3-WIRE & 2-WIRE CENTRIPRO 1Ø MOTOR WIRE SIZING CHART

Motor Lead Lengths - CentriPro 2-Wire Motors - Based on Service Factor Amps, 30° C Ambient and 5% Voltage Drop														
Motor Rating				60° C & 75° C Insulation - AWG Copper Wire Size										
Volts	HP	kW	SFA	14	12	10	8	6	4	2	1/0	2/0	3/0	4/0
115	½	0.37	9.5	115	183	293	463	721	1150	1825	2902	3662	4623	5824
230	½	0.37	4.7	466	742	1183	1874	2915	4648	7379	11733	14803	18688	23544
230	¾	0.55	6.4	342	545	869	1376	2141	3413	5419	8617	10871	13724	17290
230	1	0.75	9.1	241	383	611	968	1506	2400	3811	6060	7646	9652	12160
230	1½	1.1	11.0	199	317	505	801	1246	1986	3153	5013	6325	7985	10060

Motor Lead Lengths - CentriPro 3-Wire Motors (CSIR) - Based on Service Factor Amps, 30° C Ambient and 5% Voltage Drop														
Motor Rating				60° C & 75° C Insulation - AWG Copper Wire Size										
Volts	HP	kW	SFA	14	12	10	8	6	4	2	1/0	2/0	3/0	4/0
115	½	0.37	12.6	87	138	221	349	544	867	1376	2188	2761	3485	4391
230	½	0.37	6.3	348	553	883	1398	2175	3467	5505	8753	11044	13942	17564
230	¾	0.55	8.3	264	420	670	1061	1651	2632	4178	6644	8383	10582	13332
230	1	0.75	9.7	226	359	573	908	1413	2252	3575	5685	7173	9055	11408
230	1½	1.1	11.1	197	314	501	793	1234	1968	3124	4968	6268	7913	9969

Tables based on values from NEC, Tables 310.16 and 310.17 and NEC, Chapter 9, Table 8 Conductor Properties.

NOTE: Motors and control boxes are designed to operate on 230V systems. Systems with low line voltage, between 200 – 207 volts require the next larger cable size than shown in the 230V charts. If using a 3-wire motor with control box on a low voltage application switch to a 208V start relay. The 208V start relay order numbers are found on control box repair part charts in this manual.

Another option is to use a boost transformer to increase voltage.

The 2-wire sizing chart above is only for use with PSC type, 2-wire motors.

Temperature Conversions:

20° C = 68° F, 30° C = 86° F, 60° C = 140° F, 75° C = 167° F, 90° C = 194° F