The group G is isomorphic to the group labelled by [72, 13] in the Small Groups library. Ordinary character table of  $G \cong (C3 \times C3) : C8$ :

	1a	3a	3b	3c	3d	8 <i>a</i>	4a	12a	12b	12c	12d	8 <i>b</i>	2a	6a	6b	6c	6d	8c	4b	12e	12f	12g	12h	8 <i>d</i>
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$	1	1	1	1	1	-1	1	1	1	1	1	-1	1	1	1	1	1	-1	1	1	1	1	1	-1
$\chi_3$	1	1	1	1	1	-E(4)	-1	-1	-1	-1	-1	E(4)	1	1	1	1	1	-E(4)	-1	-1	-1	-1	-1	E(4)
$\chi_4$	1	1	1	1	1	E(4)	-1	-1	-1	-1	-1	-E(4)	1	1	1	1	1	E(4)	-1	-1	-1	-1	-1	-E(4)
$\chi_5$	1	1	1	1	1	-E(8)	E(4)	E(4)	E(4)	E(4)	E(4)	$-E(8)^{3}$	-1	-1	-1	-1	-1	E(8)	-E(4)	-E(4)	-E(4)	-E(4)	-E(4)	$E(8)^3$
$\chi_6$	1	1	1	1	1	$-E(8)^{3}$	-E(4)	-E(4)	-E(4)	-E(4)	-E(4)	-E(8)	-1	-1	-1	-1	-1	$E(8)^{3}$	E(4)	E(4)	E(4)	E(4)	E(4)	E(8)
$\chi_7$	1	1	1	1	1	$E(8)^{3}$	-E(4)	-E(4)	-E(4)	-E(4)	-E(4)	E(8)	-1	-1	-1	-1	-1	$-E(8)^3$	E(4)	E(4)	E(4)	E(4)	E(4)	-E(8)
$\chi_8$	1	1	1	1	1	E(8)	E(4)	E(4)	E(4)	E(4)	E(4)	$E(8)^{3}$	-1	-1	-1	-1	-1	-E(8)	-E(4)	-E(4)	-E(4)	-E(4)	-E(4)	$-E(8)^3$
$\chi_9$	2	2	-1	-1	-1	0	2	2	-1	-1	-1	0	2	2	-1	-1	-1	0	2	2	-1	-1	-1	0
$\chi_{10}$	2	2	-1	-1	-1	0	-2	-2	1	1	1	0	2	2	-1	-1	-1	0	-2	-2	1	1	1	0
$\chi_{11}$	2	-1	2	-1	-1	0	2	-1	2	-1	-1	0	2	-1	2	-1	-1	0	2	-1	2	-1	-1	0
$\chi_{12}$	2	-1	2	-1	-1	0	-2	1	-2	1	1	0	2	-1	2	-1	-1	0	-2	1	-2	1	1	0
$\chi_{13}$	2	-1	-1	-1	2	0	-2	1	1	1	-2	0	2	-1	-1	-1	2	0	-2	1	1	1	-2	0
$\chi_{14}$	2	-1	-1	-1	2	0	2	-1	-1	-1	2	0	2	-1	-1	-1	2	0	2	-1	-1	-1	2	0
$\chi_{15}$	2	-1	-1	2	-1	0	-2	1	1	-2	1	0	2	-1	-1	2	-1	0	-2	1	1	-2	1	0
$\chi_{16}$	2	-1	-1	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1	2	-1	0
$\chi_{17}$	2	2	-1	-1	-1	0	-2 * E(4)	-2 * E(4)	E(4)	E(4)	E(4)	0	-2	-2	1	1	1	0	2 * E(4)	2 * E(4)	-E(4)	-E(4)	-E(4)	0
$\chi_{18}$	2	2	-1	-1	-1	0	2 * E(4)	2 * E(4)	-E(4)	-E(4)	-E(4)	0	-2	-2	1	1	1	0	-2 * E(4)	-2 * E(4)	E(4)	E(4)	E(4)	0
$\chi_{19}$	2	-1	2	-1	-1	0	-2 * E(4)	E(4)	-2 * E(4)	E(4)	E(4)	0	-2	1	-2	1	1	0	2 * E(4)	-E(4)	2 * E(4)	-E(4)	-E(4)	0
$\chi_{20}$	2	-1	2	-1	-1	0	2 * E(4)	-E(4)	2 * E(4)	-E(4)	-E(4)	0	-2	1	-2	1	1	0	-2 * E(4)	E(4)	-2 * E(4)	E(4)	E(4)	0
$\chi_{21}$	2	-1	-1	-1	2	0	-2 * E(4)	E(4)	E(4)	E(4)	-2*E(4)	0	-2	1	1	1	-2	0	2 * E(4)	-E(4)	-E(4)	-E(4)	2 * E(4)	0
$\chi_{22}$	2	-1	-1	-1	2	0	2 * E(4)	-E(4)	-E(4)	-E(4)	2 * E(4)	0	-2	1	1	1	-2	0	-2*E(4)	E(4)	E(4)	E(4)	-2*E(4)	0
$\chi_{23}$	2	-1	-1	2	-1	0	-2 * E(4)	E(4)	E(4)	-2*E(4)	E(4)	0	-2	1	1	-2	1	0	2 * E(4)	-E(4)	-E(4)	2 * E(4)	-E(4)	0
$\chi_{24}$	2	-1	-1	2	-1	0	2 * E(4)	-E(4)	-E(4)	2 * E(4)	-E(4)	0	-2	1	1	-2	1	0	-2*E(4)	E(4)	E(4)	-2 * E(4)	E(4)	0

Trivial source character table of  $G \cong (C3 \times C3)$ : C8 at p = 2:

Trivial source character table of $G = (C3 \times C3) : C8$ at $p = 2$ :				
Normalisers $N_i$	$N_1$	$N_2$	$N_3$	$N_4$
p-subgroups of $G$ up to conjugacy in $G$	$P_1$	$P_2$	$P_3$	$P_4$
Representatives $n_j \in N_i$	1a $3a$ $3b$ $3c$ $3d$	1a $3b$ $3a$ $3c$ $3d$	$\begin{vmatrix} 1a & 3b & 3a & 3c & 3 \end{vmatrix}$	$3d \mid 1a \mid$
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}$	8 8 8 8 8	0 0 0 0 0	0 0 0 0	0 0
$ \left  \ 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} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	8  -4  8  -4  -4	0  0  0  0  0	0 0 0 0	0 0
$ \begin{vmatrix} 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 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \end{vmatrix} $	8  8  -4  -4  -4	0  0  0  0	0 0 0 0	0 0
$ \left  \ 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} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 1 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	8  -4  -4  -4  8	0  0  0  0	0 0 0 0	0 0
$ \left  \ 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 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} \right  $	8  -4  -4  8  -4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0	0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}$	4 4 4 4 4	4 4 4 4 4	0 0 0 0	0 0
$ \left  \ 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 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	4   4   -2   -2   -2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0  0  0  0	0 0
$ \left  \ 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} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	4  -2  4  -2  -2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0	0 0
$ \left  \ 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} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	4  -2  -2  -2  4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0  0  0  0	0 0
$ \left  \ 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 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0 0	0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}$	2 2 2 2 2	2 2 2 2 2	2 2 2 2	2 0
$ \left  \ 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} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	2  2  -1  -1  -1	2  -1  2  -1  -1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$-1 \mid 0 \mid$
$ \left  \ 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} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $		2   2   -1   -1   -1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$-1 \mid 0 \mid$
$ \left  \ 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 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$-1 \mid 0 \mid$
$ \left  \ 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} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  $	2  -1  -1  -1  2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2  -1  -1  -1	$\begin{array}{c c} 2 & 0 \end{array}$
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}$	1 1 1 1 1	1 1 1 1 1	1 1 1 1	1 1
		-		

 $P_1 = Group([()]) \cong 1$ 

 $P_2 = Group([(1,5)(2,6)(3,7)(4,8)]) \cong C2$ 

 $P_3 = Group([(1,5)(2,6)(3,7)(4,8),(1,7,5,3)(2,8,6,4)]) \cong C4$ 

 $P_4 = Group([(1,5)(2,6)(3,7)(4,8),(1,7,5,3)(2,8,6,4),(1,4,7,2,5,8,3,6)(10,11)(13,14)]) \cong C8$ 

 $N_1 = Group([(1,4,7,2,5,8,3,6)(10,11)(13,14),(1,7,5,3)(2,8,6,4),(1,5)(2,6)(3,7)(4,8),(9,10,11),(12,13,14)]) \cong (\text{C3 x C3}): \text{C8}$ 

 $N_2 = Group([(1,4,7,2,5,8,3,6)(10,11)(13,14),(1,7,5,3)(2,8,6,4),(1,5)(2,6)(3,7)(4,8),(9,10,11),(12,13,14)]) \cong (\text{C3 x C3}): \text{C8}$ 

 $N_3 = Group([(1,4,7,2,5,8,3,6)(10,11)(13,14),(1,7,5,3)(2,8,6,4),(1,5)(2,6)(3,7)(4,8),(9,10,11),(12,13,14)]) \cong (\text{C3 x C3}): \text{C8}$ 

 $N_4 = Group([(1,6,3,8,5,2,7,4)(10,11)(13,14),(1,5)(2,6)(3,7)(4,8),(1,7,5,3)(2,8,6,4)]) \cong C8$