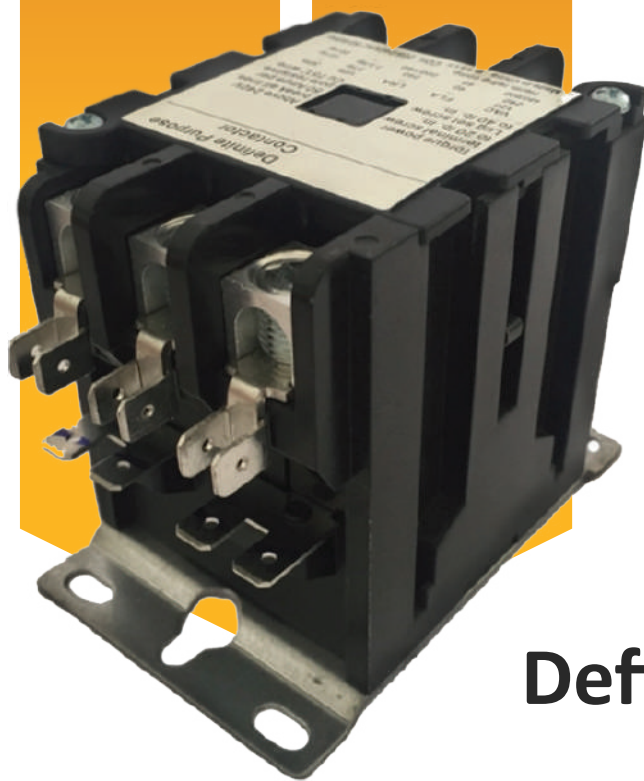




Definite Purpose Contactors

DYNAGEAR

Lakshmi Electrical Control Systems Limited

Ordering Info

240V

24V, 120V, 208-240V, 277V, 480V, 600V ;



Full Line Definite Purpose Contactors (20Amps to 90Amps)

Full Line Definite Purpose Contactors with Auxiliary Switches

20Amps to 90Amps

1 pole, 1.5 poles, 2 poles, 3 poles, 4 poles are available.

Industry Standard Mounting, Arc Covers as standard.



Definite Purpose Contactors

Contact Data : 1 & 2 Pole 20-40 FLA



Arrangements : 1 Pole with or without shunt ;
: 2 Pole.
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 / 277 480 600	120 100 80	30 30 30	120 240	2 3
25	1	240 / 277 480 600	150 50 40	30 30 30	120 240	1 2
25	2	240 / 277 480 600	150 125 100	35 35 35	120 240	2 3
30	1	240 / 277 480 600	150 75 50	40 40 40	120 240	1 2
30	2	240 / 277 480 600	150 125 100	40 40 40	120 240	2 3
40	1	240 / 277 480 600	240 200 160	50 50 50	120 240	2 3
40	2	240 / 277 480 600	240 200 160	50 50 50	120 240	2 3

Coil Data

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



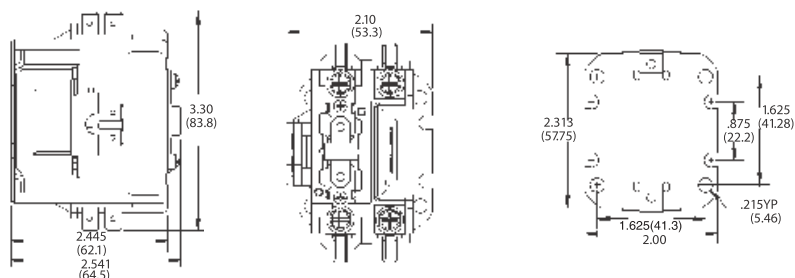
	1 Pole Contactors				2 Pole Contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	18	420	1800	2500	18	420	1800	2500
Minimum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-165
Minimum Inrush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

Technical Data

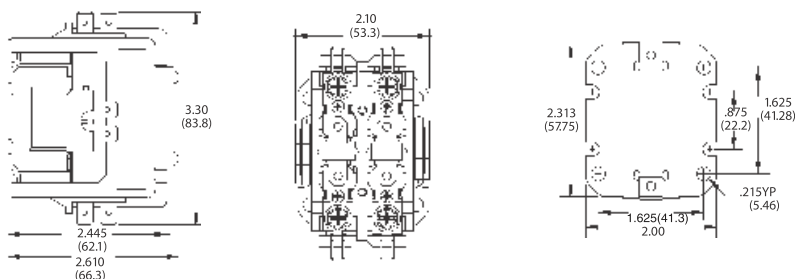
Initial Dielectric Strength	Between Contacts & Coils: 2,200 VAC Between Poles: 2,200 VAC (includes shunt) Between Open Contacts: 2,200 VAC (no shunt)
Arc Cover	Optional on 20 - 30 FLA Standard on 40 FLA
Insulation System	130°C Class B
Temperature Range	-40°C to +65°C(-40°F to +150°F)
Unit Weight	1 Pole 0.5 lb, 2 Pole 0.6 lb
Power Pole Terminations	#10-32 screw or box lug
Wire Size	#10-32 screw 16-8* (*must use ring terminal)
Box lug	14-4
Recommended Tightening Torque	#10-32 screw 22 in. Lbs
Box lug	40 in. lbs
Quick Connects	Coil terminals Dual: 0.250 QC Power terminals 1 Pole: Quad 0.250 QC 2 Pole: Dual or Quad 0.250 QC

External Dimensions (Inch) H (height)

1 Pole / 1Pole + Shunt (inch)



2-Pole (inch)



FLA Rating	No. of Poles	Coil Voltage			
		24V	120V	208-240V	277V
20	1	ABN-DP-1P20A-24V	ABN-DP-1P20A-120V	ABN-DP-1P20A-240V	ABN-DP-1P20A-277V
	2	ABN-DP-2P20A-24V	ABN-DP-2P20A-120V	ABN-DP-2P20A-240V	ABN-DP-2P20A-277V
25	1	ABN-DP-1P25A-24V	ABN-DP-1P25A-120V	ABN-DP-1P25A-240V	ABN-DP-1P25A-277V
	2	ABN-DP-2P25A-24V	ABN-DP-2P25A-120V	ABN-DP-2P25A-240V	ABN-DP-2P25A-277V
30	1	ABN-DP-1P30A-24V	ABN-DP-1P30A-120V	ABN-DP-1P30A-240V	ABN-DP-1P30A-277V
	2	ABN-DP-2P30A-24V	ABN-DP-2P30A-120V	ABN-DP-2P30A-240V	ABN-DP-2P30A-277V
40	1	ABN-DP-1P40A-24V	ABN-DP-1P40A-120V	ABN-DP-1P40A-240V	ABN-DP-1P40A-277V
	2	ABN-DP-2P40A-24V	ABN-DP-2P40A-120V	ABN-DP-2P40A-240V	ABN-DP-2P40A-277V

Dimensions are shown for reference purposes only.

Definite Purpose Contactors

Contact Data : 3 & 4 Pole 20-40 FLA



Arrangements : 3 Pole
 : 4 Pole
Material : (1) AgCdO; (2) AgSnO₂In₂O₃
Contact Ratings

Full Load Amps (FLA)	Poles	Line Voltage	LRA	Resistive Amps	Max. HP		
					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	-
	4	480	125	35	200 / 208	-	7.5
		600	100	35	240 / 277	5	10
30	4	480	150	40	480	-	15
		600	120	40	600	-	20
40	3	240 / 277	240	50	110 / 120	3	-
	4	480	200	50	200 / 208	-	10
		600	160	50	240 / 277	7.5	10
					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)



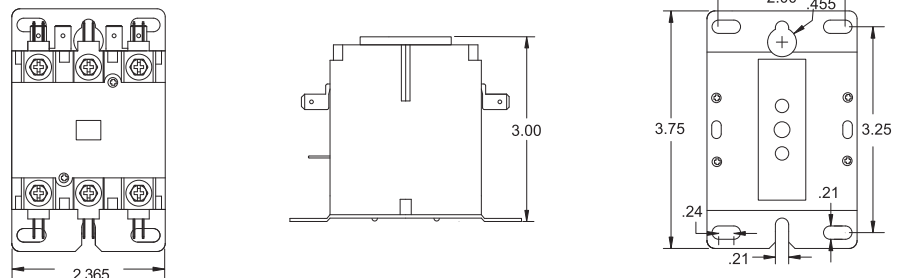
	3 Pole Contactors				4 Pole Contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	7	180	720	900	6	150	600	750
Minimum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-140	50-175
Minimum Inrush VA@50Hz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

Technical Data

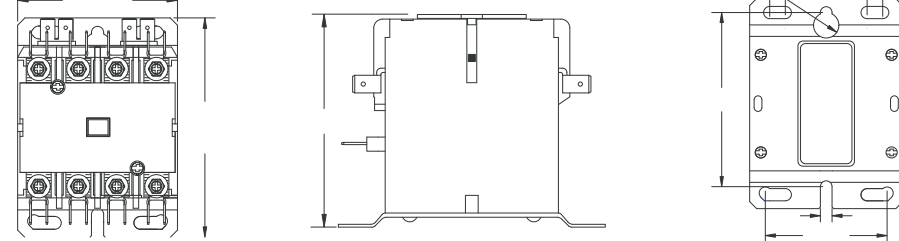
Initial Dielectric Strength	Between Contacts & Coils: 2,200 VAC Between Poles: 2,200 VAC Between Open Contacts: 2,200 VAC
Arc Cover	Standard on 40 FLA
Insulation System	130°C Class B
Temperature Range	-40°C to +65°C(-40°F to +150°F)
Unit Weight	3Pole 1 lb, 4 Pole 1.25 lb
Power Pole Terminations	#10-32 screw or box lug
Wire Size	#10-32 screw 16-8* (*must use ring terminal)
Box lug	14-4
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/0.250QC Power terminals Quad 0.250 QC

External Dimensions (Inch) H (height)

3 Pole (inch)



4 Pole (inch)



FLA Rating	No. of Poles	Coil Voltage			
		24V	120V	208-240V	277V
20	3	ABN-DP-3P20A-24V	ABN-DP-3P20A-120V	ABN-DP-3P20A-240V	ABN-DP-3P20A-277V
25	3	ABN-DP-2P25A-24V	ABN-DP-3P25A-120V	ABN-DP-3P25A-240V	ABN-DP-3P25A-277V
30	3	ABN-DP-3P30A-24V	ABN-DP-3P30A-120V	ABN-DP-3P30A-240V	ABN-DP-3P30A-277V
	4	ABN-DP-4P30A-24V	ABN-DP-4P30A-120V	ABN-DP-4P30A-240V	ABN-DP-4P30A-277V
40	3	ABN-DP-3P40A-24V	ABN-DP-3P40A-120V	ABN-DP-3P40A-240V	ABN-DP-3P40A-277V
	4	ABN-DP-4P40A-24V	ABN-DP-4P40A-120V	ABN-DP-4P40A-240V	ABN-DP-4P40A-277V

Dimensions are shown for reference purposes only.

Definite Purpose Contactors

Contact Data : 3 Pole 50-90 FLA



Arrangements : 3 Pole
Material : (1) AgCdO; (2) AgSnO₂In₂O₃
Contact Ratings
 Frame of 50-90FLA contactors is different from 20-40FLA contactors

Full Load Amps (FLA)	Poles	Line Voltage	LRA	Resistive Amps	Max. HP		
					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
		480	200	65	480	-	30
		600	200	65	600	-	30
60	3	115	300	75	110 / 120	5	-
		240	360	75	200 / 208	7.5	20
		480	300	75	240 / 277	10	20
		480	240	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
		480	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
		480	360	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)



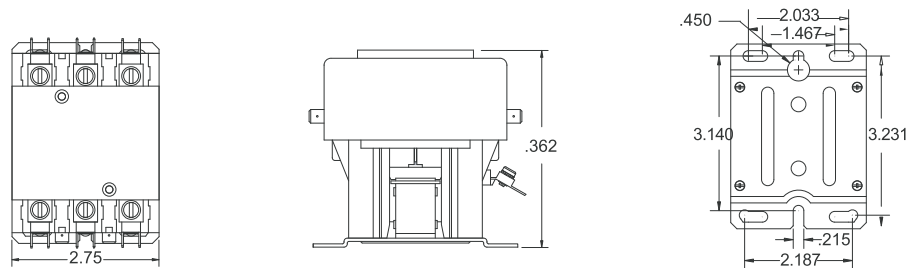
	50-60 FLA Contactors				75-90 FLA Contactors			
Nominal Coil Voltage	24	120	208/240	277	24	120	208/240	277
Nominal Coil Resistance Ohms	7	180	720	900	0.65	16	64	85
Minimum Pick Up Voltage	18	88	177	221	18	88	177	221
Minimum Drop Out Voltage	6-15	20-70	40-140	50-165	6-15	20-70	40-110	65-180
Minimum Inrush 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@50Hz	20	20	205	20	42	42	42	42
Nominal Sealed VA@60Hz	14	14	14	14	27	27	27	27
Maximum Coil Voltage	30	132	264	300	30	132	264	300

Technical Data

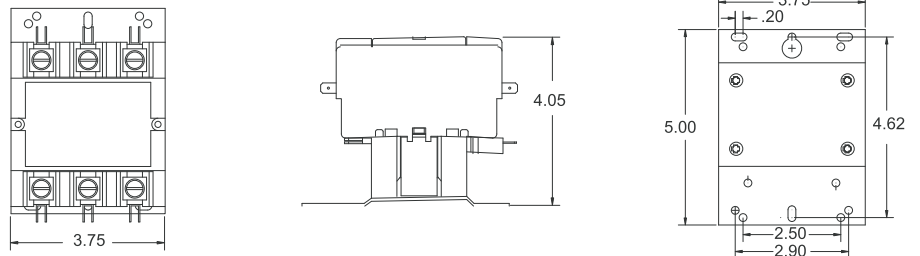
Initial Dielectric Strength	Between Contacts & Coils: 2,200 VAC Between Poles: 2,200 VAC Between Open Contacts: 2,200 VAC		
Arc Cover	Standard		
Insulation System	130°C Class B		
Temperature Range	-40°C to +65°C(-40°F to +150°F)		
Unit Weight	50-60FLA 2 lb, 75-90FLA 4 lb		
Power Pole Terminations	Aluminium box lug		
Wire Size	50-60FLA Box Lug	14-2	
	75-90FLA Box Lug	14-1	
Recommended Tightening Torque	50 in. lbs		
Quick Connects	Coil terminals	Dual: .0250 QC or #6-32 screw/0.250QC	
	Power terminals	Quad 0.250 QC	

External Dimensions (Inch) H (height)

50-60FLA (inch)



75-90FLA (inch)



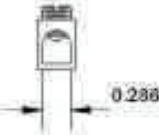
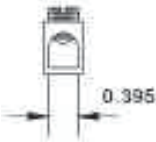
FLA Rating	No. of Poles	Coil Voltage					
		24V	120V	208-240V	208-240V	277V	600V
50	3	ABN-DP-3P50A-24V	ABN-DP-3P50A-120V	ABN-DP-3P50A-240V	ABN-DP-3P50A-240V	ABN-DP-3P50A-277V	ABN-DP-3P50A-600V
60	3	ABN-DP-3P60A-24V	ABN-DP-3P60A-120V	ABN-DP-3P60A-240V	ABN-DP-3P60A-240V	ABN-DP-3P60A-277V	ABN-DP-3P60A-600V
75	3	ABN-DP-3P75A-24V	ABN-DP-3P75A-120V	ABN-DP-3P75A-240V	ABN-DP-3P75A-240V	ABN-DP-3P75A-277V	ABN-DP-3P75A-600V
90	3	ABN-DP-3P90A-24V	ABN-DP-3P90A-120V	ABN-DP-3P90A-240V	ABN-DP-3P90A-240V	ABN-DP-3P90A-277V	ABN-DP-3P90A-600V

Dimensions are shown for reference purposes only.

Definite Purpose Contactors

Termination & Auxiliary Switches

Terminations

 Standard on 20-30FLA #10-32 commination phillips, slotted and 5/16 hex head with #12 washer	 40FLA Box Lug 14-4 AWG Cu/Al
 Optional on 20-40FLA #10-32 sems screw with pressure plate	 50-60FLA Box Lug 14-2 AWG Cu/Al
 75-90FLA Box Lug 14-1 AWG Cu/Al	

Auxiliary Switches

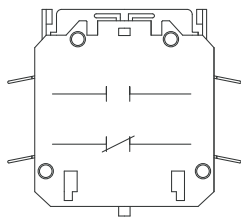
Available auxiliary switches for 3- and 4-pole contactors (20-40FLA)

Description	Contact arrangement	Termination	Part Number
Single unit interlockconfiguration. One on eachside - maxset up twoswitches	1NO/1NC break before make	250" quick connects	SAA1Q
Single unit interlockconfiguration. One on eachside - maxset up twoswitches	1NO/1NC break before make	#6-32screw terminals	SAA1S
SPDT circuit One switch oneach side	SPDT	250" quick connects	SAB1Q
SPDT circuit One switch oneach side	(2) SPDT	250" quick connects	SAB2S

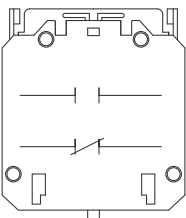
Contact Rating

Single circuit 1 NO/1NC					SPDT
Voltage Rating	120VAC	240VAC	480VAC	600VAC	10A, 1/3 HP, 125 or 250VAC 1/2A, 125VDC 1/4A, 250VDC
Amperes-Break	3.0	1.5	0.75	0.6	
Amperes-Make	30	15	75	6	
Amperes-Continuous	10	10	10	10	

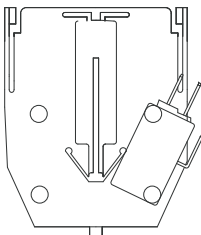
1 NO/1NC
quick connects



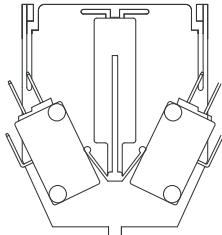
1 NO/1NC
screw terminals



One SPDT
switch per side



Two SPDT
switches per side



NOTES

SYNAGEAR

Lakshmi Electrical Control Systems Limited (LECS) is one of the leading manufacturer of switchgear products from 1982.

LECS manufactures custom-engineered control panel for Textile Machinery, Machine Tools, APFC, Energy Saver – Lighting, Compressor and many other applications conforming to International Standards.

LECS manufactures Engg. Plastic components with total expertise and facilities to deliver complete design solutions and ready to fit products. The company has strong background in R & D, Engineering, Tooling and Automation.

SYNAGEAR

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