$$\boxed{d = 6}$$

$$\Psi_{\mathbb{Q}}(6) \supseteq \left\{ \begin{array}{c} (3), (4), (6), (7), (9), (10), (12), (13), (14), (15), (18), (21), (30), \\ (2,2), (2,6), (2,10), (2,12), (2,14), (2,18), (3,3), (3,6), (3,9), (3,12), (4,4), (4,12), (6,6) \end{array} \right\}$$

G	$\Psi_{\mathbb{Q}}(6, G) \setminus \{G\} \supseteq$
()	$\{(3), (4), (6), (7), (9), (10), (12), (13), (14), (15), (18), (21), (2,2), (2,6), (2,10), (2,14), (2,18), (3,3), (3,9), (4,4), (4,12), (6,6)\}$
(2)	$\{(6), (12), (14), (18), (2,6), (2,14), (2,18), (3,6), (3,12), (6,6)\}$
(3)	$\{(9), (12), (21), (30), (2,6), (3,3), (3,6), (3,9), (4,12), (6,6)\}$
(4)	$\{(12), (2,12), (3,12)\}$
(5)	$\{(15), (30), (2,10)\}$
(6)	$\{(18), (2,18), (3,6), (3,12), (6,6)\}$
(7)	$\{(2,14)\}$
(8)	$\{\}$
(9)	$\{(2,18), (3,9)\}$
(10)	$\{\}$
(12)	$\{(3,12)\}$
(2,2)	$\{(2,6), (2,12), (6,6)\}$
(2,4)	$\{\}$
(2,6)	$\{(6,6)\}$
(2,8)	$\{\}$

$hpsi_{\mathbb{Q}}(6) = 5$

Number of configurations: 88

Maximun conductor to obtain all the configurations: 1728

G	$\mathcal{H}_{\mathbb{Q}}(6,E)$	Label
()	$(2,2)$	11a2
()	$(2,10)$	121d1
()	$(2,14)$	1922e1
()	$(4,4)$	338b1
()	$(6,6)$	108a2
()	(7)	1922c2
()	$(2,6),(3,3)$	196b2
()	$(3),(2,6)$	196a1
()	$(3),(2,18)$	1728e3
()	$(3),(4,12)$	1296h1
()	$(6),(2,6)$	361b2
()	$(7),(2,2)$	26b2
()	$(7),(4,4)$	338b2
()	$(10),(2,2)$	75a2
()	$(13),(2,2)$	147c1
()	$(14),(2,2)$	208d1
()	$(3),(6),(2,2)$	50b3
()	$(3),(6),(2,10)$	1600q1
()	$(3),(7),(2,6)$	5184u3
()	$(3),(9),(2,6)$	361b1
()	$(3),(10),(2,6)$	1600v3
()	$(3),(12),(4,4)$	1296h2
()	$(3),(18),(2,2)$	432e3
()	$(3),(21),(2,6)$	5184u1
()	$(4)^2,(2,2)$	648c1
()	$(6),(2,2),(3,3)$	44a2
()	$(6),(2,2),(3,9)$	486c2
()	$(6)^2,(2,2)$	175b2
()	$(6),(9),(2,6)$	1728e2
()	$(12),(3,3),(4,4)$	162d2
()	$(18),(2,2),(3,9)$	54a2
()	$(3),(4)^2,(2,6)$	1296j1
()	$(3),(4),(12),(2,2)$	1296j2
()	$(3),(6),(7),(2,2)$	1296e2
()	$(3),(6),(9),(2,2)$	175b1
()	$(3),(6),(10),(2,2)$	400b1
()	$(3),(6),(21),(2,2)$	1296e1

G	$\mathcal{H}_{\mathbb{Q}}(6,E)$	Label
()	$(4)^2,(7),(2,2)$	338a1
()	$(4),(12),(2,2),(3,3)$	162a2
()	$(6)^2,(9),(2,2)$	432a1
()	$(6),(7),(2,2),(3,3)$	162b4
()	$(6),(21),(2,2),(3,3)$	162b2
()	$(9)^2,(2,6),(3,3)$	27a2
()	$(3),(4)^2,(6),(2,2)$	4050g2
()	$(6),(9)^2,(2,2),(3,3)$	19a2
()	$(6),(10),(15),(2,2),(3,3)$	50a4
(2)	$(2,6)$	80b3
(2)	$(2,14)$	49a1
(2)	(6)	80b1
(2)	$(6,6)$	36a3
(2)	(12)	240b1
(2)	(14)	49a2
(2)	$(2,6),(3,6)$	20a3
(2)	$(6),(2,18)$	98a1
(2)	$(6),(18)$	98a2
(2)	$(18),(2,6)$	98a5
(2)	$(12),(2,6),(3,12)$	30a3
(2)	$(12)^2,(2,6),(3,6)$	30a7
(2)	$(18)^2,(2,6),(3,6)$	14a3
(3)	$(3,3)$	196b1
(3)	$(6,6)$	108a1
(3)	$(2,6),(3,3)$	44a1
(3)	$(2,6),(3,6)$	19a1
(3)	$(2,6),(3,9)$	486f1
(3)	$(3,3),(4,12)$	162d1
(3)	$(3,9),(6,6)$	27a1
(3)	$(2,6),(3,6),(3,9)$	54a1
(3)	$(9),(2,6),(3,3)$	19a3
(3)	$(21),(2,6),(3,3)$	162b3
(3)	$(30),(2,6),(3,3)$	50a3
(3)	$(12)^2,(2,6),(3,3)$	162a1
(4)	$(2,12)$	150c1
(4)	(12)	150c3
(4)	$(2,12),(3,12)$	90c1

G	$\mathcal{H}_{\mathbb{Q}}(6, E)$	Label
(5)	$(2, 10)$	11a1
(5)	$(15), (30), (2, 10)$	50b1
(6)	$(3, 6)$	20a1
(6)	$(3, 12)$	30a1
(6)	$(6, 6)$	36a1
(6)	$(18), (2, 18), (3, 6)$	14a4
(7)	$(2, 14)$	26b1
(9)	$(2, 18), (3, 9)$	54b3
(12)	$(3, 12)$	90c3
$(2, 2)$	$(2, 6)$	150c2
$(2, 2)$	$(2, 12)$	960o2
$(2, 2)$	$(6, 6)$	30a6
$(2, 2)$	$(2, 12), (6, 6)$	90c2
$(2, 6)$	$(6, 6)$	30a2