CONTACTOR RATINGS CHART

Allen-Bradley
Ratings To: AS/NZS 60947.4 IEC 60947.4

NHP

			100-K05	100K-09 [100-K12]	100-C09	100-C12	100-C16	100-C23	100-C30	100-C37	100-C43	100-C55	100-C60	100-C72	100-C85	100-C97	100-E116 [2]	100-E116 [2]	100-E190 [2]	100-E205 [2]	100-E265 [2]	100-E305 [2]	100-E370 [2]	100-E400 [3]	100-E460 [3]	100-E580 [3]	100-E750 [3]	100-E860 [3]	100-E1060
			CURRENT RATINGS																									
40 °C I_{th}	**AC 1** - 415 V	Amps	20	20	32	32	32	32	65	65	85	85	100	100	100	130	160 [5]	225 [5]	275 [5]	350 [5]	400 [5]	500 [5]	600 [5]	600 [5]	700 [5]	800 [5]	1050 [5]	1350 [5]	1650 [5]
60 °C	**AC 1** - 415 V		16	16	32	32	32	32	65	65	75	75	100	100	100	110	145 [5]	200 [5]	250 [5]	300 [5]	350 [5]	400 [5]	500 [5]	500 [5]	600 [5]	700 [5]	875 [5]	1150 [5]	1450 [5]
	AC 2, AC 3 - 415 V		4.9	8.5 [11.5]	9	12	16	23	30	37	43	55	60	72	85	97	116	146	190	205	265	305	370	400	460	580	750	860	1060
	AC 4 [1] - 415 V		2	3.6	4.3	6.6	9	9	12	14	16.5	22	25.5	31	38	44	38	38	49	55	73	89	100	118	135	-	-	-	-
	AC 2, AC 3 - 690 V		2.8	4.9 [6.7]	5	7	9	12	18	21	25	25	34	42	49	57	65	93	135	165	250	290	315	350	400	500	650	800	970
	AC 2, AC 3 - 1000 V		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	85	100	100	100	100	155	200	250	300	375	400
			MOTOR STARTER RATINGS AT OPERATIONAL VOLTAGE 400/415 V. ALL kW RATINGS APPROXIMATE																									
60 °C	**AC 2, AC 3** - 415 V	kW	2.2	4 [5.5]	4	5.5	7.5	11	15	20	22	30	32	40	45	55	55	75	90	110	132	160	200	220	250	355	425	500	630
	AC 4 [1] - 415 V		0.75	1.5	1.8	3	4	4	5.5	6.3	7.5	11	13	17	20	22	20	20	25	30	40	50	55	63	75	-	-	-	-
	AC 2, AC 3 - 690 V		2.2	4 [5.5]	4	5.5	7.5	10	15	18.5	22	22	32	40	45	55	55	90	132	160	200	250	315	315	355	500	600	800	1000
	AC 2, AC 3 - 1000 V		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	110	132	132	132	132	220	280	355	400	555	600
Star-delta [4]	Line/delta		4	7.5	7.5	11	15	22	25	37	40	50	55	63	80	90	90	132	160	185	220	280	335	400	450	630	710	850	1000
At 415 V	Star point Y		-	-	14	19	25	37	50	60	72	90	100	125	145	165	160	220	250	315	400	420	560	630	750	1000	1250	1450	1850
			CAPACITOR AND LAMP SWITCHING																									
Capacitor switching	40 °C	kvar	-	-	8	8	10	12.5	20	25	35	35	50	50	50	50	75	90	110	130	145	165	200	210	240	285	400	450	500
AC 6b [6] at 415 V	60 °C		-	-	8	8	10	12.5	20	22	30	30	42	50	50	50	75 [7]	90 [7]	110 [7]	130 [7]	145 [7]	165 [7]	200 [7]	210 [7]	240 [7]	285 [7]	400 [7]	450 [7]	500 [7]
Incandescent Lamps [15]	AC 5b	Amps	5	9	12	16	18	22	30	37	43	51	60	70	76	90	116	146	190	205	265	305	370	400	460	580	750	877	1072
Fluorescent lamps (100-K, -C enclosed - 100-E open)	AC 5a		14.5	14.5	22.5	25	28	29	37	41	57	57	77	81	90	100	116	146	190	205	265	305	370	400	460	580	750	877	1072
			MECHANICAL, ELECTRICAL AND COIL DATA																									
Mechanical life		mill/Ops	15	15	13	13	13	13	13	13	12	12	6	6	6	6	Contact NHP												
Electrical life at AC 3, 415 V			0.7	0.7	1.3	1.3	1.3	1.3	1.3	1.3	1	0.8	1	1	1	1	Contact NHP												
Max operating rate 0.25 sec start	(@ max Amps)	Ops/Hr	250	250	700	700	700	600	600	600	600	600	500	500	500	500	300	300	300	300	300	300	300	300	300	300	300	60	60
Switching delay	Pick-up	ms	15-40	15-40	15-30	15-30	15-30	15-30	15-30	15-30	15-30	15-30	20-40	20-40	20-40	20-40	20-55	20-55	25-60	25-60	30-60	30-60	30-60	50-120	50-120	50-120	50-120	50-80	50-80
AC Coil [16]	Drop-out		15-33	15-33	10-60	10-60	10-60	10-60	10-60	10-60	10-60	10-60	10-60	10-60	10-60	20-40	40-70	40-70	45-80	45-80	45-80	45-80	45-80	33-70	33-70	33-70	33-70	35-55	35-55
AC Coil consumption	Pick-up	VA	35	35	75	75	75	105	105	105	135	135	235	235	235	400	130 [9] [10]	130 [9] [10]	220 [9] [10]	220 [9] [10]	385 [9] [10]	385 [9] [10]	385 [9] [10]	955 [9]	955 [9]	880 [9]	880 [9]	2450 [9] [10]	2450 [9] [10]
	Hold-in	VA	5	5	9.5	9.5	9.5	12.3	12.3	12.3	13.3	13.3	19.6	19.6	19.6	24	6 [9] [10]	6 [9] [10]	7 [9] [10]	7 [9] [10]	17.5 [9] [10]	17.5 [9] [10]	17.5 [9] [10]	12 [9] [10]	12 [9] [10]	12 [9] [10]	12 [9] [10]	48 [9] [10]	48 [9] [10]
	Hold-in	W	1.8	1.8	2.7	2.7	2.7	3.1	3.1	3.1	3.3	3.3	5	5	5	9	Contact NHP												
DC Coil consumption	Pick-up (Peak)	W	3	3	10 (17)	10 (17)	10 (17)	10 (17)	10 (17)	10 (17)	16 (25)	16 (25)	200	200	200	325	210	210	205	205	400	400	400	900	900	785	785	-	-
(100-C/E @24 V DC)	Hold		2.6	2.6	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	4	4	4	5	2.5	2.5	2.5	2.5	3.5	3.5	3.5	5	5	5.5	5.5	-	-
Auxiliary contacts available		Std/Max	1/5	1/5	1/9	1/9	1/9	1/9	-/8	-/8	-/8	-/8	-/8	-/8	-/8	-/8	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10
Integral auxiliary contact	AC 12 60 °C	Amps	6	6	20	20	20	20	-	-	-	-	-	-			Contact NHP												
	AC 15, 415 V		1.8	1.8	6	6	6	6	-	-	-	-	-	-			Contact NHP												
Add-on auxiliary block	AC 12 60 °C		6	6	6	6	6	6	6	6	6	6	6	6	6	6	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]	16 [8]
	AC 15, 415 V		1.2	1.2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

For larger size contactors up to 2650 A, please contact NHP

			ELECTRONIC OVERLOAD SELECTION														**ELECTRONIC OVERLOAD SELECTION**											
Electronic overload 193-EE and adjustment range. Direct mounting application [11]	Amps			**193-EECB** 1.0…5.0 A **193-EEDB** 3.2…16 A **193-EEEB** 5.4…27 A		**193-EEED** 15.4…27 A **193-EEFD** 9…45 A **193-EEQD** 11…55 A		**193-EEGE** 18…90 A **193-EEVE** 60…120 A		**193-EEGE** 18…90 A **193-EEVE** 60…120 A		**193-EEHJ** 30…150		**193-EEJJ** 40…200		Current transformer kits [13] [14]		Contact NHP	
			THERMAL OVERLOAD SELECTION														**ADVANCED ELECTRONIC OVERLOAD SELECTION**											
Thermal overload [11] [12] and advanced electronic range	Amps		**193-KA/KB/KC** 0.1…12.5 A		**193-T1AA/AB/AC** 0.1…25 A		**193-T1BC** 15…38 A **193-T1CC** 17…60 A		**193-T1DC** 35…97 A		**193-T1DC** 35…97 A		**E300** 0.5…65000 A [11] [12]															

Utilisation categories

Main Poles
AC 1: Non-inductive or slightly inductive loads: resistance furnaces
AC 2: Slip-ring motors: Starting, plugging
AC 3: Squirrel-cage motors: Starting, switching off motors during running
AC 4: Squirrel-cage motors: Starting, plugging, inching

Auxiliary Contacts
AC 12: Control of resistive loads and solid state loads with isolation by optocouplers
AC 15: Control of electromagnetic loads: contactors coils

Notes:
1) 200, 000 operations
2) Available with electronic coil or electronic coil and interface
3) Fitted with electronic coil and interface as standard
4) Star point Y = star connected. Star point Δ = delta connected star point
5) Amp rating at 690V
6) For PF correction panels min 6pH inductive or use of harmonic filters
7) kVar rating at 55°C
8) Amp rating at AC 12, 40°C
9) VA rating at 100…250VAC
10) Electronic type coil
11) Maximum current setting to be no more than the rated current of contactor
12) Refer Price List Catalogue for complete Cat. No and Amp range
13) Availability - TBA
14) Overload relay sold seperately
15) Ratings at 230/240 V
16) With no suppressors fitted

For your complete motor control solution, please refer to our locally stocked and supported range of enclosures and operators.

Pushbuttons, indicators and accessories chart
Code: NWHSABPBCHART

Easy Selection Guide - Enclosures
Code: NHPNTUEESGAUST

Price List Catalogue - Australia

Price List Catalogue - New Zealand

Technical data correct at time of publishing. Contact NHP for further information.

NHP Electrical Engineering Products Pty Ltd
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