

The group G is isomorphic to the group labelled by [48, 16] in the Small Groups library.
 Ordinary character table of $G \cong (C3 : Q8) : C2$:

	1a	4a	2a	4b	2b	3a	8a	6a	12a	6b	8b	6c
χ_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
χ_3	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
χ_5	2	0	0	-2	2	2	0	0	-2	2	0	0
χ_6	2	0	-2	2	2	-1	0	1	-1	-1	0	1
χ_7	2	0	2	2	2	-1	0	-1	-1	-1	0	-1
χ_8	2	0	0	0	-2	2	$-E(8) - E(8)^3$	0	0	-2	$E(8) + E(8)^3$	0
χ_9	2	0	0	0	-2	2	$E(8) + E(8)^3$	0	0	-2	$-E(8) - E(8)^3$	0
χ_{10}	2	0	0	-2	2	-1	0	$-E(3) + E(3)^2$	1	-1	0	$E(3) - E(3)^2$
χ_{11}	2	0	0	-2	2	-1	0	$E(3) - E(3)^2$	1	-1	0	$-E(3) + E(3)^2$
χ_{12}	4	0	0	0	-4	-2	0	0	0	2	0	0

Trivial source character table of $G \cong (C3 : Q8) : C2$ at $p = 3$:

Normalisers N_i	N_1							N_2						
	P_2													
p -subgroups of G up to conjugacy in G	P_1							P_2						
Representatives $n_j \in N_i$	1a	4a	2a	4b	2b	8a	8b	1a	2a	4a	2b	8a	4b	8b
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	1	3	3	3	1	1	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	-1	3	3	3	-1	-1	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	-1	-3	3	3	1	1	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	3	1	-3	3	3	-1	-1	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12}$	6	0	0	-6	6	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	6	0	0	0	-6	$-E(8) - E(8)^3$	$E(8) + E(8)^3$	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	6	0	0	0	-6	$E(8) + E(8)^3$	$-E(8) - E(8)^3$	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	-1	-1	1	1	1	1	1	-1	-1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	1	-1	1	1	-1	-1	1	-1	1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	-1	1	1	1	-1	-1	1	1	-1	1	-1	1	-1
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	0	0	0	-2	$-E(8) - E(8)^3$	$E(8) + E(8)^3$	2	0	-2	$-E(8) - E(8)^3$	0	$E(8) + E(8)^3$	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	0	0	0	-2	$E(8) + E(8)^3$	$-E(8) - E(8)^3$	2	0	-2	$E(8) + E(8)^3$	0	$-E(8) - E(8)^3$	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	0	0	-2	2	0	0	2	0	2	0	-2	0	0

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

$N_1 = \text{Group}([(1, 2, 5, 9)(3, 18, 12, 32)(4, 21, 14, 8)(6, 24, 16, 38)(7, 25, 19, 11)(10, 31, 23, 17)(13, 44, 27, 48)(15, 46, 29, 37)(20, 47, 34, 40)(22, 30, 36, 42)(26, 35, 39, 45)(28, 33, 41, 43), (1, 3)(2, 7)(4, 25)(5, 12)(6, 13)(8, 32)(9, 19)(10, 20)(11, 14)(15, 39)(16, 27)(17, 28)(18, 21)(22, 43)(23, 34)(24, 35)(26, 29)(30, 47)(31, 41)(33, 36)(37, 48)(38, 45)(40, 42)(44, 46), (1, 4, 5, 14)(2, 8, 9, 21)(3, 11, 12, 25)(6, 15, 16, 29)(7, 18, 19, 32)(10, 22, 23, 36)(13, 26, 27, 39)(17, 30, 31, 42)(20, 33, 34, 43)(24, 37, 38, 46)(28, 40, 41, 47)(35, 44, 45, 48), (1, 5)(2, 9)(3, 12)(4, 14)(6, 16)(7, 19)(8, 21)(10, 23)(11, 25)(13, 27)(15, 29)(17, 31)(18, 32)(20, 34)(22, 36)(24, 38)(26, 39)(28, 41)(30, 42)(33, 43)(35, 45)(37, 46)(40, 47)(44, 48), (1, 6, 17)(2, 10, 24)(3, 13, 28)(4, 15, 30)(5, 16, 31)(7, 20, 35)(8, 22, 37)(9, 23, 38)(11, 26, 40)(12, 27, 41)(14, 29, 42)(18, 33, 44)(19, 34, 45)(21, 36, 46)(25, 39, 47)(32, 43, 48)]) \cong (C3 : Q8) : C2$
 $N_2 = \text{Group}([(1, 17, 6)(2, 24, 10)(3, 28, 13)(4, 30, 15)(5, 31, 16)(7, 35, 20)(8, 37, 22)(9, 38, 23)(11, 40, 26)(12, 41, 27)(14, 42, 29)(18, 44, 33)(19, 45, 34)(21, 46, 36)(25, 47, 39)(32, 48, 43), (1, 2, 5, 9)(3, 18, 12, 32)(4, 21, 14, 8)(6, 24, 16, 38)(7, 25, 19, 11)(10, 31, 23, 17)(13, 44, 27, 48)(15, 46, 29, 37)(20, 47, 34, 40)(22, 30, 36, 42)(26, 35, 39, 45)(28, 33, 41, 43), (1, 3)(2, 7)(4, 25)(5, 12)(6, 13)(8, 32)(9, 19)(10, 20)(11, 14)(15, 39)(16, 27)(17, 28)(18, 21)(22, 43)(23, 34)(24, 35)(26, 29)(30, 47)(31, 41)(33, 36)(37, 48)(38, 45)(40, 42)(44, 46)]) \cong (C3 : Q8) : C2$