The group G is isomorphic to the group labelled by [72, 49] in the Small Groups library. Ordinary character table of  $G \cong C2 \times C2 \times ((C3 \times C3) : C2)$ :

	1a	$\overline{3a}$	$\overline{2a}$	3b	3c	3d	2b	$\overline{6a}$	2c	6b	6c	6d	2d	6e	2e	6f	$\overline{6g}$	6h	2f	6i	$\overline{2g}$	6j	6k	6l
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	$\frac{J}{1}$	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	1	-1	-1	1	-1	-1	-1	1	1	-1	1	1	1	-1	-1	1	-1	-1	-1
$\chi_4$	1	1	-1	1	1	1	1	1	-1	1	1	1	-1	-1	1	-1	-1	-1	-1	-1	1	-1	-1	-1
$\chi_5$	1	1	-1	1	1	1	1	1	-1	1	1	1	1	1	-1	1	1	1	1	1	-1	1	1	1
$\chi_6$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_7$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_8$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_9$	2	2	0	-1	-1	-1	-2	-2	0	1	1	1	-2	-2	0	1	1	1	2	2	0	-1	-1	-1
$\chi_{10}$	2	2	0	-1	-1	-1	-2	-2	0	1	1	1	2	2	0	-1	-1	-1	-2	-2	0	1	1	1
$\chi_{11}$	2	2	0	-1	-1	-1	2	2	0	-1	-1	-1	-2	-2	0	1	1	1	-2	-2	0	1	1	1
$\chi_{12}$	2	2	0	-1	-1	-1	2	2	0	-1	-1	-1	2	2	0	-1	-1	-1	2	2	0	-1	-1	-1
$\chi_{13}$	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1
$\chi_{14}$	2	-1	0	2	-1	-1	2	-1	0	2	-1	-1	-2	1	0	-2	1	1	-2	1	0	-2	1	1
$\chi_{15}$	2	-1	0	2	-1	-1	-2	1	0	-2	1	1	2	-1	0	2	-1	-1	-2	1	0	-2	1	1
$\chi_{16}$	2	-1	0	2	-1	-1	-2	1	0	-2	1	1	-2	1	0	-2	1	1	2	-1	0	2	-1	-1
$\chi_{17}$	2	-1	0	-1	-1	2	-2	1	0	1	1	-2	-2	1	0	1	1	-2	2	-1	0	-1	-1	2
$\chi_{18}$	2	-1	0	-1	-1	2	-2	1	0	1	1	-2	2	-1	0	-1	-1	2	-2	1	0	1	1	-2
$\chi_{19}$	2	-1	0	-1	-1	2	2	-1	0	-1	-1	2	-2	1	0	1	1	-2	-2	1	0	1	1	-2
$\chi_{20}$	2	-1	0	-1	-1	2	2	-1	0	-1	-1	2	2	-1	0	-1	-1	2	2	-1	0	-1	-1	2
$\chi_{21}$	2	-1	0	-1	2	-1	-2	1	0	1	-2	1	-2	1	0	1	-2	1	2	-1	0	-1	2	-1
$\chi_{22}$	2	-1	0	-1	2	-1	-2	1	0	1	-2	1	2	-1	0	-1	2	-1	-2	1	0	1	-2	1
$\chi_{23}$	2	-1	0	-1	2	-1	2	-1	0	-1	2	-1	-2	1	0	1	-2	1	-2	1	0	1	-2	1
$v_{24}$	1 2	-1	Ω	_1	2	-1	2	<b>—</b> 1	0	-1	2	-1	2	<b>—</b> 1	0	<b>—</b> 1	2	-1	2	<b>—</b> 1	0	<b>—</b> 1	2	-1

Trivial source character table of  $G \cong C2 \times C2 \times ((C3 \times C3) : C2)$  at p = 2:

Frivial source character table of $G \cong CZ \times CZ \times ((C3 \times C3) : CZ)$ at $p = 2$ :	27	27	37   37   37   3		27	27 27 27 27			77 77
Normalisers $N_i$	$N_1$	$N_2$	$N_3 \mid N_4 \mid N_5 $		$N_8$	$N_9 \mid N_{10} \mid N_{11} \mid N$			$N_{15}   N_{16}  $
p-subgroups of $G$ up to conjugacy in $G$	$P_1$	$P_2$	$P_3$ $P_4$ $P_5$ $P$	• •	$P_8$	$P_9 \mid P_{10} \mid P_{11} \mid P$	$P_{13}$		$P_{15}$ $P_{16}$
	a  3a  3b  3c  3d	1a  3a  3d  3c  3b	1a   1a   1a   1	$a \mid 1a  3a  3d  3c$	$3b \mid 1a  3a  3d  3c$	$3b \mid 1a \mid 1a \mid 1a \mid 1$	$a \mid 1a \mid 1a \mid 3$	3a  3d  3c  3b	$1a \mid 1a$
$ \left  \begin{array}{c} 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_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ 8 \cdot \left[ \begin{array}{c} 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_$	8 8 8 8 8	0 0 0 0 0			$0 \mid 0  0  0  0$	0 0 0 0 0	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	8  8  -4  -4  -4	0 0 0 0 0			$0 \mid 0  0  0  0$	0 0 0 0 0	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	3  -4  8  -4  -4	0 0 0 0 0			$0 \mid 0  0  0  0$	0 0 0 0 0	$t \mid 0 \mid 0$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	3  -4  -4  -4  8	0 0 0 0 0		0  0  0  0	$0 \mid 0  0  0  0$	0 0 0 0 0	$t \mid 0 \mid 0 \mid 0$	0 0 0 0	0   0
$\boxed{0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 1 \cdot \chi_{21} + 1 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24}}  8 \cdot \chi_{10} + \chi_{10}$	3  -4  -4  8  -4	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	t = 0 = 0	0 0 0 0	0 0
$\left  1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ = \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ = \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ = \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ = \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ = \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{1$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4  4  4  4  4		0  0  0  0	$0 \mid 0  0  0  0$		$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$		$0 \mid 0 \mid$
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	4  -2  -2  -2	4   4   -2   -2   -2		0  0  0  0	$0 \mid 0  0  0  0$		$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	0 0 0 0	$0 \mid 0 \mid$
70 70 70 70 70 70 70 70 70 70 70 70 70 7	-2 $-2$ $4$ $-2$	4  -2  -2  4  -2			$0 \mid 0  0  0  0$	0 0 0 0 0	$t \mid 0 \mid 0$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	-2 $-2$ $-2$ 4	4  -2  4  -2  -2			$0 \mid 0  0  0  0$	0 0 0 0 0	$t \mid 0 \mid 0$	0 0 0 0	0 0
$\boxed{0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}} \boxed{4}$	-2 4 $-2$ $-2$	4  -2  -2  -2  4	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	$\frac{1}{2}$ 0 0 $\frac{1}{2}$	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  4 \cdot \chi_{10} + \chi$	4 4 4 4	0 0 0 0 0	4 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  4 \cdot \chi_{11} + \chi_{12} + \chi_{13} + \chi_{14} + \chi_{15} + \chi_{15} + \chi_{16} + \chi_{17} + \chi_{18} + \chi_{19} + \chi$	4 4 4 4	0 0 0 0 0	0 4 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  4 \cdot \chi_{10} + \chi$	4 4 4 4	0 0 0 0 0	0 0 4 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0  0	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  4 \cdot \chi_{10} + \chi$	4 4 4 4	0 0 0 0 0	0 0 0 4	. 0 0 0 0	0  0  0  0  0	0 0 0 0	0  0	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \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} + 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 \cdot \chi_{10} + $	4 4 4 4	0 0 0 0 0	0 0 0 0	4 4 4 4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0	$\sqrt{000}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	4  -2  -2  -2	0 0 0 0 0	0 0 0 0	$\begin{vmatrix} 4 & 4 & -2 & -2 \end{vmatrix}$	$-2 \mid 0  0  0  0$	0 0 0 0 0	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	-2 $-2$ $-2$ 4	0 0 0 0 0		$\begin{vmatrix} 4 & -2 & 4 & -2 \end{vmatrix}$	$-2 \mid 0  0  0  0$	0 0 0 0 0	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	-2 4 $-2$ $-2$	0 0 0 0 0		$\begin{vmatrix} 4 & -2 & -2 & -2 \end{vmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0	$I \mid 0 \mid 0 \mid f$	0 0 0 0	0  0
$\boxed{0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24}}  4 \cdot \chi_{10} + \chi_{10}$	-2 $-2$ $4$ $-2$	0 0 0 0 0	0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$-2 \mid 0  0  0  0$	0 0 0 0	$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	0 0 0 0	0 0
$\left  1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ + \left  4 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ + \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ + \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right  \\ + \left  4 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{19} + 0 \cdot$	4 $4$ $4$ $4$	0 0 0 0 0			$0 \mid 4  4  4  4$	4   0   0   0   0	$I \mid 0 \mid 0$	0 0 0 0	0     0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	-2 $-2$ $-2$ 4	0 0 0 0 0			$0 \mid 4  -2  4  -2$	$-2 \mid 0 \mid 0 \mid 0 \mid 0$	$I \mid 0 \mid 0$	0 0 0 0	0 0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-2 $-2$ $4$ $-2$	0 0 0 0 0			$0 \mid 4  -2  -2  4$	$-2 \mid 0 \mid 0 \mid 0 \mid 0$	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	0 0 0 0	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	4  -2  -2  -2	0 0 0 0 0			$0 \mid 4  4  -2  -2$	$-2 \mid 0 \mid 0 \mid 0 \mid 0$	$I = \begin{bmatrix} 0 & 0 & t \end{bmatrix}$	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} + 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] $	-2 4 $-2$ $-2$	0 0 0 0 0	0 0 0 0	0 0 0 0	$0 \mid 4  -2  -2  -2$	4 0 0 0 0	$I = \begin{bmatrix} 0 & 0 & 0 \end{bmatrix}$	0 0 0 0	0 0
$ \left[ 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} + 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_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} \right] $	2 2 2 2	0 0 0 0 0	2 0 2 0	2 2 2 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2 0 0	t = 0 = 0	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  2}$	2 2 2 2	2 2 2 2 2	0 0 2 2		0  0  0  0  0	0 0 2 0 (	0  0	0 0 0 0	0  0
$ \left[ 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} \right] $	2 2 2 2	0 0 0 0 0	0 2 2 0	0 0 0 0	0  2  2  2  2	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\sqrt{000}$	0 0 0 0	0 0
$ \left[ 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 + 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} \right] $	2 2 2 2	2 2 2 2 2	2 2 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 2	$\frac{1}{2}$ 0 0 $^{\prime}$	0 0 0 0	0 0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24}}  2}$	2 2 2 2	0 0 0 0 0	2 0 0 2	0 0 0 0	0 2 2 2 2	2 0 0 0 0	$\int$ 2 0 '	0 0 0 0	0 0
$1 \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} + 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} + 0 \cdot \chi_{15} + 0 \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} + 0 \cdot \chi_{15} + 0 \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} + 0 \cdot $	2 2 2 2	2 2 2 2 2	0 0 0 0	2 2 2 2	2 2 2 2 2	2 0 0 0 0	0 2	2 2 2 2	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	2 -1 -1 -1 2	2  -1  2  -1  -1	0 0 0 0	$\begin{vmatrix} 2 & -1 & 2 & -1 \end{vmatrix}$	$-1 \mid 2  -1  2  -1$	$-1 \mid 0 \mid 0 \mid 0 \mid 0$	0 2 -	-1 2 $-1$ $-1$	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 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \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} \end{vmatrix} = 2 $	2  2  -1  -1  -1	2  2  -1  -1  -1	0 0 0 0	2  2  -1  -1	$-1 \mid 2  2  -1  -1$	$-1 \mid 0 \mid 0 \mid 0 \mid 0$	$oldsymbol{ec{}}$	$\begin{bmatrix} 2 & -1 & -1 & -1 \end{bmatrix}$	0 0
$\left  0 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24} \right  \\ = \left  0 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24} \right  \\ = \left  0 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{1} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi$	$\begin{bmatrix} -1 & -1 & 2 & -1 \end{bmatrix}$	2  -1  -1  2  -1	0 0 0 0	2 -1 -1 2	$-1 \mid 2  -1  -1  2$	$-1 \mid 0 \mid 0 \mid 0 \mid 0$	)   0   2 -	-1 $-1$ $2$ $-1$	0 0
$ \left  \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} -1 & 2 & -1 & -1 \end{bmatrix}$	2  -1  -1  -1  2	0 0 0 0	2 -1 -1 -1	$2 \mid 2 \mid -1 \mid -1 \mid -1$	$2 \mid 0 \mid 0 \mid 0 \mid 0$	) 0 2 -	-1 $-1$ $-1$ 2	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} + 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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{19} + 0 \cdot $	2 2 2 2	0 0 0 0 0	0 2 0 2	2 2 2 2	2 0 0 0 0	0 0 0 0	0 0 0	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} + 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} + 0 \cdot \chi_{10} + 0 \cdot $			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 1	1 1
	<u> </u>				•				

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

 $P_2 = Group([(3,4)]) \cong C2$ 

 $P_3 = Group([(6,7)(9,10)]) \cong C2$ 

 $P_4 = Group([(3,4)(6,7)(9,10)]) \cong C2$ 

 $P_5 = Group([(1,2)(6,7)(9,10)]) \cong C2$ 

 $P_6 = Group([(1,2)(3,4)(6,7)(9,10)]) \cong C2$ 

 $P_7 = Group([(1,2)]) \cong C2$ 

 $P_8 = Group([(1,2)(3,4)]) \cong C2$ 

 $P_9 = Group([(6,7)(9,10), (1,2)(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{10} = Group([(3,4),(1,2)(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{11} = Group([(3,4)(6,7)(9,10),(1,2)(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{12} = Group([(3,4),(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{13} = Group([(6,7)(9,10),(1,2)(3,4)(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{14} = Group([(3,4),(1,2)]) \cong C2 \times C2$ 

 $P_{15} = Group([(3,4)(6,7)(9,10),(1,2)(3,4)(6,7)(9,10)]) \cong C2 \times C2$ 

 $P_{16} = Group([(3,4),(6,7)(9,10),(1,2)(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_1 = Group([(1,2)(6,7)(9,10),(1,2),(3,4),(5,6,7)(8,10,9),(5,6,7)(8,9,10)]) \cong C2 \times C2 \times ((C3 \times C3) : C2)$ 

 $N_2 = Group([(1,2)(6,7)(9,10),(1,2),(3,4),(5,6,7)(8,10,9),(5,6,7)(8,9,10)]) \cong C2 \times C2 \times ((C3 \times C3) : C2)$ 

 $N_3 = Group([(6,7)(9,10),(3,4),(1,2),(1,2)(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_4 = Group([(3,4)(6,7)(9,10), (6,7)(9,10), (3,4), (1,2), (1,2)(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_5 = Group([(1,2)(6,7)(9,10), (6,7)(9,10), (3,4), (1,2)]) \cong C2 \times C2 \times C2$ 

 $N_7 = Group([(1,2)(6,7)(9,10),(1,2),(3,4),(5,6,7)(8,10,9),(5,6,7)(8,9,10)]) \cong C2 \times C2 \times ((C3 \times C3) : C2)$ 

 $N_8 = Group([(1,2)(6,7)(9,10),(1,2),(3,4),(5,6,7)(8,10,9),(5,6,7)(8,9,10)]) \cong C2 \times C2 \times ((C3 \times C3) : C2)$ 

 $N_9 = Group([(1,2), (6,7)(9,10), (3,4)(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_{10} = Group([(1,2)(6,7)(9,10),(3,4),(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_{11} = Group([(1,2)(6,7)(9,10),(3,4)(6,7)(9,10),(3,4)]) \cong C2 \times C2 \times C2$ 

 $N_{12} = Group([(6,7)(9,10),(3,4),(1,2)(6,7)(9,10)]) \cong C2 \times C2 \times C2$ 

 $N_{13} = Group([(1,2)(3,4),(6,7)(9,10),(3,4)(6,7)(9,10)]) \cong C2 \times C2 \times C2$  $N_{14} = Group([(1,2)(6,7)(9,10),(1,2),(3,4),(5,6,7)(8,10,9),(5,6,7)(8,9,10)]) \cong C2 \times C2 \times ((C3 \times C3) : C2)$ 

 $N_{15} = Group([(1, 2), (3, 4)(6, 7)(9, 10), (3, 4)]) \cong C2 \times C2 \times C2$ 

 $N_{16} = Group([(1,2),(6,7)(9,10),(3,4)]) \cong C2 \times C2 \times C2$