

The group  $G$  is isomorphic to the group labelled by [ 72, 34 ] in the Small Groups library.  
Ordinary character table of  $G \cong C2 \times ((C3 \times C3) : C4)$ :

	1a	3a	3b	3c	3d	2a	6a	6b	6c	6d	4a	4b	2b	6e	6f	6g	6h	2c	6i	6j	6k	6l	4c	4d
X1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
X2	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1
X3	1	1	1	1	1	-1	-1	-1	-1	-1	1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	-1
X4	1	1	1	1	1	1	1	1	1	1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1
X5	1	1	1	1	1	-1	-1	-1	-1	-1	$-E(4)$	$E(4)$	-1	-1	-1	-1	-1	1	1	1	1	1	$E(4)$	$-E(4)$
X6	1	1	1	1	1	-1	-1	-1	-1	-1	$E(4)$	$-E(4)$	-1	-1	-1	-1	-1	1	1	1	1	1	$-E(4)$	$E(4)$
X7	1	1	1	1	1	1	1	1	1	1	$-E(4)$	$-E(4)$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	$E(4)$	$E(4)$
X8	1	1	1	1	1	1	1	1	1	1	$E(4)$	$E(4)$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	$-E(4)$	$-E(4)$
X9	2	2	-1	-1	-1	-2	-2	1	1	1	0	0	-2	-2	1	1	1	2	2	-1	-1	-1	0	0
X10	2	2	-1	-1	-1	-2	-2	1	1	1	0	0	2	2	-1	-1	-1	-2	-2	1	1	1	0	0
X11	2	2	-1	-1	-1	2	2	-1	-1	-1	0	0	-2	-2	1	1	1	-2	-2	1	1	1	0	0
X12	2	2	-1	-1	-1	2	2	-1	-1	-1	0	0	2	2	-1	-1	-1	2	2	-1	-1	-1	0	0
X13	2	-1	2	-1	-1	2	-1	2	-1	-1	0	0	2	-1	2	-1	-1	2	-1	2	-1	-1	0	0
X14	2	-1	2	-1	-1	2	-1	2	-1	-1	0	0	-2	1	-2	1	1	-2	1	-2	1	1	0	0
X15	2	-1	2	-1	-1	-2	1	-2	1	1	0	0	2	-1	2	-1	-1	-2	1	-2	1	1	0	0
X16	2	-1	2	-1	-1	-2	1	-2	1	1	0	0	-2	1	-2	1	1	2	-1	2	-1	-1	0	0
X17	2	-1	-1	-1	2	-2	1	1	1	-2	0	0	-2	1	1	1	-2	2	-1	-1	-1	2	0	0
X18	2	-1	-1	-1	2	-2	1	1	1	-2	0	0	2	-1	-1	-1	2	-2	1	1	1	-2	0	0
X19	2	-1	-1	-1	2	2	-1	-1	-1	2	0	0	-2	1	1	1	-2	-2	1	1	1	-2	0	0
X20	2	-1	-1	-1	2	2	-1	-1	-1	2	0	0	2	-1	-1	-1	2	2	-1	-1	-1	2	0	0
X21	2	-1	-1	2	-1	-2	1	1	-2	1	0	0	-2	1	1	-2	1	2	-1	-1	2	-1	0	0
X22	2	-1	-1	2	-1	-2	1	1	-2	1	0	0	2	-1	-1	2	-1	-2	1	1	-2	1	0	0
X23	2	-1	-1	2	-1	2	-1	-1	2	-1	0	0	-2	1	1	-2	1	-2	1	1	-2	1	0	0
X24	2	-1	-1	2	-1	2	-1	-1	2	-1	0	0	2	-1	-1	2	-1	2	-1	-1	2	-1	0	0

Trivial source character table of  $G \cong \text{C2} \times ((\text{C3} \times \text{C3}) : \text{C4})$  at  $p = 2$ :

[illegible]
$$\begin{aligned} P_1 &= \text{Group}([\{\}]) \cong 1 \\ P_2 &= \text{Group}([\{1, 3\}, \{2, 4\}]) \cong C2 \\ P_3 &= \text{Group}([\{5, 6\}]) \cong C2 \\ P_4 &= \text{Group}([\{1, 3\}, \{2, 4\}, \{5, 6\}]) \cong C2 \\ P_5 &= \text{Group}([\{1, 3\}, \{2, 4\}, \{5, 6\}]) \cong C2 \times C2 \\ P_6 &= \text{Group}([\{1, 3\}, \{2, 4\}, \{1, 2, 3, 4\}, \{5, 6\}, \{8, 9\}, \{11, 12\}]) \cong C4 \\ P_7 &= \text{Group}([\{1, 3\}, \{2, 4\}, \{1, 2, 3, 4\}, \{8, 9\}, \{11, 12\}]) \cong C4 \\ P_8 &= \text{Group}([\{1, 3\}, \{2, 4\}, \{5, 6\}, \{1, 2, 3, 4\}, \{5, 6\}, \{8, 9\}, \{11, 12\}]) \cong C4 \times C2 \end{aligned}$$
$$\begin{aligned}
N_1 &= Group[(1, 2, 3, 4)(5, 6)(8, 9)(11, 12), (1, 3)(2, 4)(5, 6), (1, 3)(2, 4), (7, 9, 8)(10, 11, 12), (7, 8, 9)] \cong C2 \times ((C3 \times C3) : C4) \\
N_2 &= Group[(1, 2, 3, 4)(5, 6)(8, 9)(11, 12), (1, 3)(2, 4)(5, 6), (1, 3)(2, 4), (7, 9, 8)(10, 11, 12), (7, 8, 9)] \cong C2 \times ((C3 \times C3) : C4) \\
N_3 &= Group[(1, 2, 3, 4)(5, 6)(8, 9)(11, 12), (1, 3)(2, 4)(5, 6), (1, 3)(2, 4), (7, 9, 8)(10, 11, 12), (7, 8, 9)] \cong C2 \times (C3 \times C3) : C4 \\
N_4 &= Group[(1, 2, 3, 4)(5, 6)(8, 9)(11, 12), (1, 3)(2, 4)(5, 6), (1, 3)(2, 4), (7, 9, 8)(10, 11, 12), (7, 8, 9)] \cong C2 \times ((C3 \times C3) : C4) \\
N_5 &= Group[(1, 2, 3, 4)(5, 6)(8, 9)(11, 12), (1, 3)(2, 4)(5, 6), (1, 3)(2, 4), (7, 9, 8)(10, 11, 12), (7, 8, 9)] \cong C2 \times ((C3 \times C3) : C4) \\
N_6 &= Group[(1, 4, 3, 2)(5, 6)(8, 9)(11, 12), (1, 4, 3, 2)(8, 9)(11, 12), (1, 3)(2, 4)] \cong C4 \times C2 \\
N_7 &= Group[(1, 4, 3, 2)(5, 6)(8, 9)(11, 12), (5, 6), (1, 3)(2, 4)] \cong C4 \times C2 \\
N_8 &= Group[(1, 4, 3, 2)(5, 6)(8, 9)(11, 12), (5, 6), (1, 3)(2, 4)] \cong C4 \times C2
\end{aligned}$$