

PSI Waste Equipment Services, Inc.
Typical Compactor Power Requirements

Motor Size	Volts AC	NEC FLA	Typical FLA	Maximum Size Dual Elem Tme Delay Fuse.	Maximum Size Circuit Breaker	② Minimum Recommended Fuse/ Breaker	③ Minimum Recommended Wire Size (Copper, 60°C)	Do not install if wire is smaller than listed in this column
3HP, 1Ph①	208	18.7	17	35	50	25	10	10
3HP, 1Ph①	240	17	16	30	45	25	10	10
3HP, 3Ph①	208	10.6	10	20	30	15	12	14
3HP, 3Ph①	240	9.6	9	20	25	15	12	14
3HP, 3Ph①	480	4.8	4.5	10	15	10	12	14
5HP, 1Ph	208	30.8	22	60	80	40	8	10
5HP, 1Ph	240	28	21	50	70	40	8	10
5HP, 3Ph	208	16.7	15	30	45	25	10	10
5HP, 3Ph	240	15.2	14	30	40	25	12	12
5HP, 3Ph	480	7.6	7	15	20	15	12	14
10HP, 1Ph	208	55	43	100④	150④	60④	4	6
10HP, 1Ph	230	50	40	90④	125④	60④	4	6
10HP, 3Ph①	208	30.8	30	60	80	40	6	8
10HP, 3Ph①	230	28	28	50	70	40	8	8
10HP, 3Ph①	460	14	14	25	35	20	12	12
15HP, 3Ph	208	47.3	47.3	90	125	60	4	6
15HP, 3Ph	230	45	45	80	125	60	4	6
15HP, 3Ph	460	22.5	22.5	40	60	30	10	10
20HP, 3Ph	208	59.4	59.4	110	150	80	3	4
20HP, 3Ph	230	54	54	100	150	70	4	4
20HP, 3Ph	460	27	27	50	70	35	8	8
30HP, 3Ph	208	88	88	175	225	125	1/0	2
30HP, 3Ph	230	80	80	150	200	110	1	2
30HP, 3Ph	460	40	40	70	100	60	6	6

① Many machine types that use this size motor also have competing models that use next larger size motor. If possible, on new circuits, we suggest sizing wire and disconnects to accommodate next larger motor. Size fuses and breakers according to actual motor size when equipment is finally selected. Otherwise make sure the machine you order is the horsepower you planned on.

② Beakers or fuses smaller than this may be problematic. Always use dual element time delay fuses. Classes RK1, RK5 or J are typical.

③ Recommended minimum wire size. Use larger size wire on longer runs to reduce voltage drop and improve performance and longevity.

④ Recommend 60amp Class J fuse. Some newer equipment uses VFDs or phase converters to convert 1Ph power to 3Ph power. These units sometimes limit breaker/fuse size to 60amp and recommend Class J fuses. 60amp Class J fuses should work well with any 10HP/ 1Ph equipment.

Ground Wire Sizes

Breaker/ Fuse Amps	Min Gauge Ground
Up to 20	12
25 - 60	10
70 - 100	8
110 - 200	6
225 - 300	4

The above charts are for informational purposes only! All information is believed to be correct at the time of printing. Information is generic. If available, use information provided with the compactor you intend to install. User should consult a licensed electrician to verify all information prior to use. Wire sizes should be increased for longer runs. Disconnect should be within 25' AND visible from the power unit. A representative of the equipment provider should be consulted prior to deciding on the disconnect location. Contact equipment@psiwaste.com if you have any questions or to report inaccuracies.