

# Contactor

## HCD-850 Series

600 VAC • 50-120 A • 3 Pole



### Description

The HCD-850 Series is a 3-pole definite purpose contactor used to switch loads on or off on circuits from 50 amperes to 120 amperes. Littelfuse contactors are designed with consistent silver thickness for increased product life, making them ideal for the demands of a broad range of commercial applications.

HCD-850 Series contactors are compliant with the A2L refrigerant requirements of UL Category Control Number (CCN) LZGH2/LZGH8 for Annex JJ of UL 60335-2-40.

### Features & Benefits

FEATURES	BENEFITS
<b>Double E magnet assembly</b>	For optimal performance with reduced power use
<b>Moveable contacts with heavy duty silver alloy</b>	To help extend the life of the product
<b>Termination options include combo screw, screw with pressure plate, or lug</b>	To meet a broad range of system needs
<b>Universal mounting configuration</b>	Helps streamline installation
<b>Optional auxiliary switches available</b>	Designed for use with 3 pole and 4 pole contactors

### Applications

- HVAC/R
- Food & Beverage
- Lighting
- Welding
- Water/Wastewater

### Certification & Compliance

<b>UL 508</b>	File No. E227250
<b>UL 60335-2-40 (CCN LZGH2 / CCN LZGH8)</b>	File No. E227250 - cURus
<b>CSA</b>	File No. 221260 (1456104)

# Contactors

## HCD-850 Series

### Specifications

<b>Initial Dielectric Strength</b>	Between Contacts & Coils: 2,200 VAC; Between Poles: 2,200 VAC; Between Open Contacts: 2,200 VAC
<b>Arc Cover</b>	Standard on 50 - 120 FLA
<b>Insulation System</b>	130 °C Class B
<b>Unit Weight</b>	50-60 FLA: 32.0 oz; 70-120 FLA: 64.0 oz
<b>Power Pole Terminations</b>	Aluminum box lug 50-60 FLA Copper box lug 70-120 FLA
<b>Wire Size</b>	50-60 FLA Box lug: 14-2; 75-120 FLA: Box Lug 14-1
<b>Recommended Tightening Torque</b>	50-60 FLA Box lug: 50 in.- lbs; 75-120 FLA Box lug: 60 in.- lbs
<b>Coil Terminal Connections</b>	Coil terminals: dual 0.250" quick connects or #6-32 screw/0.250" quick connects
<b>Power Terminal Connections</b>	Dual 0.250" quick connects
<b>Operating Temperature</b>	-40 °C to 65 °C; -40 °F to 150 °F
<b>Mounting Method</b>	Chassis Mount

### Coil Technical Data – 3 Pole 50 – 60 A

NOMINAL COIL VOLTAGE (VAC)	MINIMUM PICKUP VOLTAGE (VAC)	DROP-OUT VOLTAGE (VAC)	NOMINAL INRUSH (VA)		NOMINAL SEALED (VA)		NOMINAL COIL RESISTANCE (OHM)	MAXIMUM COIL VOLTAGE (VAC)
			50 HZ	60 HZ	50 HZ	60 HZ		
24	18	6-15	114	105	13	12	3.7	30
120	88	20-70	108	105	12	11	88	132
208/240	177	40-140	126	125	14	13	305	264
277	221	65-185	120	115	13	12	488	300
480	384	150-270	125	115	12	11	1453	520

### Coil Technical Data – 3 Pole 75 – 120 A

NOMINAL COIL VOLTAGE (VAC)	MINIMUM PICKUP VOLTAGE (VAC)	DROP-OUT VOLTAGE (VAC)	NOMINAL INRUSH (VA)		NOMINAL SEALED (VA)		NOMINAL COIL RESISTANCE (OHM)	MAXIMUM COIL VOLTAGE (VAC)
			50 HZ	60 HZ	50 HZ	60 HZ		
24	22	6-15	225	222	22	21	0.68	30
120	95	20-70	225	220	19	18	16.5	132
208/240	177	40-140	280	270	27	25	52	264
277	235	65-185	210	202	27	25	96.6	300
480	408	48-288	245	205	27	21	267.5	528

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### Standard Fault Short Circuit Rating

Suitable for use on a circuit capable of delivering not more than 5k rms symmetrical amperes, 600 Volts maximum at 400% of fuse and circuit breaker.

### High Fault Short Circuit Rating

Suitable for use on a circuit capable of delivering not more than 100k rms symmetrical amperes as shown.

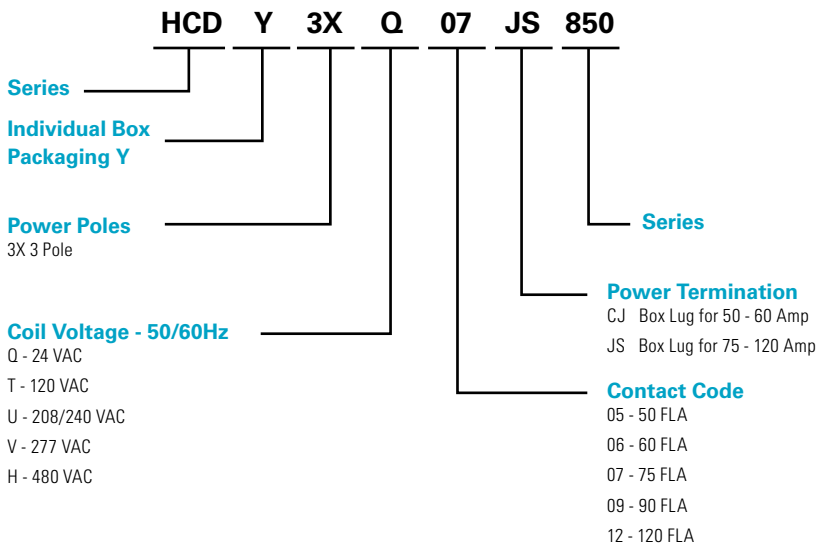
CONTACT CODE	MAXIMUM CIRCUIT BREAKER		ANY LISTED FUSE (EXCEPT AS NOTED)	
	480 VOLTS MAXIMUM	MINIMUM ENCLOSURE VOLUME	600 VOLTS MAXIMUM	MINIMUM ENCLOSURE VOLUME
05 - 50 FLA	150 A	256 cu. in.	200 A	256 cu. in.
06 - 60 FLA	150 A	256 cu. in.	200 A	256 cu. in.
07 - 75 FLA	150 A	1008 cu. in.	200 A	1008 cu. in.
09 - 90 FLA	150 A	1008 cu. in.	200 A	1008 cu. in.
12 - 120 FLA	150 A	1008 cu. in.	200 A	1008 cu. in.

Note: for a circuit capable of delivering more than 5k rms symmetrical amperes, the equipment enclosure must have a minimum of four fastening points or a piano hinge and two fastening points.

### Horsepower Rating

FULL LOAD AMPS	120 VAC		240 VAC		480 VAC		600 VAC	
	SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE	SINGLE PHASE	THREE PHASE
50	3 HP	-	10 HP	15 HP	-	30 HP	-	30 HP
60	5 HP	-	10 HP	25 HP	-	30 HP	-	30 HP
75	5 HP	-	15 HP	25 HP	-	40 HP	-	40 HP
90	7.5 HP	-	20 HP	30 HP	-	50 HP	-	50 HP
120	7.5 HP	-	20 HP	30 HP	-	50 HP	-	50 HP

### Part Numbering System



Note: Not all combinations of Part Number suffixes are listed. Contact Littelfuse for details.

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### Ordering Information

3 POLE CONTACTORS							
FULL LOAD AMPS – INDUCTIVE AT 600 VAC	NUMBER OF POLES	FULL LOAD CURRENT – RESISTIVE AT 600 VAC	LOCKED ROTOR CURRENT			CATALOG NO.	ORDERING NO.
			115/230 VAC	460 VAC	575 VAC		
50A	3	65A	300A	250A	200A	CON-3/*/50	HCDY3X*05CJ850
60A	3	75A	360A	300A	240A	CON-3/*/60	HCDY3X*06CJ850
75A	3	93A	450A	375A	300A	CON-3/*/75	HCDY3X*07JS850
90A	3	120A	540A	450A	360A	CON-3/*/90	HCDY3X*09JS850
120A	3	150A	720A	600A	480A	CON-3/*/120	HCDY3X*12JS850

To select other coil voltages, use the Coil Voltage Selection Chart to find the appropriate coil voltage. Replace the \* above with the required coil voltage. For example, for a 208/240 VAC coil in a three-pole 50 A contactor, the Catalog Number would be CON-3/240/50 and Ordering Number would be HCDY3XU05CJ850.

The Catalog Number serves solely as an identifier. When placing an order, please use ordering number.

### Coil Voltage Selection Chart

	24 VAC	120 VAC	208/240 VAC	277 VAC	480 VAC
CATALOG NO. VOLTAGE SUFFIX #	24	120	240	277	480
ORDERING NO. SUFFIX	Q	T	U	V	H

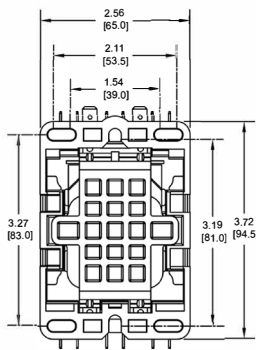
### Accessories



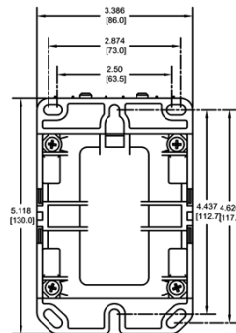
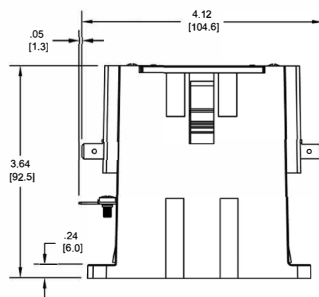
HCD - Auxiliary Switches:

- CON-AUX300-1
- CON-AUX300-2
- CON-AUX600

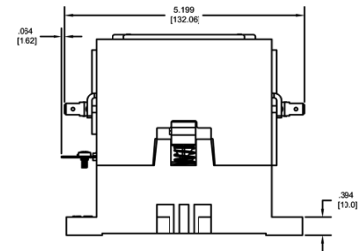
### Dimensions inches (mm)



3 Pole Contactor 50 - 60 FLA



3 Pole Contactor 75-125 FLA



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