,)(33, 47\,)(34, 41\,)(39, 44\,)(40, 43), (1, 3, 5, 12)(2, 7, 9, 19)(4, 25, 14, 11)(6, 13, 16, 27)(8, 32, 21, 18)(10, 20, 23, 34)(15, 39, 29, 26)(17, 28, 31, 41)(22, 43, 36, 33)(24, 35, 38, 45)(30, 40, 47, 42)(37, 48, 46, 44), (1, 4, 5, 14)(2, 8, 9, 21)(3, 11, 12, 25)(6, 15, 16, 29)(7, 18, 19, 32)(10, 22, 23, 36)(13, 26, 27, 39)(17, 30, 31, 42)(20, 33, 34, 43)(24, 37, 38, 46)(28, 40, 41, 47)(35, 44, 45, 48), (1, 5)(2, 9)(3, 12)(4, 14)(6, 16)(7, 19)(8, 21)(10, 23)(11, 25)(13, 27)(15, 29)(17, 31)(18, 32)(20, 34)(22, 36)(24, 38)(26, 39)(28, 41)(30, 42)(33, 43)(35, 45)(37, 46)(40, 47)(44, 48), (1, 6, 17)(2, 10, 24)(3, 13, 28)(4, 15, 30)(5, 16, 31)(7, 20, 35)(8, 22, 37)(9, 23, 38)(11, 26, 40)(12, 27, 41)(14, 29, 42)(18, 33, 44)(19, 34, 45)(21, 36, 46)(25, 39, 47)(32, 43, 48)]) \cong$ (C4 x S3) : C2

$N_2 = Group([\,18, 17, 6)(2, 24, 10)(3, 28, 13)(4, 30, 15)(5, 31, 16)(7, 35, 20)(8, 37, 22)(9, 38, 23)(11, 40, 26)(12, 41, 27)(14, 42, 29)(18, 44, 33)(19, 45, 34)(21, 46, 36)(25, 47, 39)(32, 48, 43), (1, 2)(3, 7)(4, 21)(5, 9)(6, 24)(8, 14)(10, 17)(11, 32)(12, 19)(13, 35)(15, 46)(16, 38)(18, 25)(20, 28)(22, 42)(23, 31)(26, 48)(27, 45)(29, 37)(30, 36)(33, 47)(34, 41)(39, 44)(40, 43), (1, 3, 5, 12)(2, 7, 9, 19)(4, 25, 14, 11)(6, 13, 16, 27)(8, 32, 21, 18)(10, 20, 23, 34)(15, 39, 29, 26)(17, 28, 31, 41)(22, 43, 36, 33)(24, 35, 38, 45)(30, 47, 42, 40)(37, 48, 46, 44), (1, 4, 5, 14)(2, 8, 9, 21)(3, 11, 12, 25)(6, 15, 16, 29)(7, 18, 19, 32)(10, 22, 23, 36)(13, 26, 27, 39)(17, 30, 31, 42)(20, 33, 34, 43)(24, 37, 38, 46)(28, 40, 41, 47)(35, 44, 45, 48)]) \cong$ (C4 x S3) : C2