$S_6\pmod 3$

	blocks	defect	matrix
3.G:	1 2	3 1	$\begin{array}{c} 13 \times 5 \\ 3 \times 2 \end{array}$
6.G:	3	3	10×2

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	φ_{2+}	$\varphi_{4,0}$	$\varphi_{4,1}$
$1_1 = \chi_{1,0}$	1				
$1_2 = \chi_{1,1}$		1			
$5_1 = \chi_{2,0}$	1			1	
$5_2 = \chi_{2,1}$		1			1
$5_3 = \chi_{3,0}$	1				1
$5_4 = \chi_{3,1}$		1		1	
$16_1 = \chi_{4+}$	1	1	1	1	1
$10_1 = \chi_{7,0}$			1	1	
$10_2 = \chi_{7,1}$		٠	1	•	1
$6_1 = \chi_{14+}$			1		
$6_2 = \chi_{15+}$			1		
$12_1 = \chi_{16+}$	2	2		1	1
$30_1 = \chi_{18+}$	1	1	2	2	2

$$\begin{array}{rcl} \varphi_{1,0} & = & 1_1 \\ \varphi_{1,1} & = & 1_2 \\ \varphi_{2+} & = & 6_1 \\ \varphi_{4,0} & = & 4_1 \\ \varphi_{4,1} & = & 4_2 \end{array}$$

Block 2_1 , 2_2 :	$\varphi_{5,0}$	$arphi_{5,1}$
$9_1 = \chi_{6,0}$	1	,
$9_2 = \chi_{6,1}$		1
$18_1 = \chi_{17+}$	1	1

$$\begin{array}{rcl} \varphi_{5,0} & = & 9_1 \\ \varphi_{5,1} & = & 9_2 \end{array}$$

Block 3:	φ_{6+}	φ_{8+}
$4_{1} = \chi_{8,0}$ $4_{2} = \chi_{8,1}$ $4_{3} = \chi_{9,0}$ $4_{4} = \chi_{9,1}$ $16_{2} = \chi_{10+}$ $20_{1} = \chi_{12+}$	1 1 1 1 1 2	
$12_2 = \chi_{19+}$ $12_3 = \chi_{20+}$ $24_1 = \chi_{21+}$ $24_2 = \chi_{22+}$	3 3	1 1 1 1

$$\varphi_{6+} = 4_3
\varphi_{8+} = 12_1$$