

The group  $G$  is isomorphic to the group labelled by [ 72, 39 ] in the Small Groups library.

Ordinary character table of  $G \cong (\text{C3} \times \text{C3}) : \text{C8}$ :

	$1a$	$8a$	$2a$	$8b$	$8c$	$4a$	$4b$	$8d$	$3a$
$\chi_1$	1	1	1	1	1	1	1	1	1
$\chi_2$	1	-1	1	-1	-1	1	1	-1	1
$\chi_3$	1	$-E(4)$	1	$E(4)$	$-E(4)$	-1	-1	$E(4)$	1
$\chi_4$	1	$E(4)$	1	$-E(4)$	$E(4)$	-1	-1	$-E(4)$	1
$\chi_5$	1	$-E(8)$	-1	$E(8)^3$	$E(8)$	$-E(4)$	$E(4)$	$-E(8)^3$	1
$\chi_6$	1	$-E(8)^3$	-1	$E(8)$	$E(8)^3$	$E(4)$	$-E(4)$	$-E(8)$	1
$\chi_7$	1	$E(8)^3$	-1	$-E(8)$	$-E(8)^3$	$E(4)$	$-E(4)$	$E(8)$	1
$\chi_8$	1	$E(8)$	-1	$-E(8)^3$	$-E(8)$	$-E(4)$	$E(4)$	$E(8)^3$	1
$\chi_9$	8	0	0	0	0	0	0	0	-1

Trivial source character table of  $G \cong (\text{C3} \times \text{C3}) : \text{C8}$  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 $n_j \in N_i$	$1a$	$3a$	$1a$	$1a$	$1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	8	8	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	8	-1	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	4	4	4	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1

$$P_1 = \text{Group}([(())]) \cong 1$$

$$P_2 = \text{Group}([(2, 4)(3, 6)(5, 9)(7, 8)]) \cong \text{C2}$$

$$P_3 = \text{Group}([(2, 4)(3, 6)(5, 9)(7, 8), (2, 8, 4, 7)(3, 9, 6, 5)]) \cong \text{C4}$$

$$P_4 = \text{Group}([(2, 4)(3, 6)(5, 9)(7, 8), (2, 8, 4, 7)(3, 9, 6, 5), (2, 3, 8, 9, 4, 6, 7, 5)]) \cong \text{C8}$$

$$N_1 = \text{Group}([(2, 3, 8, 9, 4, 6, 7, 5), (2, 8, 4, 7)(3, 9, 6, 5), (2, 4)(3, 6)(5, 9)(7, 8), (1, 2, 4)(3, 5, 7)(6, 8, 9), (1, 3, 6)(2, 5, 8)(4, 7, 9)]) \cong (\text{C3} \times \text{C3}) : \text{C8}$$

$$N_2 = \text{Group}([(2, 4)(3, 6)(5, 9)(7, 8), (2, 3, 8, 9, 4, 6, 7, 5), (2, 8, 4, 7)(3, 9, 6, 5)]) \cong \text{C8}$$

$$N_3 = \text{Group}([(2, 8, 4, 7)(3, 9, 6, 5), (2, 4)(3, 6)(5, 9)(7, 8), (2, 3, 8, 9, 4, 6, 7, 5)]) \cong \text{C8}$$

$$N_4 = \text{Group}([(2, 3, 8, 9, 4, 6, 7, 5), (2, 8, 4, 7)(3, 9, 6, 5), (2, 4)(3, 6)(5, 9)(7, 8)]) \cong \text{C8}$$