

Electrical Recommendations

A separate branch circuit with a main disconnect device supplied by the owner is required to supply power to compactor and baler power plants. The installation of the main disconnect must be performed by a qualified electrician in compliance with all local and National Electrical Code regulations. ANSI standards require that the main “disconnect shall be located within sight of, and no more than 50 ft. away from the main control panel”. The actual voltage must be within $\pm 5\%$ of the nameplate rating on the motor when the unit is operating at the system relief pressure.

The following table lists recommended fuse and wire sizes for the various motors used on compaction and baling equipment.

Motor Horsepower Rating/Phase	Line Supply Voltage	Full Load Amps ¹	Locked Rotor Amps ²	Maximum Dual Element Time Delay Fuse ³	Maximum Inverse Time Circuit Breaker ³	Minimum Disconnect Rating ⁴	Minimum Wire Size THHN CU 90° C/194° F ⁵		
							100'	200'	300'
2HP/1Ø	115/60Hz	24	144	45	60	30	12	10	8
	208/60Hz	13.2	80	25	35	30	12	12	12
	230/60Hz	12	72	25	30	30	12	12	12
3HP/1Ø	115/60Hz	34	204	60	90	60	8	6	4
	208/60Hz	18.7	113	35	50	30	12	12	10
	230/60Hz	17	102	30	50	30	12	12	10
5HP/1Ø	230/60Hz	28	168	50	70	60	10	8	6
10HP/1Ø	230/60Hz	50	300	90	125	60	6	4	2
3HP/3Ø	208/60Hz	10.6	71	20	30	30	12	12	12
	230/60Hz	9.6	64	20	25	30	12	12	12
	460/60Hz	4.8	32	10	15	30	12	12	12
	575/60Hz	3.9	25.6	10	10	30	12	12	12
5HP/3Ø	208/60Hz	16.7	102	30	50	30	12	12	10
	230/60Hz	15.2	92	30	40	30	12	12	10
	460/60Hz	7.6	46	15	20	30	12	12	12
	575/60Hz	6.1	36.8	15	20	30	12	12	12
10HP/3Ø	200/60Hz	32.2	186.3	60	90	60	8	6	4
	208/60Hz	30.8	179	60	80	60	10	8	6
	230/60Hz	28	162	50	70	60	10	8	6
	460/60Hz	14	81	25	35	30	12	12	12
	575/60Hz	11	64.8	20	30	30	12	12	12
15HP/3Ø	200/60Hz	48.3	267	90	125	60	6	4	3
	208/60Hz	46.2	257	90	125	60	6	4	3
	230/60Hz	42	232	80	125	60	8	6	4
	460/60Hz	21	116	40	70	30	12	10	8
	575/60Hz	17	93	30	50	30	12	12	10
20HP/3Ø	200/60Hz	62.1	334	110	175	100	4	3	2
	208/60Hz	59.4	321	110	150	100	6	4	3
	230/60Hz	54	290	100	150	100	6	4	3
	460/60Hz	27	145	50	70	60	10	8	6
	575/60Hz	22	116	40	70	30	12	10	8
30HP/3Ø	200/60Hz	92	500	175	250	150	2	1	1/0
	230/60Hz	80	435	150	200	100	3	2	1
	460/60Hz	40	218	70	100	60	8	6	4
	575/60Hz	32	174	60	80	60	10	8	6
40HP/3Ø	200/60Hz	120	667	225	300	150	1	1/0	2/0
	230/60Hz	104	580	200	300	150	2	1	1/0
	460/60Hz	52	290	100	150	60	6	4	3
	575/60Hz	41	232	80	125	60	8	6	4