

30C20

definite purpose contactor



- 30C 20FLA Definite Purpose Contactor
- Robust 1 - 4 Pole Contactor
- Arc Covers as standard
- Industry Standard Mounting
- RoHS Compliant
- UL File No: E61703



Contact Data

Table 1

Arrangements: 1 Form X (SPST-NO-DM) with or without shunt
 2 Form X (DPST-NO-DM)
 3 Form X (3PST-NO-DM)
 4 Form X (4PST-NO-DM)

Material: AgCdO, AgSnOInO

Model No	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 240/480/600VAC per UL508.
 Resistive Heat rating tested for 250,000 cycles at 277VAC.
 LRA rating tested for 6000 cycles of Locked Rotor endurance per UL508.



30C20

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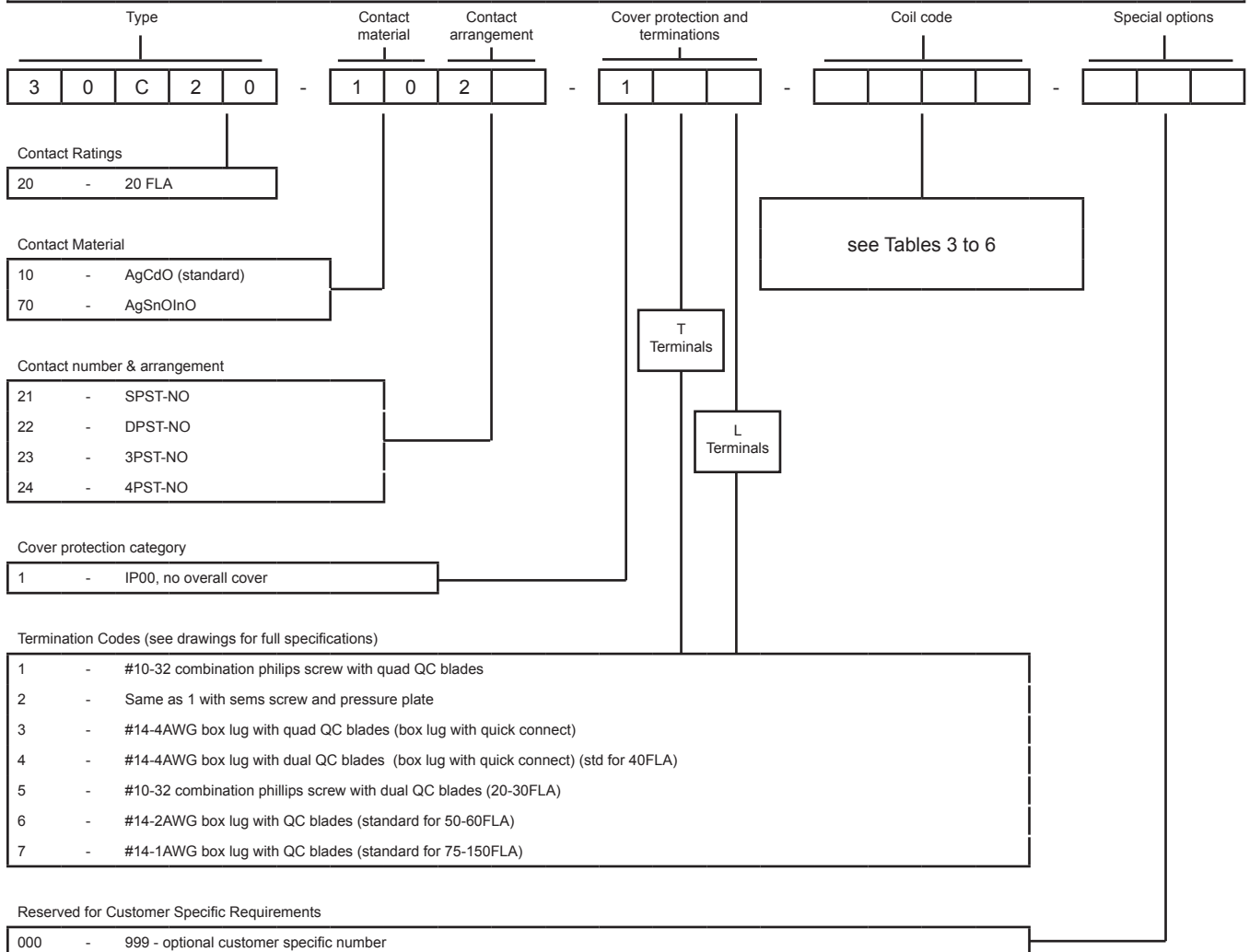
General Specifications

Table 2

Initial Operate Time	mS	20	Terminations	Coil Terminals	1 pole	Dual 0.250" QC (#6-32 screw to special option only)
Release Time	mS	10 (typical)			2 pole	
Bounce Time	mS	≤ 10			3 pole	
Arc Cover		Standard			4 pole	
Insulation System		UL Class B 130°C	Power Terminals	1 pole	#10-32 screw or #14-4 box lug + Dual 0.250" QC	
Initial Dielectric Strength between contacts and coil	VAC	2200		2 pole		
Initial Dielectric Strength between poles	VAC	2200 (includes shunt)		3 pole	#10-32 screw or #14-4 box lug + Quad 0.250" QC	
Initial Dielectric Strength between open contacts	VAC	2200		4 pole		
Temperature Range	°C	-40 ... +65	Recommended Tightening Torque	#10-32	22 in.lbf (2.49 Nm)	
Unit Weight (approx.)	1 pole	0.5 lb		box lug	40 in.lbs (4.52 Nm)	
	2 pole	0.6 lb	Wire size	#10-32	16-8AWG*	
	3 pole	1.0 lb		box lug	14-4AWG	
	4 pole	1.24 lb				

* Must use ring terminals

Ordering Codes



30C20

definite purpose contactor



Coil Data (30C20-1021)

Table 3

Voltage: 24-277VAC 50/60Hz. See coil data below. (480VAC available but not UL approved)

Insulation Class: UL Class B (130°C)

Coil Voltage Code	Rated Voltage 50/60Hz	Coil Resistance (Ohms)	Coil Operating Voltage (VAC)			Minimum Inrush		Nominal Coil Power	
			Must Release	Must Operate	Max Voltage	VA @ 50Hz	VA @ 60Hz	VA @ 50Hz	VA @ 60Hz
5024	24	18	6	18	30	31	28	6	5
5120	120	420	20	88	132	31	28	6	5
5230	208/240	1800	40	177	264	31	28	6	5
5277	277	2500	50	221	300	31	28	6	5
5480	480	8000	100	380	528	31	28	6	5

Coil Data (30C20-1022)

Table 4

Voltage: 24-277VAC 50/60Hz. See coil data below. (480VAC available but not UL approved)

Insulation Class: UL Class B (130°C)

Coil Voltage Code	Rated Voltage 50/60Hz	Coil Resistance (Ohms)	Coil Operating Voltage (VAC)			Minimum Inrush		Nominal Coil Power	
			Must Release	Must Operate	Max Voltage	VA @ 50Hz	VA @ 60Hz	VA @ 50Hz	VA @ 60Hz
5024	24	11	6	18	30	33	30	8	6.5
5120	120	237	20	88	132	33	30	8	6.5
5230	208/240	1000	40	177	264	33	30	8	6.5
5277	277	1600	50	221	300	33	30	8	6.5
5480	480	4200	100	380	528	33	30	8	6.5

Coil Data (30C20-1023)

Table 5

Voltage: 24-277VAC 50/60Hz. See coil data below. (480VAC available but not UL approved)

Insulation Class: UL Class B (130°C)

Coil Voltage Code	Rated Voltage 50/60Hz	Coil Resistance (Ohms)	Coil Operating Voltage (VAC)			Minimum Inrush		Nominal Coil Power	
			Must Release	Must Operate	Max Voltage	VA @ 50Hz	VA @ 60Hz	VA @ 50Hz	VA @ 60Hz
5024	24	7	6	18	30	65	60	7.5	6
5120	120	180	20	88	132	65	60	7.5	6
5230	208/240	719	40	177	264	65	60	7.5	6
5277	277	900	65	220	300	65	60	7.5	6
5480	480	3100	150	384	520	65	60	7.5	6

Coil Data (30C20-1024)

Table 6

Voltage: 24-277VAC 50/60Hz. See coil data below. (480VAC available but not UL approved)

Insulation Class: UL Class B (130°C)

Coil Voltage Code	Rated Voltage 50/60Hz	Coil Resistance (Ohms)	Coil Operating Voltage (VAC)			Minimum Inrush		Nominal Coil Power	
			Must Release	Must Operate	Max Voltage	VA @ 50Hz	VA @ 60Hz	VA @ 50Hz	VA @ 60Hz
5024	24	6	6	18	30	62	59	9	7
5120	120	150	20	88	132	62	59	9	7
5230	208/240	600	40	177	264	62	59	9	6
5277	277	750	65	220	300	62	59	9	7
5480	480	4200	150	384	520	62	59	9	7



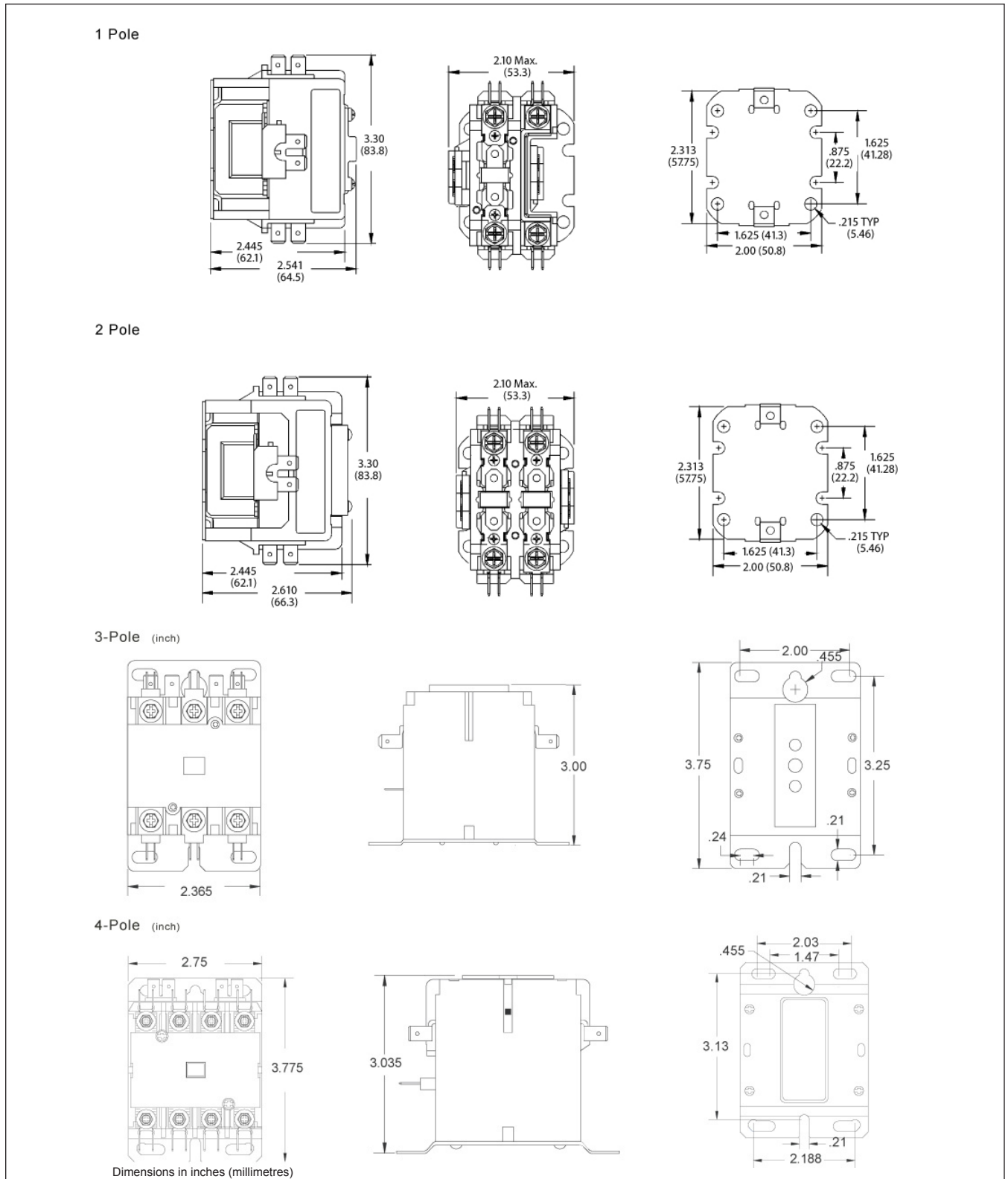
30C20

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Overall Dimensions

Fig. 1



30C20

definite purpose contactor

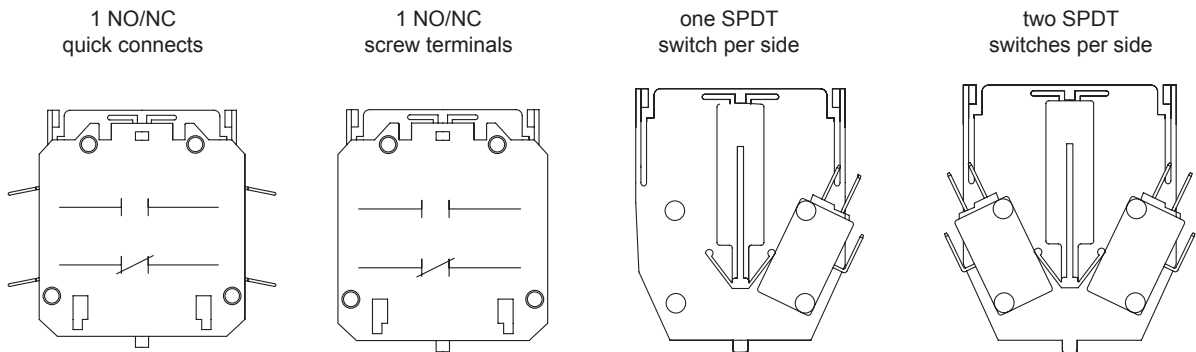


Power Terminations	
Termination Codes: 1 & 5 Standard on 20-30FLA #10-32 combination phillips/slotted and 5/16 hex head screw with #12 washer	
Termination Code: 2 Optional on 20-40FLA #10-32 sems screw with pressure plate	
Termination Codes: 3 & 4 Box Lug 14-4 AWG (Cu/Al) Dimension in inches	

Auxillary Switches for 3 & 4 pole contactors

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 Two switches per side	2 x SPDT	0.250" QC	30CB2S

Auxillary Switch Contact Rating						
SPST-NO+SPST-NC					SPDT	
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



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Page 5 of 5 www.aecensors.com Sales Department Tel: (888) 847-6552

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