

ARMATURE DIAMETER x DIAMETER x LENGTH AND FULL LOAD AMPERES

1800 RPM ONLY

HORSEPOWER at 1800 RPM	$D^2 L^*$ cubic inches	FULL LOAD AMPERES	
		230V	460V
5	152	20	--
7½	179	29	--
10	225	39	--
15	297	57	--
20	368	74	--
25	441	91	--
30	493	109	--
40	630	148	--
50	728	178	89
60	843	213	107
75	1024	270	135
100	1286	357	178
125	1529	443	222
150	1773	535	267
200	2194	713	357
300	3070	1057	528
400	3862	1400	700
500	4659	1743	872
750	6486	2587	1293
1000	8156	3413	1707

* D is the diameter of the armature in inches.
L is the length of the armature core in inches.

CAUTION: These are approximate $D^2 L$ (DDL) values and are based upon conversion of present horsepower and RPM to 1800 RPM and resulting horsepower.

Example: A motor is presumed to be a 10 horsepower at 900 RPM. What approximate DDL should be expected?

Answer: A 10 horsepower at 900 RPM is equivalent - at 1800 RPM - to 20 horsepower. The 20 horsepower DDL from the chart above is 368 cubic inches.

FIGURE A-21-2. Approximate DDL vs. Horsepower.