The group G is isomorphic to the group labelled by [48, 29] in the Small Groups library.
Ordinary character table of $G \cong$ GL(2,3):

	$1a$	$2a$	$4a$	$2b$	$8a$	$8b$	$3a$	$6a$
χ_1	1	1	1	1	1	1	1	1
χ_2	1	1	1	-1	-1	-1	1	1
χ_3	2	2	2	0	0	0	-1	-1
χ_4	3	3	-1	1	-1	-1	0	0
χ_5	4	-4	0	0	0	0	1	-1
χ_6	2	-2	0	0	$E(8)+E(8)^3$	$-E(8)-E(8)^3$	-1	1
χ_7	2	-2	0	0	$-E(8)-E(8)^3$	$E(8)+E(8)^3$	-1	1
χ_8	3	3	-1	-1	1	1	0	0

Trivial source character table of $G \cong$ GL(2,3) at $p = 2$:

Normalisers N_i	N_1		N_2		N_3	N_4	N_5	N_6	N_7		N_8	N_9
p-subgroups of G up to conjugacy in G	P_1		P_2		P_3	P_4	P_5	P_6	P_7		P_8	P_9
Representatives $n_j \in N_i$	$1a$	$3a$	$1a$	$3a$	$1a$	$1a$	$1a$	$1a$	$1a$	$3a$	$1a$	$1a$
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+2\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8$	16	4	0	0	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8$	16	-2	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8$	8	2	8	2	0	0	0	0	0	0	0	0
$0\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8$	8	-1	8	-1	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	8	2	0	0	2	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+2\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8$	12	0	12	0	0	4	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	4	1	4	1	2	0	2	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	6	0	6	0	2	2	2	2	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	2	2	2	2	0	2	0	0	2	2	0	0
$0\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	2	-1	2	-1	0	2	0	0	2	-1	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+1\cdot\chi_8$	6	0	6	0	0	2	0	0	0	0	2	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8$	1	1	1	1	1	1	1	1	1	1	1	1

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C2
$P_3 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43)]) \cong$ C2
$P_4 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45)]) \cong$ C4
$P_5 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43)]) \cong$ C2 x C2
$P_6 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43)]) \cong$ D8
$P_7 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43)]) \cong$ Q8
$P_8 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,8,31,9,6,23,15,24)(2,4,38,5,10,16,22,17)(3,32,42,33,14,44,28,45)(7,25,46,26,21,40,35,41)(11,19,47,20,27,36,39,37)(12,48,13,34,29,43,30,18)]) \cong$ C8
$P_9 = Group([(1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43)]) \cong$ QD16

$N_1 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,3,11)(2,7,18)(4,30,47)(5,28,40)(6,14,27)(8,37,48)(9,35,44)(10,21,34)(12,41,31)(13,39,16)(15,29,26)(17,42,25)(19,45,38)(20,43,23)(22,36,33)(24,46,32), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43), (1,5,6,17)(2,9,10,24)(3,13,14,30)(4,15,16,31)(7,20,21,37)(8,22,23,38)(11,26,27,41)(12,28,29,42)(18,33,34,45)(19,35,36,46)(25,39,40,47)(32,43,44,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ GL(2,3)
$N_2 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,3,11)(2,7,18)(4,30,47)(5,28,40)(6,14,27)(8,37,48)(9,35,44)(10,21,34)(12,41,31)(13,39,16)(15,29,26)(17,42,25)(19,45,38)(20,43,23)(22,36,33)(24,46,32), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43), (1,5,6,17)(2,9,10,24)(3,13,14,30)(4,15,16,31)(7,20,21,37)(8,22,23,38)(11,26,27,41)(12,28,29,42)(18,33,34,45)(19,35,36,46)(25,39,40,47)(32,43,44,48), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ GL(2,3)
$N_3 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ C2 x C2
$N_4 = Group([(1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43)]) \cong$ QD16
$N_5 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,15,6,31)(2,22,10,38)(3,28,14,42)(4,17,16,5)(7,35,21,46)(8,24,23,9)(11,39,27,47)(12,30,29,13)(18,43,34,48)(19,37,36,20)(25,41,40,26)(32,45,44,33)]) \cong$ D8
$N_6 = Group([(1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43)]) \cong$ QD16
$N_7 = Group([(1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,3,11)(2,7,18)(4,30,47)(5,28,40)(6,14,27)(8,37,48)(9,35,44)(10,21,34)(12,41,31)(13,39,16)(15,29,26)(17,42,25)(19,45,38)(20,43,23)(22,36,33)(24,46,32)]) \cong$ GL(2,3)
$N_8 = Group([(1,8,31,9,6,23,15,24)(2,4,38,5,10,16,22,17)(3,32,42,33,14,44,28,45)(7,25,46,26,21,40,35,41)(11,19,47,20,27,36,39,37)(12,48,13,34,29,43,30,18), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43)]) \cong$ QD16
$N_9 = Group([(1,4,6,16)(2,8,10,23)(3,12,14,29)(5,31,17,15)(7,19,21,36)(9,38,24,22)(11,25,27,40)(13,42,30,28)(18,32,34,44)(20,46,37,35)(26,47,41,39)(33,48,45,43), (1,2)(3,18)(4,9)(5,8)(6,10)(7,11)(12,33)(13,32)(14,34)(15,38)(16,24)(17,23)(19,26)(20,25)(21,27)(22,31)(28,48)(29,45)(30,44)(35,47)(36,41)(37,40)(39,46)(42,43), (1,31,6,15)(2,38,10,22)(3,42,14,28)(4,5,16,17)(7,46,21,35)(8,9,23,24)(11,47,27,39)(12,13,29,30)(18,48,34,43)(19,20,36,37)(25,26,40,41)(32,33,44,45), (1,6)(2,10)(3,14)(4,16)(5,17)(7,21)(8,23)(9,24)(11,27)(12,29)(13,30)(15,31)(18,34)(19,36)(20,37)(22,38)(25,40)(26,41)(28,42)(32,44)(33,45)(35,46)(39,47)(43,48)]) \cong$ QD16