

$$d = 2$$

$$\Phi_{\mathbb{Q}}(2) \supseteq \{(3), (4), (5), (6), (7), (8), (9), (10), (12), (15), (16), (2, 2), (2, 4), (2, 6), (2, 8), (2, 10), (2, 12), (3, 3), (3, 6), (4, 4)\}$$

G	$\Phi_{\mathbb{Q}}(2, G) \setminus \{G\} \supseteq$
(\emptyset)	$\{(3), (5), (7), (9)\}$
(2)	$\{(4), (6), (8), (10), (12), (16), (2, 2), (2, 6), (2, 10)\}$
(3)	$\{(15), (3, 3)\}$
(4)	$\{(8), (12), (2, 4), (2, 8), (2, 12), (4, 4)\}$
(5)	$\{(15)\}$
(6)	$\{(12), (2, 6), (3, 6)\}$
(7)	$\{\}$
(8)	$\{(16), (2, 8)\}$
(9)	$\{\}$
(10)	$\{(2, 10)\}$
(12)	$\{(2, 12)\}$
(2, 2)	$\{(2, 4), (2, 6), (2, 8), (2, 12)\}$
(2, 4)	$\{(2, 8), (4, 4)\}$
(2, 6)	$\{(2, 12)\}$
(2, 8)	$\{\}$

$$h_{\mathbb{Q}}(2) = 4$$

Number of configurations: 52

Maximum conductor to obtain all the configurations: 3150

G	$\mathcal{H}_{\mathbb{Q}}(2, E)$	Label
($)$	(3)	19a2
($)$	(5)	75a2
($)$	(7)	208d1
($)$	(9)	54a2
($)$	$(3)^2$	175b2
($)$	(3), (5)	50a4
(2)	(2, 2)	46a1
(2)	(2, 6)	36a3
(2)	(2, 10)	450a3
(2)	(6), (2, 2)	14a3
(2)	(6), (2, 6)	98a3
(2)	(10), (2, 2)	150b3
(2)	$(4)^2$, (2, 2)	15a5
(2)	$(4)^2$, (2, 6)	450g1
(2)	(4), (8), (2, 2)	24a6
(2)	(4), (12), (2, 2)	30a3
(2)	(4), (16), (2, 2)	3150bk1
(2)	$(6)^2$, (2, 2)	98a4
(2)	$(8)^2$, (2, 2)	2880r6
(2)	$(4)^2$, (6), (2, 2)	30a7
(3)	(3, 3)	19a1
(3)	(15)	50a3
(4)	(2, 4)	17a1
(4)	(2, 8)	192c6
(4)	(2, 12)	150c3
(4)	(4, 4)	40a4
(4)	(12), (2, 4)	90c1
(4)	$(8)^2$, (2, 4)	15a7
(4)	$(8)^2$, (2, 8)	240d6
(5)	(15)	50b1
(6)	(2, 6)	14a4
(6)	(2, 6), (3, 6)	14a1
(6)	$(12)^2$, (2, 6)	30a1
(8)	(2, 8)	15a4
(8)	$(16)^2$, (2, 8)	210e1
(10)	(2, 10)	66c1
(12)	(2, 12)	90c3

G	$\mathcal{H}_{\mathbb{Q}}(2, E)$	Label
(2, 2)	(2, 4)	33a1
(2, 2)	(2, 6)	30a6
(2, 2)	(2, 8)	63a2
(2, 2)	(2, 12)	960o6
(2, 2)	$(2, 4)^2$	17a2
(2, 2)	(2, 4), (2, 6)	90c2
(2, 2)	(2, 4), (2, 8)	75b3
(2, 2)	$(2, 4)^3$	15a2
(2, 2)	$(2, 4)^2, (2, 8)$	510e5
(2, 4)	(2, 8)	15a3
(2, 4)	(4, 4)	195a3
(2, 4)	$(2, 8)^2$	1230f2
(2, 4)	(2, 8), (4, 4)	15a1
(2, 4)	$(2, 8)^2, (4, 4)$	210e3
(2, 6)	(2, 12)	90c6