

The group G is isomorphic to the group labelled by [360, 118] in the Small Groups library.

Ordinary character table of $G \cong A6$:

	1a	2a	3a	3b	4a	5a	5b
χ_1	1	1	1	1	1	1	1
χ_2	5	1	2	-1	-1	0	0
χ_3	5	1	-1	2	-1	0	0
χ_4	8	0	-1	-1	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$
χ_5	8	0	-1	-1	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$
χ_6	9	1	0	0	1	-1	-1
χ_7	10	-2	1	1	0	0	0

Trivial source character table of $G \cong A6$ at $p = 3$:

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	2a	5a		5b	4a	1a	2a	1a	2a	1a	4a	2a	4b
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	27	3	2		2	-1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	18	-2	$-E(5) - E(5)^4$		$-E(5)^2 - E(5)^3$	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	18	-2	$-E(5)^2 - E(5)^3$		$-E(5) - E(5)^4$	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	36	0	1		1	-2	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	9	1	-1		-1	1	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	6	2	1		1	0	3	1	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	15	-1	0		0	-1	3	-1	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	6	2	1		1	0	0	0	3	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	15	-1	0		0	-1	0	0	3	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	1	1		1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	10	2	0		0	-2	1	1	1	1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	10	-2	0		0	0	1	-1	1	-1	1	$E(4)$	-1	$-E(4)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7$	10	-2	0		0	0	1	-1	1	-1	1	$-E(4)$	-1	$E(4)$

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

$$P_2 = \text{Group}([(3, 5, 6)]) \cong C3$$

$$P_3 = \text{Group}([(1, 2, 4)(3, 6, 5)]) \cong C3$$

$$P_4 = \text{Group}([(3, 5, 6), (1, 2, 4)(3, 6, 5)]) \cong C3 \times C3$$

$$N_1 = \text{AlternatingGroup}([1..6]) \cong A6$$

$$N_2 = \text{Group}([(1, 2, 4), (3, 5, 6), (1, 2)(5, 6)]) \cong (C3 \times C3) : C2$$

$$N_3 = \text{Group}([(1, 2, 4)(3, 6, 5), (3, 6, 5), (2, 4)(3, 5)]) \cong (C3 \times C3) : C2$$

$$N_4 = \text{Group}([(1, 2, 4), (3, 5, 6), (2, 4)(3, 6), (1, 3, 4, 6)(2, 5)]) \cong (C3 \times C3) : C4$$