

30C

Definite Purpose Contactor

20FLA - 150FLA
1-4Pole

Nomenclature

30C 50 P3 J 2 - 001

Design number 30C;
Series Number 30C, Definite purpose contactor

Contact Rating:
20FLA 25FLA 30FLA 40FLA;
50FLA 60FLA
75FLA 90FLA
120FLA 150FLA

Pole and Form:
P= Form NO
N= Only for 1pole without shut
K= Only for 3poles, 2 form NO, 1 form NC

1, 2, 3, 4 poles

Coil Voltage: 50/60Hz Frequency
J= 24 D=120 A= 208-240
F= 277 B= 480 C= 600

Termination:

- | | |
|--|-----------------------------------|
| 1 #10-32 combo screw with quad QC(20-30FLA) | 6 14-2 Box lug with quick connect |
| 2 Same as 1 with sems plate | 7 14-1 Box lug with quick connect |
| 3 #14-4 lug with quad QC (box lug with quick connect) | |
| 4 #14-4 lug with dual QC (box lug with quick connect) standard | |
| 5 #10-32 combo screw with dual QC(20-30 FLA) | |

Customer Identification:
001 -999 optional customer specifics designation assigned by Aislu to specify significant variation from the standard construction

1- , 2- Pole **20 - 40FLA**

Contact Data

Arrangements: 1 Form X (SPST-NO-DM) with or without shunt;
 2 Form X (DPST-NO-DM).
Material: (1) AgCdO ; (2) AgSnO₂In₂O₃
Contact Ratings:

Full Load Amps (FLA)	Poles	Line Voltage	LRA	Resistive Amps	Max. HP	
					Voltage	1 Phase
20	2	240/277	120	30	120	2
		480	100	30	240	3
		600	80	30		
25	1	240/277	150	30	120	1
		480	50	30	240	2
		600	40	30		
25	2	240/277	150	35	120	2
		480	125	35	240	3
		600	100	35		
30	1	240/277	150	40	120	1
		480	75	40	240	2
		600	50	40		
30	2	240/277	150	40	120	2
		480	125	40	240	3
		600	100	40		
40	1	240/277	240	50	120	2
		480	200	50	240	3
		600	160	50		
40	2	240/277	240	50	120	2
		480	200	50	240	3
		600	160	50		

Coil Data

Voltage: 24 - 480 VAC, 50/60 Hz. See Coil Data Table below (480V un-listed)
Insulation Class: UL Class B (130°C)
Coil Data:

	1 Pole Contactors				2 Pole Contactors			
	24	120	208/240	277	24	120	208/240	277
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	18	420	1800	2500	18	420	1800	2500
Maximum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-165
Minimum Inrush VA@50Hz	31	31	31	31	31	31	31	31
Minimum Inrush VA@60Hz	28	28	28	28	28	28	28	28
Nominal Sealed VA @ 50 Hz	6	6	6	6	6	6	6	6
Nominal Sealed VA @ 60 Hz	5	5	5	5	5	5	5	5
Maximum Coil Voltage	30	132	264	300	30	132	264	300

General Specifications

INITIAL DIELECTRIC STRENGTH

Between Contacts & Coils: 2,200 VAC
 Between Poles: 2,200 VAC (includes shunt)
 Between Open Contacts: 2,200 VAC (no shunt)

ARC COVER

Optional on 20- 30 FLA
 Standard on 40 FLA

INSULATION SYSTEM

130°C Class B

TEMPERATURE RANGE

-40°C to +65°C (-40°F to +150°F)

UNIT WEIGHT

1 Pole 0.5 lb
 2 Pole 0.6 lb

POWER POLE TERMINATIONS

#10-32 screw or box lug

WIRE SIZE

#10-32 screw 16-8*
 Box lug 14-4

*must use ring terminal

RECOMMENDED TIGHTENING TORQUE

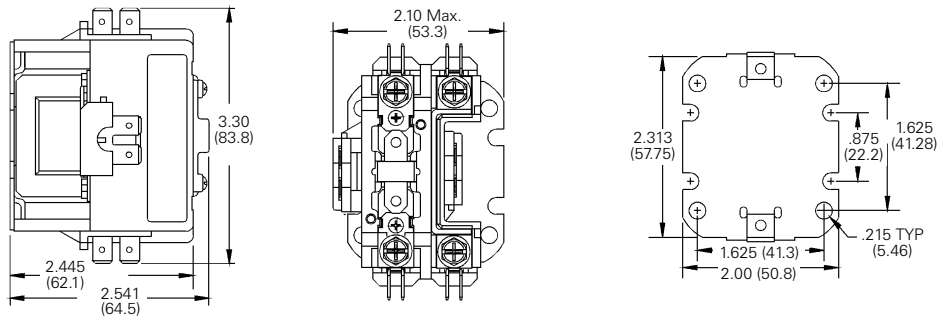
#10-32 screw 22 in. Lbs
 Box lug 40 in. lbs

QUICK CONNECTS

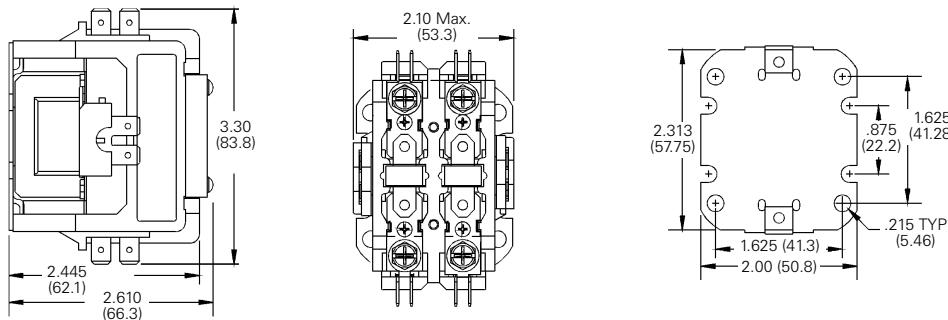
Coil terminals Dual: .250" QC
 Power terminals 1 Pole: Quad .250" QC
 2 Pole: Dual or Quad .250" QC

Outline Dimensions

1-Pole (inch)



2-Pole (inch)



*Standard part numbers for normal ordering:

FLA Rating	Number of poles	Coil Voltage			
		24V	120V	208-240V	277V
20	1	30C20P1J1	30C20P1D1	30C20P1A1	30C20P1F1
	2	30C20P2J1	30C20P2D1	30C20P2A1	30C20P2F1
25	1	30C25P1J1	30C25P1D1	30C25P1A1	30C25P1F1
	2	30C25P2J1	30C25P2D1	30C25P2A1	30C25P2F1
30	1	30C30P1J1	30C30P1D1	30C30P1A1	30C30P1F1
	2	30C30P2J1	30C30P2D1	30C30P2A1	30C30P2F1
40	1	30C40P1J3	30C40P1D3	30C40P1A3	30C40P1F3
	2	30C40P2J3	30C40P2D3	30C40P2A3	30C40P2F3

3- , 4- Pole 20 - 40FLA

Contact Data

Arrangements: 3 Form X (3PST-NO-DM) ;
 4 Form X (4PST-NO-DM).
Material: (1)AgCdO ; (2) AgSnO₂In₂O₃
Contact Ratings:

Full Load Amps (FLA)	Poles	Line Voltage	LRA	Resistive Amps	Maximum Horsepower		
					Voltage	1 Phase	3 Phase
20	3	240/277	120	30	110/120	1.5	-
		480	100	30	200/240	3	7.5
		600	80	30	480/600	-	7.5
25	3	240/277	150	35	110/120	2	-
		480	125	35	200/208	-	7.5
	600	100	35	240/277	5	10	
30	3	240/277	180	40	110/120	2	-
		480	150	40	200/208	-	10
	600	120	40	240/277	5	10	
40	3	240/277	240	50	110/120	3	-
		480	200	50	200/208	-	10
	600	160	50	240/277	7.5	10	
	4						
					480	-	20
					600	-	25

Coil Data

Voltage: 24 - 480 VAC, 50/60 Hz. See Coil Data Table below (480V un-listed)
Insulation Class: UL Class B (130°C)
Coil Data:

	3 Pole Contactors				4 Pole Contactors			
	24	120	208/240	277	24	120	208/240	277
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	7	180	720	900	6	150	600	750
Maximum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-175
Minimum Inrush VA@50Hz	65	65	65	65	60	60	60	60
Minimum Inrush VA@60Hz	60	60	60	60	55	55	55	55
Nominal Sealed VA @ 50 Hz	7.5	7.5	7.5	7.5	9	9	9	9
Nominal Sealed VA @ 60 Hz	6	6	6	6	7	7	6	7
Maximum Coil Voltage	30	132	264	300	30	132	264	300

General Specifications

INITIAL DIELECTRIC STRENGTH
 Between Contacts & Coils: 2,200 VAC
 Between Poles: 2,200 VAC
 Between Open Contacts: 2,200 VAC

ARC COVER
 Standard on 40 FLA

INSULATION SYSTEM
 130°C Class B

TEMPERATURE RANGE
 -40°C to +65°C (-40°F to +150°F)

UNIT WEIGHT
 3 Pole 1 lb
 4 Pole 1.25 lb

POWER POLE TERMINATIONS
 #10-32 screw or box lug

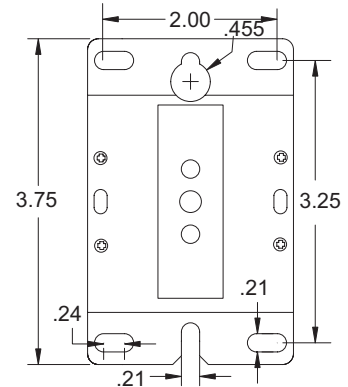
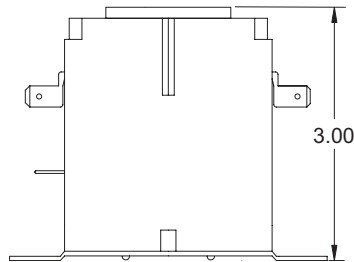
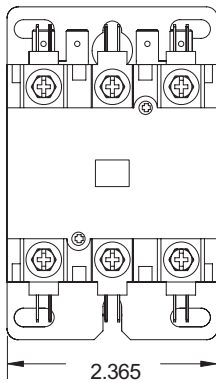
WIRE SIZE
 #10-32 screw 16-8*
 Box lug 14-4
 *must use ring terminal

RECOMMENDED TIGHTENING TORQUE
 #10-32 screw 22 in. Lbs
 Box lug 40 in. lbs

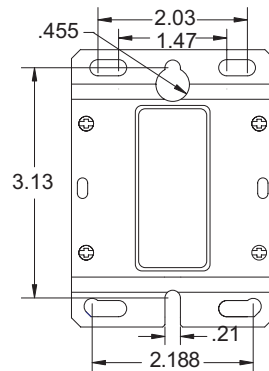
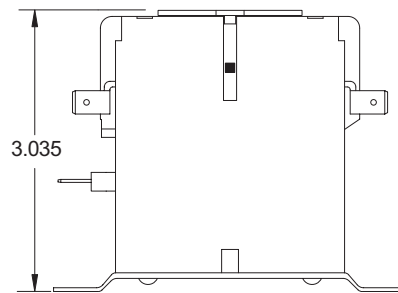
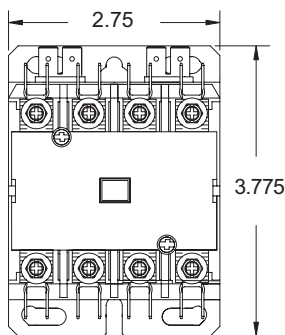
QUICK CONNECTS
 Coil terminals Dual: 0.250" QC
 or # 6-32 screw/0.250" QC
 Power terminals Quad 0.250" QC

Outline Dimensions

3-Pole (inch)



4-Pole (inch)



*Standard part numbers for normal ordering:

FLA Rating	Number of poles	Coil Voltage			
		24V	120V	208-240V	277V
20	3	30C20P3J5	30C20P3D5	30C20P3A5	30C20P3F5
	4				
25	3	30C25P3J5	30C25P3D5	30C25P3A5	30C25P3F5
	4				
30	3	30C30P3J5	30C30P3D5	30C30P3A5	30C30P3F5
	4	30C30P4J5	30C30P4D5	30C30P4A5	30C30P4F5
40	3	30C40P3J4	30C40P3D4	30C40P3A4	30C40P3F4
	4	30C40P4J4	30C40P4D4	30C40P4A4	30C40P4F4

Auxiliary Switches

Available auxiliary switches for 3- and 4-pole contactors (20-40FLA)

Description	Contact arrangement	Termination	Part Number
Single unit interlock configuration. One on each side - max set up two switches	1NO/1NC break before make	250" quick connects	30CA1Q
Single unit interlock configuration. One on each side - max set up two switches	1NO/1NC break before make	#6-32 screw terminals	30CA1S
SPDT circuit One switch on each side	SPDT	250" quick connects	30CB1Q
SPDT circuit One switch on each side	(2) SPDT	250" quick connects	30CB2S

Contact Rating

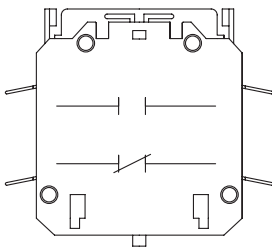
Single circuit 1NO/1NC

Voltage Rating	120VAC	240VAC	480VAC	600VAC
Amperes-Break	3.0	1.5	0.75	0.6
Amperes-Make	30	15	75	6
Amperes-Continuous	10	10	10	10

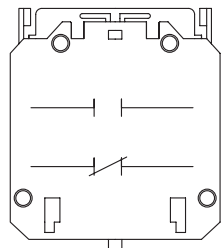
SPDT

10A, 1/3 HP, 125 or 250VAC
1/2A, 125VDC
1/4A, 250VDC

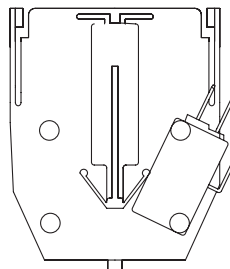
1 NO/1NC
quick connects



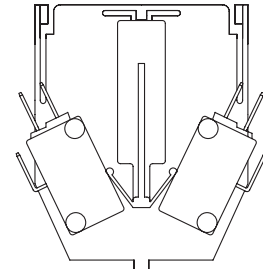
1 NO/1NC
screw terminals



One SPDT
switch per side



Two SPDT
switches per side



3- Pole 50 - 90FLA

Be important: The frame of 50-90FLA contactors different than 20-40FLA contactors. See outline drawing

Contact Data

Arrangements: 3 Form X (SPST-NO-DM)
Material: (1)AgCdO ; (2) AgSnO2In2O3
Contact Ratings:

Full Load Amps (FLA)	Poles	Line Voltage	LRA	Resistive Amps	Maximum Horsepower		
					Voltage	1 Phase	3 Phase
50	3	115	300	65	110/120	3	-
		240	300	65	200/208	7.5	15
		480	250	65	240/277	10	15
		600	200	65	480	-	30
		600	200	65	600	-	30
60	3	115	360	75	110/120	5	-
		240	360	75	200/208	7.5	20
		480	300	75	240/277	10	20
		600	300	75	480	-	40
		600	240	75	600	-	40
75	3	115	450	93	110/120	7.5	-
		240	450	93	200/208	15	20
		480	375	93	240/277	20	25
		600	300	93	480	-	40
		600	300	93	600	-	40
90	3	115	540	120	110/120	5	-
		240	540	120	200/208	7.5	20
		480	450	120	240/277	10	30
		600	450	120	480	-	50
		600	360	120	600	-	50

Coil Data

Voltage: 24 - 480 VAC, 50/60 Hz. See Coil Data Table below (480V un-listed)
Insulation Class: UL Class B (130°C)
Coil Data:

	50-60FLA Contactors				75-90FLA Contactors			
	24	120	208/240	277	24	120	208/240	277
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	7	180	720	900	0.65	16	64	85
Maximum Pick Up Voltage	18	88	177	235	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-110	65-180
Minimum Inrush VA@50Hz	140	140	140	140	285	285	285	285
Minimum Inrush VA@60Hz	132	132	132	132	240	240	240	240
Nominal Sealed VA @ 50 Hz	20	20	20	20	42	42	42	42
Nominal Sealed VA @ 60 Hz	14	14	14	14	27	27	27	27
Maximum Coil Voltage	30	132	264	300	30	132	264	300

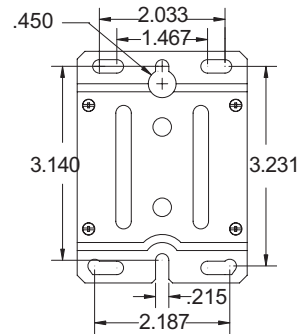
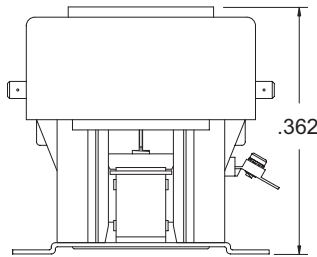
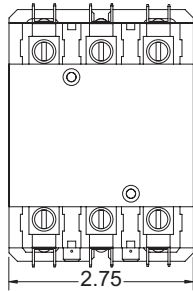
General Specifications

INITIAL DIELECTRIC STRENGTH
 Between Contacts & Coils: 2,200 VAC
 Between Poles: 2,200 VAC
 Between Open Contacts: 2,200 VAC
ARC COVER
 Standard
INSULATION SYSTEM
 130°C Class B
TEMPERATURE RANGE
 -40°C to +65°C (-40°F to +150°F)
UNIT WEIGHT
 50-60FLA 2 lb
 75-90FLA 4 lb

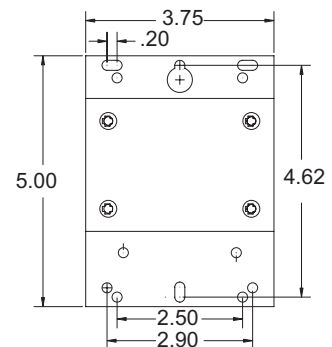
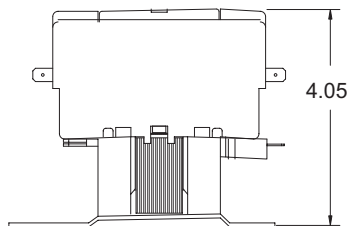
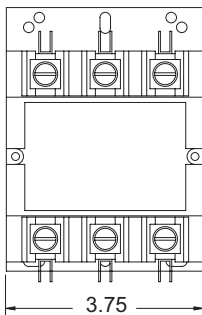
POWER POLE TERMINATIONS
 Aluminum boxlug
WIRE SIZE
 50-60FLA BoxLug 14-2
 75-90FLA BoxLug 14-1
RECOMMENDED TIGHTENING TORQUE
 Box lug 50 in. lbs
QUICK CONNECTS
 Coil terminals Dual: 0.250" QC
 or # 6-32 screw/0.250" QC
 Power terminals Quad 0.250" QC

Outline Dimensions

50-60FLA (inch)



75-90FLA (inch)



*Standard part numbers for normal ordering:

FLA Rating	Number of poles	Coil Voltage					
		24V	120V	208-240V	277V	480V	600V
50	3	30C50P3J6	30C50P3D6	30C50P3A6	30C50P3F6	30C50P3B6	30C50P3C6
60	3	30C60P3J6	30C60P3D6	30C60P3A6	30C60P3F6	30C60P3B6	30C60P3C6
75	3	30C75P3J7	30C75P3D7	30C75P3A7	30C75P3F7	30C75P3B7	30C75P3C7
90	3	30C90P3J7	30C90P3D7	30C90P3A7	30C90P3F7	30C90P3B7	30C90P3C7

F= 277

B= 480

C= 600

Terminations

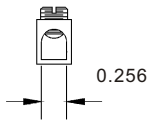
Standard on 20-30FLA
#10-32 combination phillips, slotted and 5/16 hex head with #12 washer



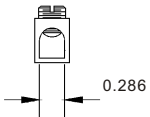
Optional on 20-40FLA
#10-32 sems screw with pressure plate



40FLA BoxLug
14-4 AWG Cu/Al



50-60FLA BoxLug
14-2 AWG Cu/Al



75-90FLA BoxLug
14-1 AWG Cu/Al

