

Please refer to Application Note AP039004EN for additional information on proper size selection.

**DS7 Soft Start Controller—
Frames 3 and 4**



**DS7 Soft Start Controllers—Horsepower Ratings—
10 Second Ramp, One Start per Hour, 300% Current Limit at 40 °C**

Rated Current (A)	Motor Power (hp)			Maximum Allowable Breaker Size ^①	Maximum Allowable Fuse Size ^①	Recommended XTOB Overload	Recommended C440 Overload	Catalog Number
	200 V	230 V	460 V					
40	10	10	30	HFD3150L	150A Class RK5	XTOB040DC1 ^②	C440A1A045SAX	DS7-340SX041N0-N ^{⑤⑥}
								DS7-342SX041N0-N ^⑦
								DS7-34DSX041N0-D ^⑧
52	15	20	40	HFD3200L	200A Class RK5	XTOB057DC1 ^②	C440B1A100SAX	DS7-340SX055N0-N ^{⑤⑥}
								DS7-342SX055N0-N ^⑦
								DS7-34DSX055N0-D ^⑧
65	20	25	50	HJD3250	200A Class RK5	XTOB065DC1 ^②	C440B1A100SAX	DS7-340SX070N0-N ^{⑤⑥}
								DS7-342SX070N0-N ^⑦
								DS7-34DSX070N0-D ^⑧
77	25	30	60	HKD3300	300A Class RK5	XTOB100GC1S	C440B1A100SAX	DS7-340SX081N0-N ^{⑤⑥}
								DS7-342SX081N0-N ^⑦
								DS7-34DSX081N0-D ^⑧
96	30	30	75	HKD3350	350A Class RK5	XTOB100GC1S	C440B1A100SAX	DS7-340SX100N0-N ^{⑤⑥}
								DS7-342SX100N0-N ^⑦
								DS7-34DSX100N0-D ^⑧
124	40	50	100	HKD3400	500A Class RK5	XTOB125GC1S	C440A1A005SAX ^④	DS7-340SX135N0-N ^{⑤⑥}
								DS7-342SX135N0-N ^⑦
								DS7-34DSX135N0-D ^⑧
156	50	60	125	HLD3450	500A Class RK5	XTOB160LC1 ^③	C440A1A005SAX ^④	DS7-340SX160N0-N ^{⑤⑥}
								DS7-342SX160N0-N ^⑦
								DS7-34DSX160N0-D ^⑧
180	60	75	150	HLD3500	500A Class RK5	XTOB220LC1 ^③	C440A1A005SAX ^④	DS7-340SX200N0-N ^{⑤⑥}
								DS7-342SX200N0-N ^⑦
								DS7-34DSX200N0-D ^⑧

Notes

- ① Maximum values may be higher than allowed per NEC® 430.52 and UL 508A 31.1.
- ② XTOBXDIND Panel Mounting Adapter must be used with this overload.
- ③ XTOBXTLL line and load lugs must be used with this overload.
- ④ ZEB-XCT300 current transformer must be used with this overload.
- ⑤ 24 Vac/Vdc device.
- ⑥ -40 °C rated low temperature version available in 24 Vac/Vdc, change to "N0-L."
- ⑦ 110/230 Vac device.
- ⑧ 24 Vdc for SmartWire-DT device.

Considerations

1. Either XTOB, C306 or C440 series or equivalent overload protection devices may be selected.
2. Contactor is optional for normal applications. It is recommended for mains isolation.

Power Supply

Eaton's PSG and ELC power supplies are recommended as a compact and low-cost source for 24 Vdc power. The lightweight, DIN rail mounted devices have a wide input voltage range, and robust screw terminals make these power supplies easy to install and use. These power supplies are available in 1A and 2A models.

Power Supply Selection

Description	Catalog Number
85–264 V input and 24 Vdc output	ELC-PS01
100–240 V input and 24 Vdc output	PSG60E
400–500 V input and 24 Vdc output	PSG60F24RM