

# Definite Purpose Controls Full Voltage Contactors

## Section 4

### CR453C, CR553, CR353

Technical Data

25A-150A

#### DP Contactors Compact

Product Family	Poles	Inductive Amps	Resistive Amps	Locked Rotor Amps, 50/60 Hz @ 240/277V	Locked Rotor Amps, 50/60 Hz @ 480V	Locked Rotor Amps, 50/60 Hz @ 600V	% Nominal Coil Voltage @ Pickup	% Nominal Coil Voltage @ Dropout	Wire Size Range AWG	Terminal Torque (lb.-in.)	Approx. Ship. Wt. (Lbs)
CR453CA	1 + shunt	20	30	120	100	80	85%	60%	16-8	20	0.7
CR453CA	2	20	30	120	100	80	85%	60%	16-8	20	0.7
CR453CB	1 + shunt	25	35	150	125	100	85%	60%	16-8	20	0.7
CR453CB	2	25	35	150	125	100	85%	60%	16-8	20	0.7
CR453CC	1 + shunt	30	40	180	150	120	85%	60%	16-8	20	0.7
CR453CC	2	30	40	180	150	120	85%	60%	16-8	20	0.7
CR453CD	1 + shunt	35	50	180	150	120	85%	60%	16-8	20	0.7
CR453CD	2	35	50	210	175	140	85%	60%	16-8	20	0.7
CR453CE	1 + shunt	40	50	180	150	120	85%	60%	14-4	40	0.7
CR453CE	2	40	50	240	200	160	85%	60%	14-4	40	0.7

#### DP Contactors Standard

Family	Type	Inductive Amps	Resistive Amps	Three Phase 240V LRA	Three Phase 480V LRA	Three Phase 600V LRA	Locked Rotor Amps, 50/60 Hz @ 240V	Locked Rotor Amps, 50/60 Hz @ 480V	Locked Rotor Amps, 50/60 Hz @ 600V	Part Winding Locked Rotor Amps @ 240V	Part Winding Locked Rotor Amps @ 480V	Part Winding Locked Rotor Amps @ 600V
CR553	AB	25	35	150	125	100	—	—	—	—	—	—
CR554	AC	30	40	180	150	120	—	—	—	—	—	—
CR555	AD	40	50	240	200	160	—	—	—	—	—	—
CR353	FE	50	62	300	250	200	—	—	—	300	250	200
CR354	FF	60	75	360	300	240	—	—	—	360	300	240
CR353	GG	75	90	450	375	300	—	—	—	450	375	300
CR355	EH	90	90	540	450	360	—	—	—	540	450	360
CR353	GJ	120	120	720	600	480	—	—	—	720	600	480
CR353	GK	150	150	900	750	600	—	—	—	900	750	600

#### DP Contactors Standard (continued)

Family	Type	% Nominal Coil Voltage @ Pickup	% Nominal Coil Voltage @ Dropout	Wire Size Range AWG	Terminal Torque (lb.-in.)	Approx. Shipping Wt. (Lbs)
CR553, CR554	AB, AC, AD	≤ 85%	≤ 60%	16-8	20	0.7
CR555	AB, AC, AD	≤ 85%	≤ 60%	14-4	40	0.7
CR353	FE, FF	≤ 85%	≤ 60%	14-2	50	1.9
CR354	FE, FF	≤ 85%	≤ 60%	14-2	50	3.5
CR353	GG	≤ 85%	≤ 55%	14-2/0	50	4.0
CR355	EH	≤ 85%	≤ 55%	14-2/0	50	8.1
CR353	GJ	≤ 85%	≤ 65%	8/3/0	200	17.5
CR353	GK	≤ 85%	≤ 65%	8/3/0	200	17.5



# Definite Purpose Controls Full Voltage Contactors

## Section 4

### CR453C, CR553, CR353

Technical Data  
25A-150A

#### CR453C CE Technical Data

Product Number	Electrical Rating AC1 @ 480V	Electrical Rating AC3 @ 240V	Electrical Rating AC3 @ 480V	UL File No.
CR453CA1*AA	30A	20A	16.7A	E126105 Volume 20, Section 1
CR453CB1*AA	35A	25A	20.8A	E126105 Volume 20, Section 1
CR453CC1*AA	40A	30A	25A	E126105 Volume 20, Section 1
CR453CD1*AA	50A	35A	25A	E126105 Volume 20, Section 1
CR453CE2*BB	50A	40A	25A	E126105 Volume 20, Section 1

#### UL References

Family	Type	File	Volume	Section	Issued
CR553	A	E1811	20	1	11/27/14
CR554, CR555	A	E1811	20	2	11/27/14
CR355	EE	E1811	2	26	03/10/70
CR355	EF	E1811	2	25	01/22/70
CR353, CR355	EG	E1811	2	24	10/15/68
CR353, CR355	EH	E1811	2	30	06/01/71
CR353, CR354	FE	E1811	2	54	06/17/75
CR353, CR354	FF	E1811	2	54	06/17/75
CR353	GJ	E1811	2	47	01/31/74
CR353	GK	E1811	3	5	05/26/76

#### CSA References

Product Line	CSA File Number	CSA Class
CR453C	212530-M-000	1222 01, 4813 01

#### Auxiliary Contact Ratings

Product Line	Type	Kits	Ratings
CR553	250 V SPDT	CR553XC2**	11 A, 1/3 HP at 250 VAC; 1/2 A at 125 VDC; 1/4 A at 250 VDC
CR553	600 V	BCLF**, BCLL**	A600, Q600 Pilot Duty
CR553	600 V Interlock	BEL02	A600, Q600 Pilot Duty
CR353F	250 V SPDT	353XAAA	10 A, 1/3 HP at 250 VAC; 1/2 A at 125 VDC; 1/4 A at 250 VDC
CR353E	250 V SPDT	353XAAB	10 A, 1/3 HP at 250 VAC; 1/2 A at 125 VDC; 1/4 A at 250 VDC
CR353G	600 V	353XA*C	A600, P300 Pilot Duty



# Definite Purpose Controls

## Full Voltage Contactors

# Section 4

### CR453C, CR553, CR353

Technical Data  
25A-150A

#### AC Coils – CR553

Nominal Coil voltage VAC	Frequency	FLA	Poles	12	24	115-120	208-240	277	440-480	550-600
Maximum pickup voltage	60Hz	25 / 30 / 40A	2, 3 & 4	9.6	18	88	177	220	352	440
Drop-out voltage range	60Hz	25 / 30 / 40A	2, 3 & 4	4.2	6 - 15	20 - 70	50 - 165	65 - 185	150 - 270	192 - 336
		25 / 30 A	2, 3	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Nominal inrush VA	60Hz	40 A	3	100	100	100	100	100	100	100
		25 / 30 / 40A	4	100	100	100	100	100	100	100
	50Hz	25 / 30 A	2, 3	53	53	53	53	-	53	53
		40 A	3	120	120	120	120	-	120	120
Nominal sealed VA	60Hz	25 / 30 / 40A	4	120	120	120	120	-	120	120
		25 / 30 A	2, 3	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	50Hz	40 A	3	9.5	9.5	9.5	9.5	9.5	9.5	9.5
		25 / 30 / 40A	4	9.5	9.5	9.5	9.5	9.5	9.5	9.5
50Hz	25 / 30 A	2, 3	6.8	6.8	6.8	6.8	-	6.8	6.8	
	40 A	3	11.4	11.4	11.4	11.4	-	11.4	11.4	
	25 / 30 / 40A	4	11.4	11.4	11.4	11.4	-	11.4	11.4	

#### AC Coils – CR453C, CR35\*F, CR35\*E, CR353G

Family	Coil Voltage	Inrush VA	Sealed VA	Sealed Watts	Resistance Ohms ±10%	
					Inrush	Sealed
CR453C	24V, 50/60 Hz	29	5.0	2.6	11	
	110-120V, 50/60 Hz	34	6.0	3.3	244	
	208-240V, 50/60 Hz	33	5.6	3.7	990	
CR35*F	277V, 60 Hz	30	6.3	3.2	1520	
	24V, 60 Hz	125	17	8	2.7	
	115-120V 60 Hz, 110V 50 Hz	125	17	8	64	
	208-240V 60 Hz, 220V 50 Hz	125	17	8	241	
	277V, 60 Hz	125	17	8	389	
	460V 60 Hz, 440V 50 Hz	125	17	8	972	
CR35*E	600V 60 Hz, 550V 50 Hz	125	17	8	2074	
	24V, 50/60 Hz	233	40	16	1.0	
	110-120V, 50/60 Hz	233	40	16	28	
	208-240V, 50/60 Hz	233	40	16	109	
	277V, 60 Hz	233	40	16	169	
CR353G	440-480V 60 Hz, 380-415V 60 Hz	233	40	16	547	
	575-600V 60 Hz, 550V 50 Hz	233	40	16	655	
	115-120V 60 Hz, 110V 50 Hz	1150	80	18.4	2.11	
	230-240V 60 Hz, 220V 50 Hz	1150	80	18.4	10.6	
CR353G	460-480V 60 Hz, 440V 50 Hz	1150	80	18.4	41.8	
	575-600V 60 Hz, 550V 50 Hz	1150	80	18.4	67.0	

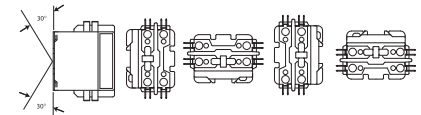
#### DC Coils

Family	Voltage DC	Inrush VA	Sealed VA	Sealed Watts	Resistance Ohms ±10%	
					Inrush	Sealed
CR353F	12	107	3.8	3.8	1.35	37.6
	24-28	110	3.8	3.8	5.2	153
	110-125	110	5.25	5.25	133	2519
CR353E	12	278	11.3	11.3	0.54	12.7
	24-48	270	11.1	11.1	2.13	51.9
	48	301	12.6	12.6	7.65	183.0
	110-125	292	12.0	12.0	47.1	1133

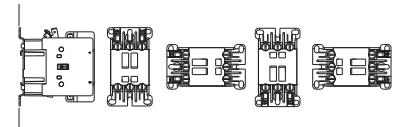
#### Mounting Positions

To maintain operating integrity, contactors must be mounted in one of the positions

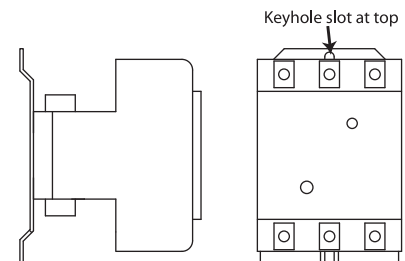
shown below:



CR453C



CR553



CR353

