The group G is isomorphic to the group labelled by $[\,16, 6\,]$ in the Small Groups library.
Ordinary character table of $G \cong$ C8 : C2:

	1a	8a	2a	4a	2b	8b	8c	4b	4c	8d
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	$-2*E(4)$	-2	0	0	0	$2*E(4)$	0
χ_{10}	2	0	0	$2*E(4)$	-2	0	0	0	$-2*E(4)$	0

Trivial source character table of $G \cong$ C8 : 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}
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}
Representatives $n_j \in N_i$	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
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	8	8	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10}$	8	0	4	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	0	4	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	4	4	0	4	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	4	0	0	0	4	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	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	0	2	0	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	0	2	0	0	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

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong$ C2
$P_3 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong$ C2
$P_4 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16)]) \cong$ C4
$P_5 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong$ C2 x C2
$P_6 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,9,5,15)(2,12,8,16)(3,4,10,11)(6,7,13,14)]) \cong$ C4
$P_7 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong$ C4 x C2
$P_8 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8
$P_9 = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,13,11,12,5,6,4,16)(2,15,14,10,8,9,7,3)]) \cong$ C8
$P_{10} = Group([(1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8 : C2

$N_1 = Group([(1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong$ C8 : C2
$N_2 = Group([(1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong$ C8 : C2
$N_3 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong$ C4 x C2
$N_4 = Group([(1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong$ C8 : C2
$N_5 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8 : C2
$N_6 = Group([(1,9,5,15)(2,12,8,16)(3,4,10,11)(6,7,13,14), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8 : C2
$N_7 = Group([(1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8 : C2
$N_8 = Group([(1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16)]) \cong$ C8 : C2
$N_9 = Group([(1,13,11,12,5,6,4,16)(2,15,14,10,8,9,7,3), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16), (1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12)]) \cong$ C8 : C2
$N_{10} = Group([(1,2,4,7,5,8,11,14)(3,13,9,16,10,6,15,12), (1,3)(2,6)(4,9)(5,10)(7,12)(8,13)(11,15)(14,16), (1,4,5,11)(2,7,8,14)(3,9,10,15)(6,12,13,16), (1,5)(2,8)(3,10)(4,11)(6,13)(7,14)(9,15)(12,16)]) \cong$ C8 : C2