

The group  $G$  is isomorphic to the group labelled by [ 12, 3 ] in the Small Groups library.  
 Ordinary character table of  $G \cong A_4$ :

	1a	2a	3a	3b
$\chi_1$	1	1	1	1
$\chi_2$	1	1	$E(3)$	$E(3)^2$
$\chi_3$	1	1	$E(3)^2$	$E(3)$
$\chi_4$	3	-1	0	0

Trivial source character table of  $G \cong A_4$  at  $p = 2$ :

Normalisers $N_i$	$N_1$			$N_2$			$N_3$		
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$			$P_2$			$P_3$		
Representatives $n_j \in N_i$	1a	3a	3b	1a	1a	3a	3b	1a	3a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4$	4	1	1	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4$	4	$E(3)$	$E(3)^2$	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4$	4	$E(3)^2$	$E(3)$	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4$	6	0	0	2	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4$	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4$	1	$E(3)$	$E(3)^2$	1	1	$E(3)$	$E(3)^2$	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4$	1	$E(3)^2$	$E(3)$	1	1	$E(3)^2$	$E(3)$	1	1

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

$$P_2 = \text{Group}([(1, 3)(2, 6)(4, 8)(5, 9)(7, 11)(10, 12)]) \cong C_2$$

$$P_3 = \text{Group}([(1, 3)(2, 6)(4, 8)(5, 9)(7, 11)(10, 12), (1, 8)(2, 11)(3, 4)(5, 12)(6, 7)(9, 10)]) \cong C_2 \times C_2$$

$$N_1 = \text{Group}([(1, 2, 5)(3, 7, 12)(4, 11, 9)(6, 10, 8), (1, 3)(2, 6)(4, 8)(5, 9)(7, 11)(10, 12), (1, 4)(2, 7)(3, 8)(5, 10)(6, 11)(9, 12)]) \cong A_4$$

$$N_2 = \text{Group}([(1, 3)(2, 6)(4, 8)(5, 9)(7, 11)(10, 12), (1, 8)(2, 11)(3, 4)(5, 12)(6, 7)(9, 10)]) \cong C_2 \times C_2$$

$$N_3 = \text{Group}([(1, 8)(2, 11)(3, 4)(5, 12)(6, 7)(9, 10), (1, 3)(2, 6)(4, 8)(5, 9)(7, 11)(10, 12), (1, 2, 5)(3, 7, 12)(4, 11, 9)(6, 10, 8)]) \cong A_4$$