

Character Tables of Multiplicity-Free Endomorphism Rings

$G = J_3.2$ (no. 2)

$H = 3^2.3^{1+2} : 8.2$

rank: 15

degree: 25840

	O_1	O_2	O_3	O_4	O_5
$1a^+$	1	81	243	243	972
$324a^+$	1	21	-17	63	-78
$1140a^+$	1	21	3	-5	46
$1215a^+$	1	8+r17	22-3r17	13-2r17	-12-8r17
$1215a^-$	1	4-3r17	3+2r17	-22+3r17	12+8r17
$1215b^+$	1	8-r17	22+3r17	13+2r17	-12+8r17
$1215b^-$	1	4+3r17	3-2r17	-22-3r17	12-8r17
$1615a^+$	1	9	-3	13	4
$1920a^+$	1	-3-2y9-y9*2	6-4y9-14y9*2	1-3y9+9y9*2	10-22y9-8y9*2
$1920b^+$	1	-3+y9+2y9*2	6-10y9+4y9*2	1+12y9+3y9*2	10+14y9+22y9*2
$1920c^+$	1	-3+y9-y9*2	6+14y9+10y9*2	1-9y9-12y9*2	10+8y9-14y9*2
$1938ab$	1	3	-15	-5	-8
$2432a^+$	1	-9	-12	13	22
$2754a^+$	1	-7	-15	-15	12
$3078a^+$	1	-9	13	3	-48

	O_6	O_7	O_8	O_9
$1a^+$	972	1944	1944	1944
$324a^+$	22	164	-16	44
$1140a^+$	42	-44	-64	-28
$1215a^+$	8+4r17	-60-12r17	-20+12r17	16+8r17
$1215a^-$	8-4r17	-10-10r17	72+8r17	-28+12r17
$1215b^+$	8-4r17	-60+12r17	-20-12r17	16-8r17
$1215b^-$	8+4r17	-10+10r17	72-8r17	-28-12r17
$1615a^+$	-12	28	32	80
$1920a^+$	27y9+12y9*2	40+6y9-12y9*2	14+10y9+8y9*2	-34+3y9-27y9*2
$1920b^+$	-15y9-27y9*2	40-18y9-6y9*2	14-2y9-10y9*2	-34-30y9-3y9*2
$1920c^+$	-12y9+15y9*2	40+12y9+18y9*2	14-8y9+2y9*2	-34+27y9+30y9*2
$1938ab$	-48	-8	8	8
$2432a^+$	42	-26	14	-1
$2754a^+$	12	12	-72	48
$3078a^+$	-8	-16	-16	-16

	O_{10}	O_{11}	O_{12}
$1a^+$	1944	1944	1944
$324a^+$	24	-16	164
$1140a^+$	40	96	12
$1215a^+$	24	-64-8r17	-16+8r17
$1215a^-$	-28+12r17	-6+2r17	46+6r17
$1215b^+$	24	-64+8r17	-16-8r17
$1215b^-$	-28-12r17	-6-2r17	46-6r17
$1615a^+$	-80	12	-60
$1920a^+$	$19+34y9+20y9^*2$	$-30+7y9-4y9^*2$	$-12-30y9-3y9^*2$
$1920b^+$	$19-14y9-34y9^*2$	$-30-11y9-7y9^*2$	$-12+27y9+30y9^*2$
$1920c^+$	$19-20y9+14y9^*2$	$-30+4y9+11y9^*2$	$-12+3y9-27y9^*2$
$1938ab$	40	24	-24
$2432a^+$	-44	21	-33
$2754a^+$	0	-36	36
$3078a^+$	-24	56	32

	O_{13}	O_{14}	O_{15}
$1a^+$	3888	3888	3888
$324a^+$	-232	-152	8
$1140a^+$	-24	8	-104
$1215a^+$	24-8r17	-8+24r17	64-16r17
$1215a^-$	10-6r17	-94-14r17	32-16r17
$1215b^+$	24+8r17	-8-24r17	64+16r17
$1215b^-$	10+6r17	-94+14r17	32+16r17
$1615a^+$	84	-28	-80
$1920a^+$	$-6+18y9+54y9^*2$	$38-36y9-24y9^*2$	$-44-8y9-10y9^*2$
$1920b^+$	$-6+36y9-18y9^*2$	$38+12y9+36y9^*2$	$-44-2y9+8y9^*2$
$1920c^+$	$-6-54y9-36y9^*2$	$38+24y9-12y9^*2$	$-44+10y9+2y9^*2$
$1938ab$	-24	8	40
$2432a^+$	-78	26	64
$2754a^+$	36	-12	0
$3078a^+$	32	16	-16

$r17 = Sqrt(17)$

$y9 = z9 + z9^8$

References

- [Höh01] I. Höhler. Vielfachheitsfreie Permutationsdarstellungen und die Invarianten zugehöriger Graphen. Examensarbeit, RWTH Aachen, 2001.