



- 30C 20FLA Definite purpose contactor
- Robust 1 - 4 pole contactor
- Arc covers as standard
- Industry standard mounting



Contacts

Contact arrangement	1 Form X (SPST-NO-DM) with/without shunt
	2 Form X (DPST-NO-DM)
	3 Form X (3PST-NO-DM)
	4 Form X (4PST-NO-DM)
Contact material	AgCdO, AgSnOInO

General Specifications

Initial operate time	ms	20
Release time (typical)	ms	10
Bounce time	ms	≤ 10
Arc cover		standard

Insulation

Insulation system	UL Class B 130°C		
Initial dielectric strength	coil to contact	2200VAC	
	pole to pole	2200VAC (includes shunt)	
	between open contacts	2200VAC	

Environmental

Ambient temperature	operating	-40 to +65°C			
		1 Pole	2 Pole	3 Pole	4 Pole
Weight	approx.	0.5lb	0.6lb	1.0lb	1.24lb

Terminations

Coil terminals	1 - 4 pole	0.250° QC + 6-32 screw (dual 0.25" QC optional)
		per terminal
Power terminals	1 - 2 pole	10-32 screw or 14-4 box lug + dual 0.25" QC
	3 - 4 pole	10-32 screw or 14-4 box lug + quad 0.25" QC
Recommended tightening torque	10-32	22 in.lbs (2.49 Nm)
	box lug	40 in.lbs (4.52 Nm)
Wire size	10-32	16-8AWG*
	box lug	14-4AWG
		* Must use ring terminals

Ordering Code

3 0 C 2 0 - 1 0 2 3 - 1 - -

Series	Coil code: See table 2
Contact ratings 20: 20 FLA	
Contact material 10: AgCdO (standard) 70: AgSnOInO	
Contact arrangement 21: SPST-NO 22: DPST-NO 23: 3PST-NO 24: 4PST-NO	
Environmental protection 1: No overall cover - IP00	T Terminals
	L Terminals

- #### Mounting & terminations
- 1: 10-12 Combi philips screw, quad QC blades
 - 2: Same as 1 with sems screw and pressure plate
 - 3: 14-4AWG Box lug, quad QC blades
 - 4: 14-4AWG Box lug, dual QC blades (40FLA std.)
 - 5: 10-32 Combi philips screw, dual QC blades (20-30FLA std.)
 - 6: 14-2AWG Box lug, QC blades (50-60FLA std.)
 - 7: 14-1AWG Box lug, QC blades (75-150FLA std.)

- #### Reserved for customer specific requirements
- 001: Dual 0.25° QC blades for coil terminations
 - 002: 999 - Optional customer specific number

Contact Data						Table 1		
Model	Full load amps (FLA)	Poles	Line voltage (VAC)	Locked rotor amps (LRA)	Resistive amps	Max. HP		
						Voltage	1 Phase	3 Phase
30C20-1021	20	1	120	120	30	120	1	
			240 / 277	120		240	2	
			480	100				
			600	80				
30C20-1022	20	2	120	120	30	120	1.5	
			240 / 277	120		240	3	
			480	100		480		7.5
			600	80		600		7.5
30C20-1023	20	3	120	120	30	110 / 120	1.5	
			240 / 277	120		200 / 240	3	7.5
			480	100		480		7.5
			600	80		600		7.5
30C20-1024	20	4	120	120	30	120	1.5	
			240 / 277	120		240	3	7.5
			480	100		480		7.5
			600	80		600		7.5

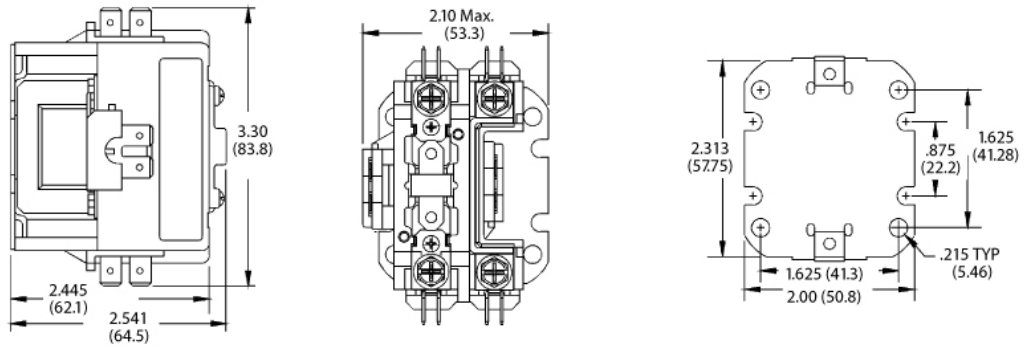
FLA Rating tested for 30,000 cycles of endurance at 240 / 480 / 600 VAC per UL508
 Resistive heat rating tested for 250,000 cycles at 277 VAC
 LRA Rating tested for 600 cycles of locked rotor endurance per UL508

Coil Data										Table 2	
Voltage: 24-277VAC 50/60Hz. See coil data below. (480VAC available but not UL approved). Insulation Class: UL Class B (130°C)											
Coil Code	Rated voltage 50/60Hz	Coil resistance (Ω)	Coil operating voltage (VAC)			Minimum inrush		Nominal coil power			
			Must release	Must operate	Max. voltage	VA @ 50Hz	VA @ 60Hz	VA @ 50Hz	VA @ 60Hz		
30C20-1021											
5024	24	18	6	18	30	31	28	6	5		
5120	120	420	20	88	132						
5230	208 / 240	1800	40	177	264						
5277	277	2500	50	221	300						
5480	480	8000	100	380	528						
30C20-1022											
5024	24	11	6	18	30	33	30	8	6.5		
5120	120	237	20	88	132						
5230	208 / 240	1000	40	177	264						
5277	277	1600	50	221	300						
5480	480	4200	100	380	528						
30C20-1023											
5024	24	7	6	18	30	65	60	7.5	6		
5120	120	180	20	88	132						
5230	208 / 240	719	40	177	264						
5277	277	900	65	220	300						
5480	480	3100	150	384	520						
30C20-1024											
5024	24	6	6	18	30	62	59	9	7		
5120	120	150	20	88	132				7		
5230	208 / 240	600	40	177	264				6		
5277	277	750	65	220	300				7		
5480	480	4200	150	384	520				7		

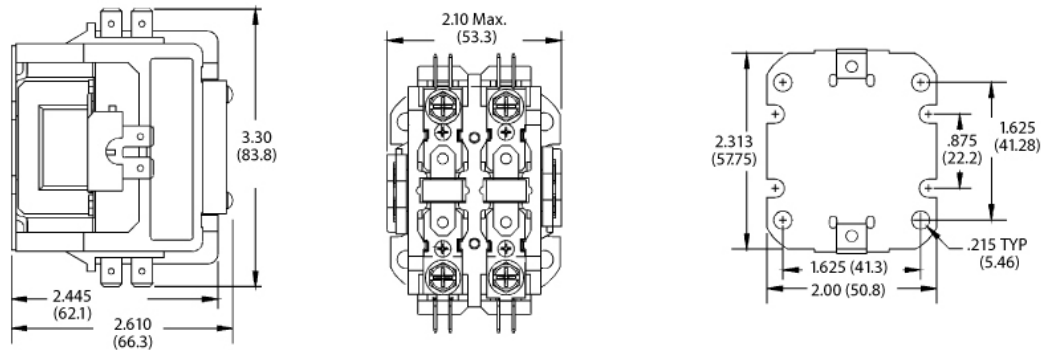
Dimensions in Inches (mm)

Fig. 1

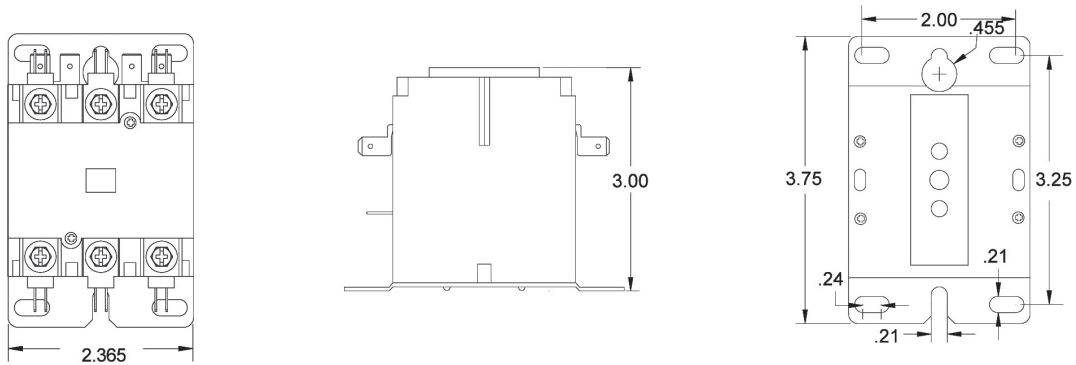
1 Pole



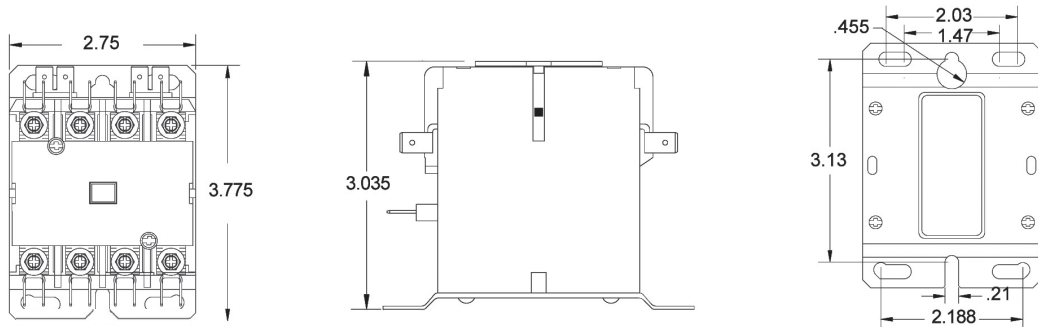
2 Pole



3 Pole



4 Pole



Power Terminations (Dimensions in Inches)

Fig. 2

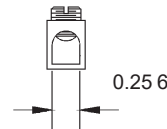
Termination Codes: 1 & 5
Standard on 20-30FLA
#10-32 combination phillips/slotted
and 5/16 hex head screw with #12 washer



Termination Code: 2
Optional on 20-40FLA
#10-32 sems screw with pressure plate



Termination Codes: 3 & 4
Box Lug
14-4 AWG (Cu/Al)



Auxiliary Switches for 3 & 4 Pole Contactors

Table 3

Description	Contact arrangement	Termination	Part number
Single unit interlock configuration One on each side - max set up to two switches	SPST-NO + SPST-NC break before make	0.250" QC	30CA1Q
Single unit interlock configuration One on each side - max set up to two switches	SPST-NO + SPST-NC break before make	6-32 screw terminals	30CA1S
SPDT circuit One switch per side	SPDT	0.250" QC	30CB1Q
SPDT circuit One switch per side	2 x SPDT	0.250" QC	30CB2S

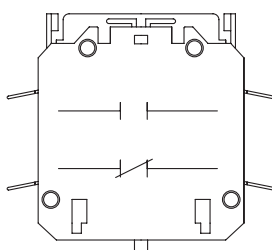
Auxiliary Switch Contact Rating

	SPST-NO+SPST-NC				SPDT	
	120VAC	240VAC	480VAC	600VAC	120VAC	250VAC
Voltage rating	120VAC	240VAC	480VAC	600VAC	120VAC	250VAC
Amps - break	3.00	1.50	0.75	0.60	0.5	0.25
Amps - make	30	15	7.5	6	15	15
Amps- continuous	10	10	10	10	10	10

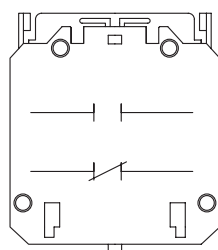
Auxiliary Switch Position (side view)

Fig. 3

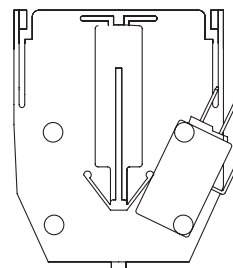
1 NO/NC
quick connects



1 NO/NC
screw terminals



one SPDT
switch per side



two SPDT
switches per side

