The group G is isomorphic to the group labelled by [16, 3] in the Small Groups library.
Ordinary character table of $G \cong (C4 \times C2) : C2$:

	1a	4a	2a	2b	2c	4b	4c	2d	2e	4d
χ_1	1	1	1	1	1	1	1	1	1	1
χ_2	1	-1	-1	1	1	1	-1	-1	1	1
χ_3	1	-1	1	1	1	-1	-1	1	1	-1
χ_4	1	1	-1	1	1	-1	1	-1	1	-1
χ_5	1	$-E(4)$	-1	1	-1	$E(4)$	$E(4)$	1	-1	$-E(4)$
χ_6	1	$E(4)$	-1	1	-1	$-E(4)$	$-E(4)$	1	-1	$E(4)$
χ_7	1	$-E(4)$	1	1	-1	$-E(4)$	$E(4)$	-1	-1	$E(4)$
χ_8	1	$E(4)$	1	1	-1	$E(4)$	$-E(4)$	-1	-1	$-E(4)$
χ_9	2	0	0	-2	2	0	0	0	-2	0
χ_{10}	2	0	0	-2	-2	0	0	0	2	0

Trivial source character table of $G \cong (C4 \times C2) : C2$ at $p = 2$:

Normalisers N_i	N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8	N_9	N_{10}	N_{11}	N_{12}	N_{13}	N_{14}	N_{15}	N_{16}	N_{17}
p-subgroups of G up to conjugacy in G	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}	P_{16}	P_{17}
Representatives $n_j \in N_i$	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 2 \cdot \chi_9 + 2 \cdot \chi_{10}$	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 2 \cdot \chi_9 + 0 \cdot \chi_{10}$	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10}$	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10}$	8	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10}$	8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	4	4	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10}$	4	4	0	0	2	2	0	2	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	4	0	4	0	4	0	0	0	4	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	4	0	4	0	0	4	0	0	0	4	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10}$	4	0	0	4	2	2	0	0	0	0	2	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10}$	4	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10}$	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	2	2	2	2	2	2	2	2	2	2	2	0	0	2	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	2	2	2	2	0	0	2	0	0	0	0	2	0	0	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	2	2	2	2	0	0	2	0	0	0	0	0	2	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong C2$
$P_3 = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C2$
$P_4 = Group([(1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13)]) \cong C2$
$P_5 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong C2$
$P_6 = Group([(1,10)(2,13)(3,5)(4,15)(6,8)(7,16)(9,11)(12,14)]) \cong C2$
$P_7 = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong C2 \times C2$
$P_8 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong C2 \times C2$
$P_9 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C2 \times C2$
$P_{10} = Group([(1,10)(2,13)(3,5)(4,15)(6,8)(7,16)(9,11)(12,14), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C2 \times C2$
$P_{11} = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13)]) \cong C2 \times C2$
$P_{12} = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong C4$
$P_{13} = Group([(1,12,11,13)(2,15,14,3)(4,6,5,16)(7,10,8,9), (1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13)]) \cong C4$
$P_{14} = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong C2 \times C2 \times C2$
$P_{15} = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong C4 \times C2$
$P_{16} = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,12,11,13)(2,15,14,3)(4,6,5,16)(7,10,8,9)]) \cong C4 \times C2$
$P_{17} = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong (C4 \times C2) : C2$

$N_1 = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong (C4 \times C2) : C2$
$N_2 = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong (C4 \times C2) : C2$
$N_3 = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong (C4 \times C2) : C2$
$N_4 = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong (C4 \times C2) : C2$
$N_5 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13)]) \cong C2 \times C2 \times C2$
$N_6 = Group([(1,10)(2,13)(3,5)(4,15)(6,8)(7,16)(9,11)(12,14), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,9)(2,12)(3,4)(5,15)(6,7)(8,16)(10,11)(13,14)]) \cong C2 \times C2 \times C2$
$N_7 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong (C4 \times C2) : C2$
$N_8 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C2 \times C2 \times C2$
$N_9 = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong (C4 \times C2) : C2$
$N_{10} = Group([(1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,10)(2,13)(3,5)(4,15)(6,8)(7,16)(9,11)(12,14), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong (C4 \times C2) : C2$
$N_{11} = Group([(1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong C2 \times C2 \times C2$
$N_{12} = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C4 \times C2$
$N_{13} = Group([(1,12,11,13)(2,15,14,3)(4,6,5,16)(7,10,8,9), (1,11)(2,14)(3,15)(4,5)(6,16)(7,8)(9,10)(12,13), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong C4 \times C2$
$N_{14} = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong (C4 \times C2) : C2$
$N_{15} = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong (C4 \times C2) : C2$
$N_{16} = Group([(1,12,11,13)(2,15,14,3)(4,6,5,16)(7,10,8,9), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16), (1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9)]) \cong (C4 \times C2) : C2$
$N_{17} = Group([(1,2,5,8)(3,12,10,16)(4,7,11,14)(6,15,13,9), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4)(2,7)(3,9)(5,11)(6,12)(8,14)(10,15)(13,16)]) \cong (C4 \times C2) : C2$