

# $Co_3 \pmod{23}$

	blocks	defect	matrix
$G :$	1	1	$13 \times 11$
	2	0	$23_1 = \chi_2, \varphi_2$
	3	0	$253_1 = \chi_3, \varphi_3$
	4	0	$253_2 = \chi_4, \varphi_4$
	5	0	$1771_1 = \chi_8, \varphi_8$
	6	0	$2024_1 = \chi_9, \varphi_9$
	7	0	$4025_1 = \chi_{12}, \varphi_{12}$
	8	0	$7084_1 = \chi_{14}, \varphi_{14}$
	9	0	$8855_1 = \chi_{15}, \varphi_{15}$
	10	0	$20608_1 = \chi_{18}, \varphi_{17}$
	$11 = \overline{10}$	0	$20608_2 = \chi_{19}, \varphi_{18}$
	12	0	$23000_1 = \chi_{20}, \varphi_{19}$
	13	0	$26082_1 = \chi_{21}, \varphi_{20}$
	14	0	$31625_1 = \chi_{22}, \varphi_{21}$
	15	0	$31625_2 = \chi_{23}, \varphi_{22}$
	16	0	$31625_3 = \chi_{24}, \varphi_{23}$
	17	0	$31878_1 = \chi_{25}, \varphi_{24}$
	18	0	$40250_1 = \chi_{26}, \varphi_{25}$
	19	0	$57960_1 = \chi_{27}, \varphi_{26}$
	20	0	$63250_1 = \chi_{28}, \varphi_{27}$
	21	0	$73600_1 = \chi_{29}, \varphi_{28}$
	22	0	$80960_1 = \chi_{30}, \varphi_{29}$
	23	0	$129536_1 = \chi_{33}, \varphi_{32}$
	24	0	$129536_2 = \chi_{34}, \varphi_{33}$
	25	0	$177100_1 = \chi_{35}, \varphi_{34}$
	26	0	$184437_1 = \chi_{36}, \varphi_{35}$
	27	0	$221375_1 = \chi_{37}, \varphi_{36}$
	28	0	$226688_1 = \chi_{38}, \varphi_{37}$
	29	0	$253000_1 = \chi_{41}, \varphi_{39}$
	30	0	$255024_1 = \chi_{42}, \varphi_{40}$

<b>Block 1:</b>	$\varphi_1$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{13}$	$\varphi_{16}$	$\varphi_{30}$	$\varphi_{31}$	$\varphi_{38}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.
$275_1 = \chi_5$	1	1	.	.	.	.	.	.	.	.	.
$896_1 = \chi_6$	.	.	1	.	.	.	.	.	.	.	.
$896_2 = \chi_7$	.	.	.	1	.	.	.	.	.	.	.
$3520_1 = \chi_{10}$	.	.	.	.	1	.	.	.	.	.	.
$3520_2 = \chi_{11}$	.	.	.	.	.	1	.	.	.	.	.
$5544_1 = \chi_{13}$	.	1	.	.	.	.	1	.	.	.	.
$9625_1 = \chi_{16}$	.	.	.	.	.	.	.	1	.	.	.
$9625_2 = \chi_{17}$	.	.	.	.	.	.	.	1	.	.	.
$91125_1 = \chi_{31}$	.	.	.	.	.	.	1	.	.	1	.
$93312_1 = \chi_{32}$	.	.	.	.	.	.	.	1	1	.	.
$246400_1 = \chi_{39}$	.	.	1	1	.	.	.	.	.	1	1
$249480_1 = \chi_{40}$	.	.	.	.	1	1	.	.	1	.	1

$$\begin{array}{ll}
\varphi_1 = 1_1 & \varphi_{13} = 5270_1 \\
\varphi_5 = 274_1 & \varphi_{16} = 9625_1 \\
\varphi_6 = 896_1 & \varphi_{30} = 83687_1 \\
\varphi_7 = 896_2 & \varphi_{31} = 85855_1 \\
\varphi_{10} = 3520_1 & \varphi_{38} = 158753_1 \\
\varphi_{11} = 3520_2 &
\end{array}$$