

$${}^2F_4(2)'.2 \pmod{3}$$

	blocks	defect	matrix
$G :$	1	3	14×9
	2	0	$27_1 = \chi_{4,0}, \varphi_{4,0}$
	3	0	$27_2 = \chi_{4,1}, \varphi_{4,1}$
	$4 = \overline{2}$	0	$27_3 = \chi_{5,0}, \varphi_{5,0}$
	$5 = \overline{3}$	0	$27_4 = \chi_{5,1}, \varphi_{5,1}$
	6	0	$351_1 = \chi_{9,0}, \varphi_{9,0}$
	7	0	$351_2 = \chi_{9,1}, \varphi_{9,1}$
	8	0	$351_3 = \chi_{10,0}, \varphi_{10,0}$

	blocks	defect	matrix
	9	0	$351_4 = \chi_{10,1}, \varphi_{10,1}$
	$10 = \overline{8}$	0	$351_5 = \chi_{11,0}, \varphi_{11,0}$
	$11 = \overline{9}$	0	$351_6 = \chi_{11,1}, \varphi_{11,1}$
	12	0	$675_1 = \chi_{15,0}, \varphi_{13,0}$
	13	0	$675_2 = \chi_{15,1}, \varphi_{13,1}$
	14	0	$1404_1 = \chi_{16+}, \varphi_{14+}$
	15	0	$1728_1 = \chi_{20,0}, \varphi_{18,0}$
	$16 = \overline{15}$	0	$1728_2 = \chi_{20,1}, \varphi_{18,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	φ_{2+}	$\varphi_{6,0}$	$\varphi_{6,1}$	φ_{7+}	$\varphi_{12,0}$	$\varphi_{12,1}$	φ_{16+}
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.
$52_1 = \chi_{2+}$	.	.	1	.	.	.	.	.	.
$78_1 = \chi_{6,0}$	1	.	.	1	.	.	.	.	.
$78_2 = \chi_{6,1}$	.	1	.	.	1	.	.	.	.
$300_1 = \chi_{7,0}$	.	.	1	.	.	1	.	.	.
$300_2 = \chi_{7,1}$	.	.	1	.	.	1	.	.	.
$325_1 = \chi_{8,0}$	.	.	.	1	.	1	.	.	.
$325_2 = \chi_{8,1}$	.	.	.	.	1	1	.	.	.
$1248_1 = \chi_{12+}$	.	.	2	.	.	.	1	1	.
$650_1 = \chi_{14,0}$	1	.	.	1	.	.	1	.	.
$650_2 = \chi_{14,1}$	.	1	.	.	1	.	.	1	.
$2600_1 = \chi_{18+}$	.	.	.	1	1	1	.	.	1
$4096_1 = \chi_{21+}$	.	.	2	1	1	2	1	1	1

$$\begin{array}{ll}
\varphi_{1,0} &= 1_1 \\
\varphi_{1,1} &= 1_2 \\
\varphi_{2+} &= 52_1 \\
\varphi_{6,0} &= 77_1 \\
\varphi_{6,1} &= 77_2
\end{array}
\qquad
\begin{array}{ll}
\varphi_{7+} &= 248_1 \\
\varphi_{12,0} &= 572_1 \\
\varphi_{12,1} &= 572_2 \\
\varphi_{16+} &= 2198_1
\end{array}$$