

# E510 COMPACT DRIVE



Effective 07-08-18  
Supersedes 03-24-17

## MEDIUM DUTY



The E510 Compact AC Drive is an easily configured drive that controls many applications. From simple fixed speed set ups to applications requiring PM motors, the E510 meets the application challenge. This product replaces our legacy product the N3.

### APPLICATIONS:

- Conveyors
- Mixing Equipment
- Fans and Blowers
- Compact size is convenient for retrofitting/ replacing an older generation VFD
- Pumps
- Lathes
- AC Contactor Replacement

### FEATURES:

- 0.5 to 3 HP (CT), 230V, 50/ 60Hz, 1-Phase
- 0.5 to 40 HP (CT), 460V, 50/ 60Hz, 3-Phase
- 1 to 75 HP (CT), 460V, 50/ 60Hz, 3-Phase
- Parameters Grouped by function
- Built-in PLC Functionality
- PID Process Control Loop
- Built-in Modbus & BACnet Protocols
- 5 Digit Operator's Keypad with Speed Pot
- Digital and Analog Inputs and Outputs have Extremely Fast (~4 msec) Update Time
- Auto Run Mode (Cyclic Operation)
- Power Loss Ride Through
- Automatic Voltage Regulation (AVR)
- Complies with IEC 60018-2-78, UL, cUL, CE, & RoHS

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### 230V 1/3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH	
E510-2P5-H-U	0.5	0.5	3.1	3.1	6.46	3.57	5.96	3.5
E510-201-H-U	1	1	4.5	4.5	6.46	3.57	5.96	3.5
E510-202-H-U	2	2	7.5	7.5	7.39	5.07	6.00	5.5
E510-203-H-U	3	3	10.5	10.5	7.39	5.07	6.00	5.5

### 230V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH	
E510-205-H3-U	5	5	17.5	17.5	7.39	5.07	6.00	5.5
E510-208-H3-U	7.5	7.5	26	26	10.27	7.36	7.98	14.3
E510-210-H3-U	10	10	35	35	10.27	7.36	7.98	14.3
E510-215-H3-U	15	15	48	48	12.66	8.84	8.11	22.3
E510-220-H3-U	20	20	64	64	12.66	8.84	8.11	22.9
E510-225-H3-U	25	25-30	73	80	14.17	10.43	9.38	22.1
E510-230-H3-U	30	40	85	110	20.67	11.28	10.62	66.1
E510-240-H3-U	40	50	115	138	20.67	11.28	10.62	66.1

### 460V 3-Phase

MODEL NO.	HP		DRIVE AMPS		DIMENSIONS (Inches)			APPROX. WT. (lbs.)
	CONSTANT TORQUE	VARIABLE TORQUE	CONSTANT TORQUE	VARIABLE TORQUE	HEIGHT	WIDTH	DEPTH	
E510-401-H3-U	1	1	2.5	2.5	6.46	3.57	5.96	3.8
E510-402-H3-U	2	2	3.8	3.8	6.46	3.57	5.96	3.8
E510-403-H3-U	3	3	5.3	5.3	7.39	5.07	6.00	5.5
E510-405-H3-U	5	5	9.2	9.2	7.39	5.07	6.00	5.5
E510-408-H3-U	7.5	7.5	13	13	10.27	7.36	7.98	14.3
E510-410-H3-U	10	10	17.5	17.5	10.27	7.36	7.98	14.3
E510-415-H3-U	15	15	24	24	10.27	7.36	7.98	14.3
E510-420-H3-U	20	20	32	32	12.66	8.84	8.11	23.2
E510-425-H3-U	25	25	40	40	12.66	8.84	8.11	23.2
E510-430-H3-U	30	30-40	45	58	14.17	10.43	9.38	22.1
E510-440-H3-U	40	50	60	73	20.67	11.28	10.62	66.1
E510-450-H3-U	50	60	75	88	20.67	11.28	10.62	66.1
E510-460-H3-U	60	75	91	103	20.67	11.28	10.62	66.1
E510-475-H3-U	75	100	118	145	20.67	11.28	10.62	77.2

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## E510 COMPACT DRIVE PERIPHERALS ONLY

MODEL NO.	DESCRIPTION	
JN5-CB-01M	Extension wire (1M)	
JN5-CB-02M	Extension wire (2M)	
JN5-CB-03M	Extension wire (3M)	
JN5-CB-05M	Extension wire (5M)	
JN5-NK-E01	E510 frame 1 NEMA1 KIT* (Replacement)	
JN5-NK-E02	E510 frame 2 NEMA1 KIT* (Replacement)	
JN5-NK-E03	E510 frame 3 NEMA1 KIT* (Replacement)	
JN5-NK-E04	E510 frame 4 NEMA1 KIT* (Replacement)	
JN5-CM-USB	USB cable to connect PC	
JN5-OP-A02	IP20 LCD operator panel mount (Remote use only)	
JN5-KEYBOX	Remote keypad holder (For LED keypad only)	
JN5-CU	Copy module only	
JN5-CMI-PDP	PROFIBUS communication interface module	
JN5-CMI-TCPIP	TCPIP card	
JN5-CMI-DNET	DeviceNet card	
JN5-CMI-CAN	CanOpen card	
JN5-DINF1	Din Rail option kit frame 1	
JN5-DINF2	Din Rail option kit, frame 2	

### Notes:

- \* E510 Frame 1~4 NEMA Kits are standard for all models.

# E510 COMPACT DRIVE BRAKE MODULES AND RESISTORS



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All resistor sets are not in an enclosure (chassis)

### 230V 1/3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR		BRAKING RESISTOR							
	MODEL NO.	QTY USED	MODEL NO.	QTY USED	RESISTANCE OHMS WATTS		ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	
1	X	-	JNBR-150W200	1	200	150	12"L x 5"W x 5"D	117	10	
2	X	-	JNBR-150W100	1	100	150	12"L x 5"W x 5"D	117	10	
3	X	-	JNBR-260W70	1	70	260	12"L x 5"W x 5"D	112	10	

### 230V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR		BRAKING RESISTOR							
	MODEL NO.	QTY USED	MODEL NO.	QTY USED	RESISTANCE OHMS WATTS		ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	
5	X	-	JNBR-390W40	1	40	390	12"L x 5"W x 5"D	117	10	
7.5	X	-	JNBR-520W30	1	30	520	12"L x 7"W x 5"D	123	10	
10	X	-	JNBR-780W20	1	20	780	12"L x 7"W x 5"D	117	10	
15	X	-	JNBR-2R4KW13R6	1	13.6	2400	19"L x 10"W x 5"D	100	10	
20	X	-	JNBR-2R4KW13R6	1	13.6	2400	19"L x 13"W x 5"D	100	10	
25	X	-	JNBR-4R8KW8	1	8	4800	26.5"L x 10"W x 5"D	119	10	
30	X	-	JNBR-4R8KW6R8	1	6.8	4800	26.5"L x 10"W x 5"D	117	10	
40	JNTBU-230	2	JNBR-3KW10	2	10	3000	19"L x 13"W x 5"D	119	10	

### 460V 3-Phase

AC DRIVE HP RATING	BRAKING TRANSISTOR		BRAKING RESISTOR							
	MODEL NO.	QTY USED	MODEL NO.	QTY USED	RESISTANCE OHMS WATTS		ENCLOSURE DIMENSIONS (in.)	BRAKING TORQUE (%)	DUTY CYCLE (%)	
1	X	-	JNBR-150W750	1	750	150	12"L x 5"W x 5"D	123	10	
2	X	-	JNBR-150W400	1	400	150	12"L x 5"W x 5"D	117	10	
3	X	-	JNBR-260W250	1	250	260	12"L x 5"W x 5"D	123	10	
5	X	-	JNBR-400W150	1	150	400	12"L x 5"W x 5"D	123	10	
7.5	X	-	JNBR-600W130	1	130	600	12"L x 7"W x 5"D	123	10	
10	X	-	JNBR-800W100	1	100	800	12"L x 7"W x 5"D	117	10	
15	X	-	JNBR-1R6KW50	1	50	1600	12"L x 10"W x 5"D	149	10	
20	X	-	JNBR-1R5KW40	1	40	1500	12"L x 13"W x 5"D	100	10	
25	X	-	JNBR-4R8KW32	1	32	4800	26.5"L x 13"W x 5"D	120	10	
30	X	-	JNBR-4R8KW27R2	1	27.2	4800	26.5"L x 13"W x 5"D	117	10	
40	X	-	JNBR-6KW20	1	20	6000	26.5"L x 13"W x 5"D	117	10	
50	JNTBU-430	2	JNBR-4R8KW32	2	32	4800	28"L x 10"W x 10"D	117	10	
60	JNTBU-430	2	JNBR-4R8KW27R2	2	27.2	4800	28"L x 10"W x 10"D	117	10	
75	JNTBU-430	2	JNBR-6KW20	2	20	6000	26.5"L x 13"W x 5"D	117	10	

#### Notes:

- All brake resistor units include thermal overload switches.
- X = Transistor Built-in for all E510 Compact Drives at these ratings