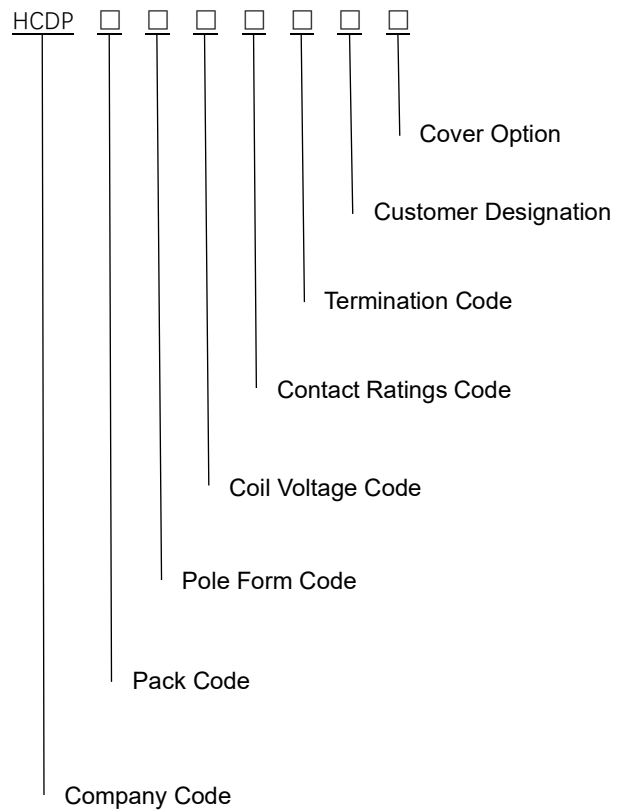


## HCDP Series Definite Purpose Contactors, 20~90A

### 1. General

- 1.1 Certificates: UL-E246810; CSA-256361;
- 1.2 Application: HVACR;
- 1.3 Standard: UL508; UL60947; ARI 780/790;
- 1.4 RoHS Compliance;

### 2. Type Designation



Type	Description			
Company Code	<b>HCDP</b> = Hecheng Electrical. Definite Purpose Contactor for HVAC applications			
Pack Code	– = Normal factory bulk packaging for OEM or volume delivery skid quantities, not for individual sale or distribution. <b>Y</b> = Individual box packing and stick on information label. Packed in quantities in an over pack carton, suitable for individual sale or distribution. <b>A to Z</b> = Any assigned non standard packaging of OEM or Distribution.			
Pole Form Code	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>1</b> = 1 Pole Normally Open Double Make w/ shunt  <b>2</b> = 2 Pole Normally Open Double Make  <b>3</b> = 3 Pole Normally Open Double Make  <b>4</b> = 4 Pole Normally Open Double Make                         </td> <td style="width: 50%; vertical-align: top;"> <b>1N</b> = 1 Pole Normally Open Double Make(no shunt)  <b>3E</b> = 2 form X NO, 1 from Y NC  <b>3R</b> = 3 pole reversing assembly  <b>4E</b> = 2 form X NO, 2 form Y NC                         </td> </tr> </table>	<b>1</b> = 1 Pole Normally Open Double Make w/ shunt <b>2</b> = 2 Pole Normally Open Double Make <b>3</b> = 3 Pole Normally Open Double Make <b>4</b> = 4 Pole Normally Open Double Make	<b>1N</b> = 1 Pole Normally Open Double Make(no shunt) <b>3E</b> = 2 form X NO, 1 from Y NC <b>3R</b> = 3 pole reversing assembly <b>4E</b> = 2 form X NO, 2 form Y NC	
<b>1</b> = 1 Pole Normally Open Double Make w/ shunt <b>2</b> = 2 Pole Normally Open Double Make <b>3</b> = 3 Pole Normally Open Double Make <b>4</b> = 4 Pole Normally Open Double Make	<b>1N</b> = 1 Pole Normally Open Double Make(no shunt) <b>3E</b> = 2 form X NO, 1 from Y NC <b>3R</b> = 3 pole reversing assembly <b>4E</b> = 2 form X NO, 2 form Y NC			
Coil Voltage Code	<b>24</b> = 24 VAC <b>120</b> = 120 VAC <b>240</b> = 208/240 VAC <b>277</b> = 277 VAC <b>380</b> = 380 VAC <b>480</b> = 480 VAC			
Contact Ratings Code	<table border="0" style="width: 100%;"> <tr> <td style="width: 25%; vertical-align: top;"> <b>20</b> = 20 FLA  <b>25</b> = 25 FLA  <b>30</b> = 30 FLA                         </td> <td style="width: 25%; vertical-align: top;"> <b>35</b> = 35 FLA  <b>40</b> = 40 FLA  <b>50</b> = 50 FLA                         </td> <td style="width: 25%; vertical-align: top;"> <b>60</b> = 60 FLA  <b>75</b> = 75 FLA  <b>90</b> = 90 FLA                         </td> </tr> </table>	<b>20</b> = 20 FLA <b>25</b> = 25 FLA <b>30</b> = 30 FLA	<b>35</b> = 35 FLA <b>40</b> = 40 FLA <b>50</b> = 50 FLA	<b>60</b> = 60 FLA <b>75</b> = 75 FLA <b>90</b> = 90 FLA
<b>20</b> = 20 FLA <b>25</b> = 25 FLA <b>30</b> = 30 FLA	<b>35</b> = 35 FLA <b>40</b> = 40 FLA <b>50</b> = 50 FLA	<b>60</b> = 60 FLA <b>75</b> = 75 FLA <b>90</b> = 90 FLA		
Termination Code	<b>AA</b> = Std. #10-32 Combo Screw (one and two pole) Quad 1/4" Q.C. <b>BB</b> = Same as AA except optional SEMS plate <b>CC</b> = #14-4 LUG w/ dual Q.C. 40 FLA <b>DD</b> = Std. #10-32 Combo Screw NO QC TERMINALS <b>EE</b> = SEMS COMBO SCREW W/O QC TERMINALS <b>FF</b> = #14-4 LUG W/O QUICK CONNECT TERMINALS <b>GG</b> = #14-4 LUG W/QUAD QUICK CONNECT TERMINALS 40 FLA  Three Pole standard termination is designated by: <b>CY</b> = Standard #10-32 Combination Screw for 20-35 amp w/ dual .250" Q.C. terminals <b>CG</b> = #14-2 LUG w/ dual Q.C. for 40 FLA <b>CJ</b> = #14-2 / #14-1 LUG with dual Q.C. terminals <b>NN</b> = #10 screws only no quick connects <b>XX</b> = Other Combinations as specials & factory assigned designators made from existing termination listing <b>AB</b> = exclusive for 3 pole reversing assembly			
Customer Designation	100-99 Hecheng electrical assigned customer specific designation for a qualified customer special in marking, termination, or other significant variation from the standard construction. When blank, no options apply.			
Cover Option	'C' indicates the addition of a cover when one is not standard.			

### 3. Technical Data

#### 3.1 Contactor

##### ★ HCDP, 1 Pole

Model	HCDPY1 24/120/240 30/40									
	Poles	Full Load Amps	Locked Rotor Amps				Resistive Amps Rating	Coil Voltage 50/60Hz	Approx Ship Weight	
240V			277V	480V	600V					
HCDPY1	1	20	120	110	100	80	25	24 120 208/240 277 380 480	1 lb	
	1	25	150	150	100	80	35			
	1	30	180	180	150	120	40			
	1	35	180	180	150	120	50			
	1	40	240	240	200	160	55			

##### ★ HCDP, 2 Poles

Model	HCDPY2 24/120/240 30/40									
	Poles	Full Load Amps	Locked Rotor Amps				Resistive Amps Rating	Coil Voltage 50/60Hz	Approx Ship Weight	
240V			277V	480V	600V					
HCDPY2	2	20	120	120	100	80	30	24 120 208/240 277 380 480	1 lb	
	2	25	150	150	125	100	35			
	2	30	180	180	135	110	40			
	2	35	200	200	135	110	50			
	2	40	240	240	200	160	55			

##### ★ HCDP, 2 & 3 Poles

Model	HCDPY3 24/120/240 30/40/50/60/75/90												
	Poles	Full Load Amps	120V		240V		480V		600V		Resistive Amps Rating	Coil Voltage 50/60Hz	Approx Ship Weight
			Hp	LRA	Hp	LRA	Hp	LRA	Hp	LRA			
HCDPY3	2 3	25	2 -	150	3 5	125	- 7.5	100	- 7.5	35	24 120 208/240 277 380 480	1 1/2 lbs	
	2 3	30	2 -	180	5 7.5	150	- 10	120	- 10	40			
	2 3	40	3 -	240	7.5 10	200	- 15	160	- 15	50			
	2 3	50	3 -	300	10 15	300	- 30	200	- 30	63			
	2 3	60	5 -	360	10 20	300	- 40	240	- 40	75			
	2 3	75	-	450	- 25	375	- 40	300	- 40	93			
	2 3	90	-	540	- 30	450	- 60	360	- 60	120			

##### ★ HCDP, 4 Poles

Model	HCDPY4 24/120/240 30/40												
	Poles	Full Load Amps	120V		240V		480V		600V		Resistive Amps Rating	Coil Voltage 50/60Hz	Approx Ship Weight
			Hp	LRA	Hp	LRA	Hp	LRA	Hp	LRA			
HCDPY4	4	25	-	150	5	125	7.5	100	7.5	35	24 120 208/240 277 380 480	1 1/2 lbs	
	4	30	-	180	7.5	150	10	120	10	40			
	4	40	-	240	10	200	15	160	15	50		2 lbs	

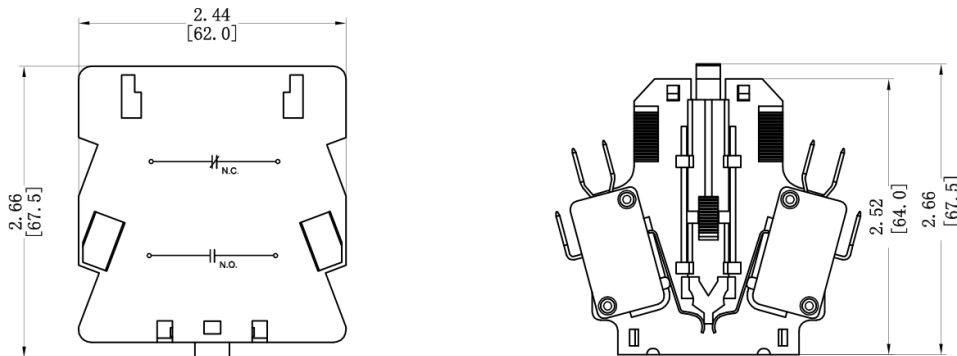
### 3.2 Coil Specifications

Poles	FLA	Watts	VA(Nominal)		Volts(Nominal)	
			Inrush	Sealed	Pick-up	Drop-out
1P-2P	20-40	2.6	27	7.3	80%	50%
	25-40	2.5	52	6.2	80%	50%
2P-3P	50-60	4.2	91	15.6	80%	50%
	75-90	13.5	200	31	85%	53%
4P	25-40	4.2	91	15.6	80%	50%

### 3.3 Other Specifications

Specifications	20-30 FLA	40 FLA	50 FLA	60FLA	75 FLA	90 FLA
Permissible Ambient Temperature:	-40°C to 65°C		-40°F to 150°F			

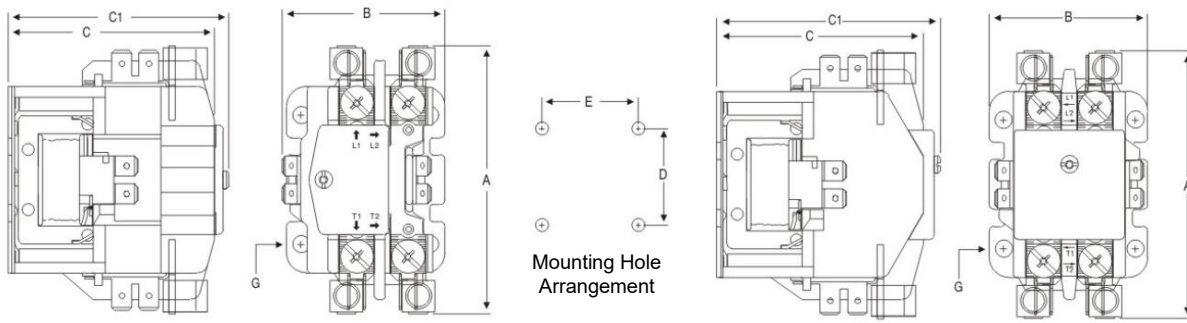
### 4. Modifications and Accessories



Field Modification Kits

Description	Poles	Contactor FLA	Auxiliary Contacts	Catalog Number
Snap-on Side Mounted Auxiliary Contacts	2P-3P	25-60	1 NO	HCACR0
			1 NC	HCACR6
			1 NO & 1NC	HCACR7
			2 NO	HCACR8
	2P-3P	75-90	2 NC	HCD36098001
			1 SPDT	HCD36098003
			2 SPDT	HCD22125001
			1 NO	HCD22125002
Mechanical Interlock	2P-3P	25-60	1 NC	HCCE42SPDT
			1 SPDT	HCD70035001

### 5. Outline Dimensions



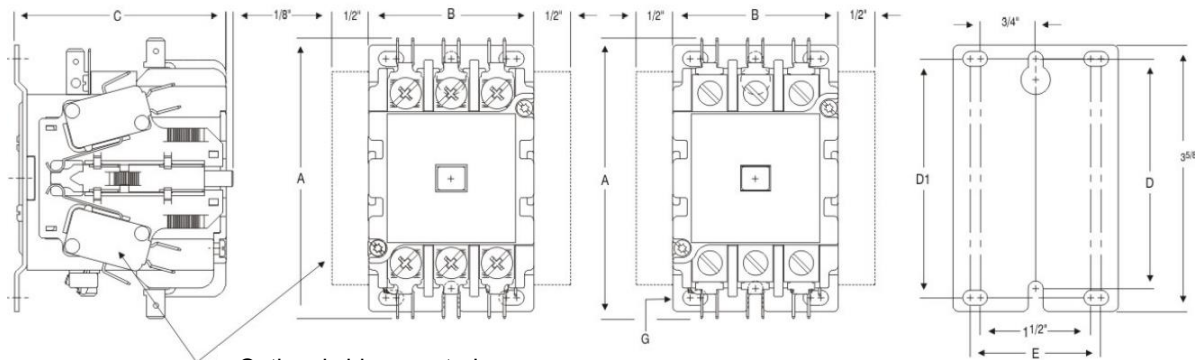
20 – 40 Amp 1-pole

20 – 40 Amp 2-pole

Open Type

FLA	Poles	Outline Dimensions				Mtg Dimensions		Mtg Screw	Max Wire Size
		A	B	C	C1	D	E	G	
20-40	1	3 3/8	2 1/16	2 5/8	2 13/16	1 5/8	1 5/8	10	10
20-40	2	3 3/8	2	2 11/16	2 27/32	1 5/8	1 5/8	10	10

25 – 40 Amp 2-pole & 3-pole

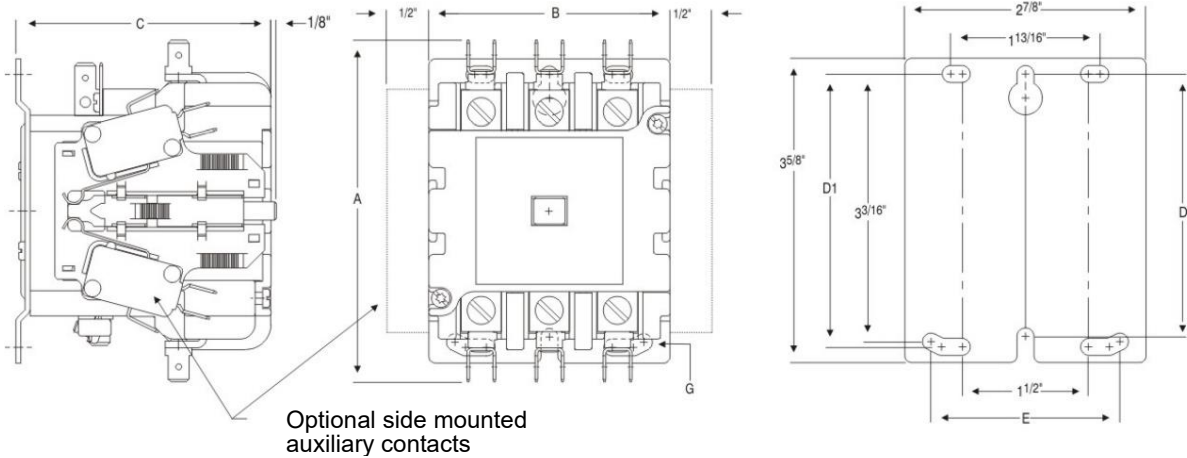


Optional side mounted auxiliary contacts

Open Type

FLA	Poles	Outline Dimensions			Mtg Dimensions			Mtg Screw	Max Wire Size
		A	B	C	D	D1	E	G	
25-30	3	3 3/4	2 1/4	2 7/8	3 1/8	3 1/4	1 3/4	10	8
40	3	3 3/4	2 1/4	2 7/8	3 1/8	3 1/4	1 3/4	10	2

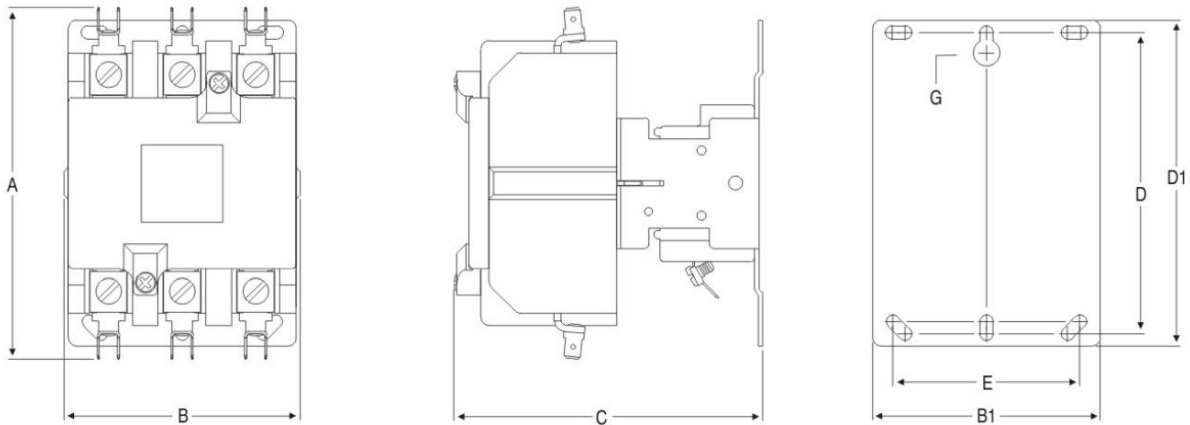
**50 – 60 Amp 2-pole & 3-pole**



Open Type

FLA	Poles	Outline Dimensions			Mtg Dimensions			Mtg Screw	Max Wire Size
		A	B	C	D	D1	E	G	
50-60	3	4 1/16	2 7/8	3 1/16	3 1/8	3 1/4	2 1/4	10	2

**75 – 90 Amp 2-pole & 3-pole**

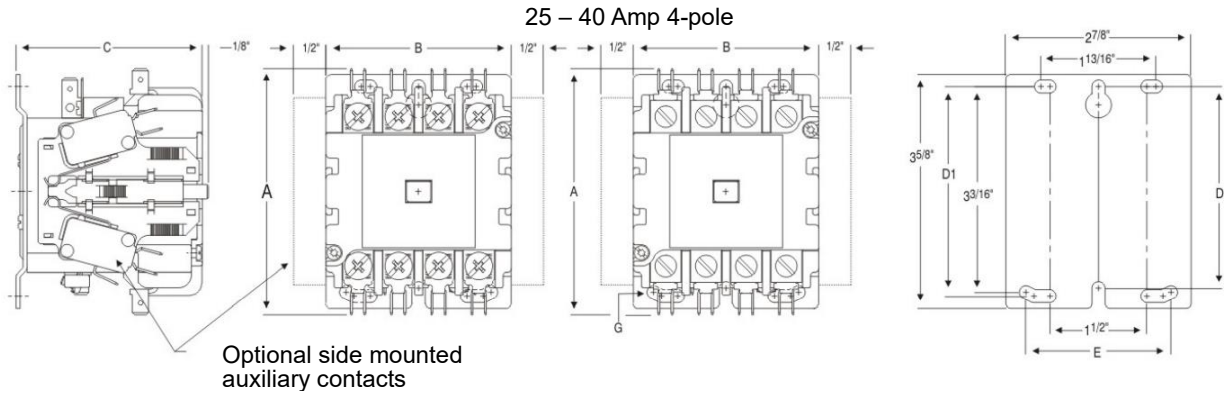


Add 3/16" on each end for auxiliary

Mounting Hole Pattern

Open Type

FLA	Poles	Outline Dimensions				Mtg Dimensions			Mtg Screw	Max Wire Size
		A	B	B1	C	D	D1	E	G	
75-90	3	5 3/8	3 5/8	3 1/2	4 3/4	4 5/8	5	2 7/8	10	1/0



Open Type

FLA	Poles	Outline Dimensions			Mtg Dimensions			Mtg Screw	Max Wire Size
		A	B	C	D	D1	E	G	
25-30	4	3 3/4	2 7/8	2 7/8	3 1/8	3 1/4	2 1/4	10	8
40	4	3 3/4	2 7/8	2 7/8	3 1/8	3 1/4	2 1/4	10	2