

The group G is isomorphic to the group labelled by [24, 4] in the Small Groups library.
 Ordinary character table of $G \cong C3 : Q8$:

	1a	2a	12a	12b	4a	3a	6a	4b	4c
χ_1	1	1	1	1	1	1	1	1	1
χ_2	1	1	-1	-1	-1	1	1	-1	1
χ_3	1	1	-1	-1	-1	1	1	1	-1
χ_4	1	1	1	1	1	1	1	-1	-1
χ_5	2	-2	0	0	0	2	-2	0	0
χ_6	2	2	1	1	-2	-1	-1	0	0
χ_7	2	2	-1	-1	2	-1	-1	0	0
χ_8	2	-2	$E(12)^7 - E(12)^{11}$	$-E(12)^7 + E(12)^{11}$	0	-1	1	0	0
χ_9	2	-2	$-E(12)^7 + E(12)^{11}$	$E(12)^7 - E(12)^{11}$	0	-1	1	0	0

Trivial source character table of $G \cong C3 : Q8$ at $p = 2$:

Normalisers N_i	N_1	N_2	N_3	N_4	N_5	N_6
p -subgroups of G up to conjugacy in G	P_1	P_2	P_3	P_4	P_5	P_6
Representatives $n_j \in N_i$	1a	3a	1a	3a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 2 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	8	8	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	8	-4	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	4	4	4	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	-2	4	-2	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	-1	2	-1	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1

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

$$P_2 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24)]) \cong C2$$

$$P_3 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24)]) \cong C4$$

$$P_4 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23)]) \cong C4$$

$$P_5 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 13, 4, 6)(2, 3, 7, 9)(5, 24, 11, 21)(8, 18, 15, 23)(10, 22, 17, 16)(12, 20, 19, 14)]) \cong C4$$

$$P_6 = \text{Group}([(1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24), (1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23)]) \cong Q8$$

$$N_1 = \text{Group}([(1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong C3 : Q8$$

$$N_2 = \text{Group}([(1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong C3 : Q8$$

$$N_3 = \text{Group}([(1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23), (1, 5, 12)(2, 8, 16)(3, 10, 18)(4, 11, 19)(6, 14, 21)(7, 15, 22)(9, 17, 23)(13, 20, 24)]) \cong C3 : Q8$$

$$N_4 = \text{Group}([(1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24)]) \cong Q8$$

$$N_5 = \text{Group}([(1, 13, 4, 6)(2, 3, 7, 9)(5, 24, 11, 21)(8, 18, 15, 23)(10, 22, 17, 16)(12, 20, 19, 14), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24), (1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23)]) \cong Q8$$

$$N_6 = \text{Group}([(1, 2, 4, 7)(3, 13, 9, 6)(5, 16, 11, 22)(8, 19, 15, 12)(10, 24, 17, 21)(14, 18, 20, 23), (1, 3, 4, 9)(2, 6, 7, 13)(5, 10, 11, 17)(8, 14, 15, 20)(12, 18, 19, 23)(16, 21, 22, 24), (1, 4)(2, 7)(3, 9)(5, 11)(6, 13)(8, 15)(10, 17)(12, 19)(14, 20)(16, 22)(18, 23)(21, 24)]) \cong Q8$$