

# Contender™ Series Factory Sealed Manual Motor Starters and Contactors

## Explosionproof, Dust-Ignitionproof

### NEC/CEC:

Class I, Division 1 and 2, Groups C, D  
Class II, Division 1 and 2, Groups E, F, G  
Class III  
NEMA 3, 7CD, 9EFG

### Applications

- Manual motor starters are available to meet any plant installation requirement.
- They may be used to install a variety of electrical wiring devices and comes complete with covers and dead-end or feed-thru hub arrangements. Available with or without the heater.
- Complete units are ideal for manual starting of small Vac or Vdc motors in locations made hazardous by the presence of flammable vapors, gases or combustible dust.

### Features

- Easily readable operator handle with provisions for padlocking in the ON or OFF position.
- Cast in hubs.
- Interchangeable heater units.

### Standard Materials

- Body and cover: malleable iron
- Sealing chamber: copperfree (4/10 of 1% max.) aluminum
- Operating handle: nylon

### Standard Finishes

- Body and cover: gray epoxy powder coat

### Options

- For Aluminum Backbox and Cover add suffix **-SA**.
- Starters are furnished with one interchangeable heater. Select heater number from heater selection table and add appropriate suffix to catalog number. For example, a complete catalog number with Allen-Bradley ◀ motor starter and Allen-Bradley ◀ 0-17 amp heater: EPS2199-P1.

### NEC/CEC Certifications and Compliances

- UL Standards: UL 508, UL 698, UL 1203,
- CSA Standards: CSA C22.2 No. 14-M, C22.2 No. 25, C22.2 No. 30
- cULus Listed: E81751, E76550



1-Gang  
Dead-End



2-Gang  
Feed-Thru

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◀ Allen-Bradley is a registered trademark of Rockwell Automation.

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Factory Sealed Manual Motor Starters with Allen-Bradley ◀ 600 Devices

Poles	Hub Size (Inches)	Catalog Number Cover/Chamber/Device	1-Gang Catalog Number ①		2-Gang Catalog Number ①	
			Dead-End	Feed-Thru	Dead-End	Feed-Thru
1	1/2	EDSK-1MSAB ①	EDS1199	EDSC1199	—	—
	3/4		EDS2199	EDSC2199	EDS2299	EDSC2299
	1		EDS3199	EDSC3199	EDS3299	EDSC3299
2	1/2	EDSK-2MSAB ①	EDS11100	EDSC11100	—	—
	3/4		EDS21100	EDSC21100	EDS22100	EDSC22100
	1		EDS31100	EDSC31100	EDS32100	EDSC32100

Manual Motor Starter Horsepower Ratings

Poles	120–240 Vac	32 Vdc	120 Vdc	240 Vdc	Allen-Bradley ◀ Catalog Number
1	1 HP	—	—	—	Bulletin 600
2	1 HP	—	3/4 HP	3/4 HP	Bulletin 600

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① **Ordering Instructions:** Starters are furnished with one interchangeable heater. Select heater number from heater selection table and add appropriate suffix to catalog number. For example, a complete catalog number with an Allen-Bradley motor starter and an Allen-Bradley heater: **EDS1199-P5**. Available in aluminum; add suffix **-SA**.

# Contender™ Series Factory Sealed Manual Motor Starter and Contactor Heaters

Allen-Bradley ◀ and Cutler-Hammer † heaters and starters are not interchangeable with each other.

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The "Full Load Motor Current" listed in the tables below are ratings which determine the proper heat element that should be used with the EDS Series starters. Refer to motor nameplate for its full load motor current. It is our recommendation that for normal conditions the heater element selected should have a capacity of 20 to 25% greater than the full load current of the motor. This applies to standard +40 °C (+104 °F) temperature rise motors. For +50 °C (+122 °F) rise motors, a heater not greater than 115% full load current should be selected.

However, due to the difference between full load motor currents of various motor manufacturers of the same size motors, the above information is approximate.

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 or his local representative giving full particulars, such as motor horsepower, voltage, phase cycles, name or manufacturer or pertinent data that may aid in the selection of the proper heater element.

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### Allen-Bradley ◀

Full Load Motor Current (Amp)	Add Suffix Contender/EDS
0.17	P1
0.21	P2
0.25	P3
0.32	P4
0.39	P5
0.46	P6
0.57	P7
0.71	P8
0.79	P9
0.87	P10
0.98	P11
1.08	P12
1.19	P13
1.30	P14
1.43	P15
1.58	P16
1.75	P17
1.88	P18
2.13	P19
2.40	P20
2.58	P21
2.92	P22
3.09	P23
3.32	P24
3.77	P25
4.16	P26
4.51	P27
4.93	P28
5.43	P29
6.03	P30
6.83	P31
7.72	P32
8.24	P33
8.90	P34
9.60	P35
10.80	P36
12.00	P37
13.50	P38
15.20	P39

### Cutler-Hammer †

Full Load Motor Current (Amp)	Heater Rating (Amp)	Add Suffix Contender
0.40-0.43	0.50	W1
0.44-0.48	0.55	W2
0.49-0.53	0.61	W3
0.54-0.58	0.67	W4
0.59-0.64	0.74	W5
0.65-0.71	0.81	W6
0.72-0.78	0.89	W7
0.79-0.87	0.98	W8
0.88-0.95	1.10	W9
0.96-1.03	1.20	W10
1.04-1.15	1.30	W11
1.16-1.27	1.45	W12
1.28-1.35	1.60	W13
1.36-1.51	1.70	W14
1.52-1.67	1.90	W15
1.68-1.83	2.10	W16
1.84-1.99	2.30	W17
2.00-2.23	2.50	W18
2.24-2.47	2.80	W19
2.48-2.71	3.10	W20
2.72-2.95	3.40	W21
2.96-3.27	3.70	W22
3.28-3.59	4.10	W23
3.60-3.99	4.50	W24
4.00-4.39	5.00	W25
4.40-4.79	5.50	W26
4.80-5.26	6.00	W27
5.27-5.83	6.60	W28
5.84-6.39	7.30	W29
6.40-7.03	8.00	W30
7.07-7.74	8.80	W31
7.75-8.46	9.70	W32
8.47-9.35	10.60	W33
9.36-10.30	11.70	W34
10.31-11.35	12.90	W35
11.36-12.47	14.20	W36
12.48-13.67	15.60	W37
13.68-15.12	17.10	W38
15.13-16.00	18.60	W39

† Cutler-Hammer is a registered trademark of Eaton Corporation.  
 ◀ Allen-Bradley is a registered trademark of Rockwell Automation.

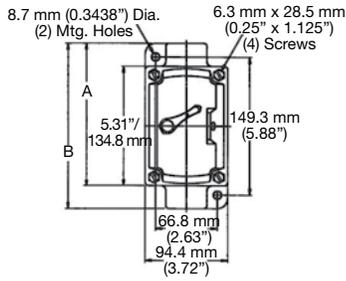
# Contender™ Series Factory Sealed Manual Motor Starter and Contactor

## Explosionproof, Dust-Ignitionproof

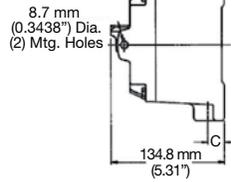
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### Dimensions in Millimeters (Inches)

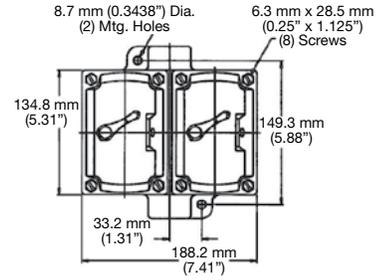
#### 1-Gang and 2-Gang



1-Gang Front



1- 2- Gang Side



2-Gang Front

Hub Size (Inches)	Dimensions in Millimeters (Inches)		
	A	B	C
1/2	153.9 (6.06)	172.9 (6.81)	19.0 (0.75)
3/4	153.9 (6.06)	172.9 (6.81)	22.3 (0.88)
1	156.7 (6.17)	178.5 (7.03)	25.4 (1.00)

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