

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 $p = 2$:

Normalisers N_i	N_1					N_2	N_3		N_4		N_5	N_6
p -subgroups of G up to conjugacy in G	P_1					P_2	P_3		P_4		P_5	P_6
Representatives $n_j \in N_i$	1a	3a	5a	5b	3b	1a	1a	3a	1a	3a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 2 \cdot \chi_7$	40	4	0	0	4	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	24	3	-1	-1	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7$	24	0	-1	-1	3	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	8	-1	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	-1	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	8	-1	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	-1	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	20	2	0	0	2	4	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	0	1	1	3	2	2	2	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	14	2	-1	-1	-1	2	2	-1	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	3	1	1	0	2	0	0	2	2	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	14	-1	-1	-1	2	2	0	0	2	-1	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7$	10	1	0	0	1	2	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7$	1	1	1	1	1	1	1	1	1	1	1	1

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

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

$$P_3 = \text{Group}([(1, 6)(3, 5), (2, 4)(3, 5)]) \cong C2 \times C2$$

$$P_4 = \text{Group}([(1, 5)(3, 6), (1, 6)(3, 5)]) \cong C2 \times C2$$

$$P_5 = \text{Group}([(1, 3, 6, 5)(2, 4), (1, 6)(3, 5)]) \cong C4$$

$$P_6 = \text{Group}([(1, 6)(3, 5), (2, 4)(3, 5), (1, 5)(3, 6)]) \cong D8$$

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

$$N_2 = \text{Group}([(1, 6)(3, 5), (2, 4)(3, 5), (1, 6)(2, 5, 4, 3)]) \cong D8$$

$$N_3 = \text{Group}([(2, 4)(3, 5), (1, 6)(3, 5), (2, 5)(3, 4), (1, 2, 5)(3, 6, 4)]) \cong S4$$

$$N_4 = \text{Group}([(3, 6, 5), (1, 5)(2, 4)]) \cong S4$$

$$N_5 = \text{Group}([(1, 6)(3, 5), (1, 5, 6, 3)(2, 4), (2, 4)(3, 5)]) \cong D8$$

$$N_6 = \text{Group}([(2, 4)(3, 5), (1, 6)(3, 5), (1, 3, 6, 5)(2, 4)]) \cong D8$$