

# EDS, N1 and Contender Series Manual Motor Starter Heater Selection Table

## Instruction Sheet

**Warning:**

Electrical power must be turned OFF before and during installation of heater. Failure to follow safety instructions may cause ignition of hazardous atmospheres resulting in serious personal injury and/or property damage.

**Heater Selection Guideline**

The "Full Load Motor Current" listed on Table 1 and 2 are ratings which determine the proper heater element that should be used with in conjunction with the motor starter. Refer to the motor nameplate for its full load motor current. For normal operating condition, we recommend that heater element selected should have a capacity of 20 to 25% greater than the full load motor current at 40°C ambient temperature. For 50°C rise, a heater not greater than 115% of full load current should be selected.

The above information is an approximation only due to the difference between full load currents of various motor manufacturer of the same size motor.

If selection of heater element is uncertain as might be in the case of a motor subject to frequent starting and intermittent load, it is advisable to contact the starter manufacturer giving full particulars, such as motor horsepower, voltage, phase cycles or other pertinent data that may aid in the selection of proper heater element.

NOTE: Use copper conductors only rated at 60°C or 75°C.

**Warning:**

Tripping or opening of the circuit breaker or fuse(s) could be an indication that a fault current has been interrupted. If such a case happened, the starter must be mechanically and electrically inspected, examined and replaced if damaged. This action will provide continued protection against fire or shock hazard. If heater burnouts occurs, the complete starter and heater must be replaced.

**Table 1**

**(Westinghouse Heaters)**

Full Load Motor Current Amperes	EDS/N1 Series Add Suffix	Contender Series Add Suffix
0.43	-WH1	-W1
0.48	-WH2	-W2
0.53	-WH3	-W3
0.58	-WH4	-W4
0.64	-WH5	-W5
0.71	-WH6	-W6
0.78	-WH7	-W7
0.87	-WH8	-W8
0.95	-WH9	-W9
1.03	-WH10	-W10
1.15	-WH11	-W11
1.27	-WH12	-W12
1.35	-WH13	-W13
1.51	-WH14	-W14
1.67	-WH15	-W15
1.83	-WH16	-W16
1.99	-WH17	-W17
2.23	-WH18	-W18
2.47	-WH19	-W19
2.71	-WH20	-W20
2.95	-WH21	-W21
3.27	-WH22	-W22
3.59	-WH23	-W23
3.99	-WH24	-W24
4.39	-WH25	-W25
4.79	-WH26	-W26
5.26	-WH27	-W27
5.83	-WH28	-W28
6.39	-WH29	-W29
7.03	-WH30	-W30
7.74	-WH31	-W31
8.46	-WH32	-W32
9.35	-WH33	-W33
10.30	-WH34	-W34
11.35	-WH35	-W35
12.47	-WH36	-W36
13.67	-WH37	-W37
15.12	-WH38	-W38
16.00	-WH39	-W39

**Table 2**

**(Allen-Bradley Heaters)**

Full Load Motor Current Amperes	EDS/N1 Series Add Suffix	Contender Series Add Suffix
0.17	-AB1	-P1
0.21	-AB2	-P2
0.25	-AB3	-P3
0.32	-AB4	-P4
0.39	-AB5	-P5
0.46	-AB6	-P6
0.57	-AB7	-P7
0.71	-AB8	-P8
0.79	-AB9	-P9
0.87	-AB10	-P10
0.98	-AB11	-P11
1.08	-AB12	-P12
1.19	-AB13	-P13
1.30	-AB14	-P14
1.43	-AB15	-P15
1.58	-AB16	-P16
1.75	-AB17	-P17
1.88	-AB18	-P18
2.13	-AB19	-P19
2.40	-AB20	-P20
2.58	-AB21	-P21
2.92	-AB22	-P22
3.09	-AB23	-P23
3.32	-AB24	-P24
3.77	-AB25	-P25
4.16	-AB26	-P26
4.51	-AB27	-P27
4.93	-AB28	-P28
5.43	-AB29	-P29
6.03	-AB30	-P30
6.83	-AB31	-P31
7.72	-AB32	-P32
8.24	-AB33	-P33
8.90	-AB34	-P34
9.60	-AB35	-P35
10.80	-AB36	-P36
12.00	-AB37	-P37
13.50	-AB38	-P38
15.20	-AB39	-P39