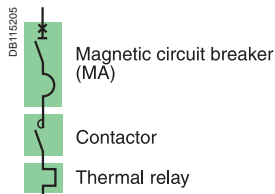


Type 2 coordination (IEC 60947-4-1) 220/240 V



Circuit breakers, contactors and thermal relays

Performance: U = 220/240 V						
Circuit breakers	B	F	N	H	S	L
NSX100/160/250-MA	40 kA	85 kA	90 kA	100 kA	120 kA	150 kA
NSX400/630 Micrologic 1.3M	40 kA	85 kA	90 kA	100 kA	120 kA	150 kA
NS800L/NS1000L Micrologic 5.0	-	-	-	-	-	150 kA

Starting⁽²⁾: normal LRD class 10 A, LR9 class 10

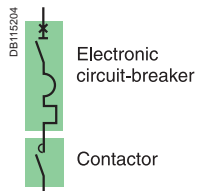
Motors				Circuit breakers			Contactors ⁽¹⁾	Thermal relays	
P (kW)	I (A) 220 V	I (A) 240 V	Ie max (A)	Type	Rating (A)	Irm (A)	Type	Type	Irth (A) ⁽²⁾
0.18	1.2	1.1	1.6	NSX100-MA	2.5	23.5	LC1-D09	LRD-06	1/1.6
0.25	1.5	1.4	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
0.37	2	1.8	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
0.55	2.8	2.6	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4
0.75	3.5	3.2	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4
1.1	5	4.5	6	NSX100-MA	6.3	82	LC1-D32	LRD-10	4/6
1.5	6.5	6	8	NSX100-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8
2.2	9	8	10	NSX100-MA	12.5	138	LC1-D40	LRD-33 14	7/10
3	12	11	12.5	NSX100-MA	12.5	163	LC1-D40	LRD-33 16	9/13
4	15	14	18	NSX100MA	25	250	LC1-D40	LRD-33 21	12/18
5.5	21	19	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25
6.3	24	22	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25
7.5	28	25	32	NSX100-MA	50	450	LC1-D80	LRD-33 53	23/32
10	36	33	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40
11	39	36	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40
15	52	48	63	NSX100-MA	100	700	LC1-D80	LRD-33 59	48/65
18.5	63	59	63	NSX100-MA	100	900	LC1-D80	LRD-33 59	48/65
22	75	70	80	NSX100-MA	100	1100	LC1-D80	LRD-33 63	63/80
30	100	95	100	NSX100-MA	100	1300	LC1-D115 LC1-F115	LRD-53 67 LR9-F53 67	60/100
37	125	115	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150
45	150	140	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150
55	180	170	185 220	NSX250-MA NSX400-MA	220 320	2420 2880	LC1-F185 LC1-F265	LR9-F53 71	132/220
75	250	235	265	NSX400-MA	320	3500	LC1-F265	LR9-F73 75	200/330
90	300	270	320	NSX400-MA	320	4160	LC1-F330	LR9-F73 75	200/330
110	360	330	400	NSX630-MA	500	5700	LC1-F400	LR9-F73 79	300/500
132	430	400	500	NSX630-MA	500	6500	LC1-F500	LR9-F73 79	300/500
150	460	450	500	NSX630-MA	500	6500	LC1-F500	LR9-F73 79	300/500
160	520	480	630	NS800L Micrologic 5.0- LR off	800	8000	LC1-F630	LR9-F73 81	380/630
200	630	580	630	NS800L Micrologic 5.0-LR off	800	8000	LC1-F630	LR9-F73 81	380/630
220	700	640	700	NS800L Micrologic 5.0-LR off	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000
250	800	730	800	NS1000L Micrologic 5.0-LR off	1000	10000	LC1-F780	TC800/5 + LRD-10	630/1000

(1) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(2) For long starting (class 20), see the correspondence table for thermal relay.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 2 coordination (IEC 60947-4-1) 380/415 V



Circuit breakers, contactors

Performance: U = 380/415 V

Circuit breakers	B	F	N	H	S	L
NS100/160/250 Micrologic 2.2M/6.2M	25 kA	36 kA	50 kA	70 kA	100 kA	130 kA
NSX400/630 Micrologic 2.3M/6.3M	25 kA	36 kA	50 kA	70 kA	100 kA	130 kA
NS800L/NS1000L Micrologic 5.0	-	-	-	-	-	130 kA

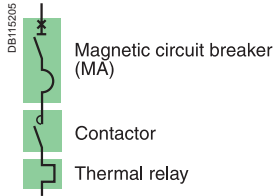
Starting	Norme IEC 60947-4-1		
Micrologic	2.2M/2.3M	6.2M/6.3M	5.0
Normal (class)	5, 10	5, 10	10
Long (class)	20	20, 30	20

Motors P (kW)	I (A) 380 V	I (A) 415 V	I _e max (A)	Circuit breakers				Contactors ⁽¹⁾
				Type	Trip unit/t.u.	I _{rth} (A)	I _{rm} (A) ⁽²⁾	Type
7.5	16	14	20	NSX100	Micrologic 2.2 or 6.2	12/25	13 I _{rth}	LC1-D80
10	21	19	25	NSX100	Micrologic 2.2 or 6.2	12/25	13 I _{rth}	LC1-D80
11	23	21	25	NSX100	Micrologic 2.2 or 6.2	12/25	13 I _{rth}	LC1-D80
15	30	28	50	NSX100	Micrologic 2.2 or 6.2	25/50	13 I _{rth}	LC1-D80
18.5	37	35	50	NSX100	Micrologic 2.2 or 6.2	25/50	13 I _{rth}	LC1-D80
22	44	40	50	NSX100	Micrologic 2.2 or 6.2	25/50	13 I _{rth}	LC1-D80
30	60	55	80	NSX100	Micrologic 2.2 or 6.2	50/100	13 I _{rth}	LC1-D80
37	72	66	80	NSX100	Micrologic 2.2 or 6.2	50/100	13 I _{rth}	LC1-D80
45	85	80	100	NSX100	Micrologic 2.2 or 6.2	50/100	13 I _{rth}	LC1-D115 or LC1-F115
55	105	100	115	NSX160	Micrologic 2.2 or 6.2	70/150	13 I _{rth}	LC1-D115 or LC1-F115
75	138	135	150	NSX160	Micrologic 2.2 or 6.2	70/150	13 I _{rth}	LC1-D150 or LC1-F150
90	170	165	185	NSX250	Micrologic 2.2 or 6.2	100/220	13 I _{rth}	LC1-F185
			225	NSX400	Micrologic 2.3 or 6.3	160/320	13 I _{rth}	LC1-F225
110	205	200	220	NSX250	Micrologic 2.2 or 6.2	100/220	13 I _{rth}	LC1-F225
				NSX400	Micrologic 2.3 or 6.3	160/320	13 I _{rth}	LC1-F225
132	250	240	265	NSX400	Micrologic 2.3 or 6.3	160/320	13 I _{rth}	LC1-F265
160	300	280	320	NSX400	Micrologic 2.3 or 6.3	160/320	13 I _{rth}	LC1-F330
200	370	340	400	NSX630	Micrologic 2.3 or 6.3	250/500	13 I _{rth}	LC1-F400
220	408	385	500	NSX630	Micrologic 2.3 or 6.3	250/500	13 I _{rth}	LC1-F500
250	460	425	500	NSX630	Micrologic 2.3 or 6.3	250/500	13 I _{rth}	LC1-F500
			630	NS800L	Micrologic 5.0	320/800	8000	LC1-F630
300	565	500	630	NS800L	Micrologic 5.0	320/800	8000	LC1-F630
335	620	560	630	NS800L	Micrologic 5.0	320/800	8000	LC1-F630
375	670	620	710	NS800L	Micrologic 5.0	320/800	9600	LC1-F780
400	710	660	710	NS800L	Micrologic 5.0	320/800	9600	LC1-F780
450	800	750	800	NS1000L	Micrologic 5.0	400/1000	10000	LC1-F780

(1) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(2) li for Micrologic 5.0 control unit.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.



Circuit breakers, contactors and thermal relays

Performance: U = 380/415 V

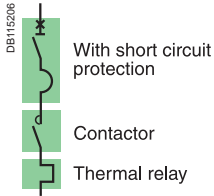
Circuit breakers	N	H	L
NS80-MA	-	70 kA	-
Starting ⁽²⁾ : normal		LRD class 10 A	

Motors P (kW)	I (A) 380 V	I (A) 415 V	I _e max (A)	Circuit breakers			Contactors ⁽¹⁾	Thermal relays	
				Type	Rating (A)	I _{rm} (A)	Type	Type	I _{rth} ⁽²⁾
0.18	0.7	0.6	1	NS80H-MA	1.5	13.5	LC1-D09	LRD-05	0.63/1
0.25	0.9	0.8	1	NS80H-MA	1.5	13.5	LC1-D09	LRD-05	0.63/1
0.37	1.2	1.1	1.6	NS80H-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6
0.55	1.6	1.5	2.5	NS80H-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
0.75	2	1.8	2.5	NS80H-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
1.1	2.8	2.6	4	NS80H-MA	6.3	57	LC1-D32	LRD-08	2.5/4
1.5	3.7	3.4	4	NS80H-MA	6.3	57	LC1-D32	LRD-08	2.5/4
2.2	5.3	4.8	6	NS80H-MA	6.3	82	LC1-D32	LRD-10	4/6
3	7	6.5	8	NS80H-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8
4	9	8.2	10	NS80H-MA	12.5	138	LC1-D40	LRD-33 14	7/10
5.5	12	11	12.5	NS80H-MA	12.5	163	LC1-D40	LRD-33 16	9/13
7.5	16	14	16	NS80H-MA	25	250	LC1-D40	LRD-33 21	12/18
10	21	19	25	NS80H-MA	25	325	LC1-D40	LRD-33 22	17/25
11	23	21	25	NS80H-MA	25	325	LC1-D40	LRD-33 22	17/25
15	30	28	32	NS80H-MA	50	450	LC1-D40	LRD-33 53	23/32
18.5	37	34	40	NS80H-MA	50	550	LC1-D50	LRD-33 55	30/40
22	43	40	50	NS80H-MA	50	650	LC1-D50	LRD-33 57	37/50
30	59	55	63	NS80H-MA	80	880	LC1-D65	LRD-33 59	48/65
37	72	66	80	NS80H-MA	80	1040	LC1-D80	LRD-33 63	63/80

⁽¹⁾ Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

⁽²⁾ For long starting (class 20), see the correspondence table for thermal relay.

Type 2 coordination (IEC 60947-4-1) 380/415 V



Circuit breakers, contactors and thermal relays

Performance: U = 380/415 V

Circuit breakers	B	F	N	H	S	L
NSX100/160/250-MA	25 kA	36 kA	50 kA	70 kA	100 kA	130 kA
NSX400/630 Micrologic 1.3M	25 kA	36 kA	50 kA	70 kA	100 kA	130 kA
NS800L/NS1000L Micrologic 5.0	-	-	-	-	-	130 kA

Starting ⁽²⁾: normal LRD class 10 A, other classes 10

Motors P (kW)				Circuit breakers			Contactors ⁽¹⁾		Thermal relays	
	I (A) 380 V	I (A) 415 V	I _e max (A)	Type	Rating (A)	I _{rm} (A) ⁽³⁾	Type	Type	Irth ⁽²⁾	
0.37	1.2	1.1	1.6	NSX100-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6	
0.55	1.6	1.5	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
0.75	2	1.8	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
1.1	2.8	2.6	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4	
1.5	3.7	3.4	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4	
2.2	5.3	4.8	6	NSX100-MA	6.3	82	LC1-D32	LRD-10	4/6	
3	7	6.5	8	NSX100-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8	
4	9	8.2	10	NSX100-MA	12.5	138	LC1-D40	LRD-33 14	7 /10	
5.5	12	11	12.5	NSX100-MA	12.5	163	LC1-D40	LRD-33 16	9/13	
7.5	16	14	18	NSX100-MA	25	250	LC1-D40	LRD-33 21	12/18	
10	21	19	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25	
11	23	21	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25	
15	30	28	32	NSX100-MA	50	450	LC1-D80	LRD-33 53	23/32	
18.5	37	34	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40	
22	43	40	50	NSX100-MA	50	650	LC1-D80	LRD-33 57	37/50	
30	59	55	63	NSX100-MA	100	900	LC1-D80	LRD-33 59	48/65	
37	72	66	80	NSX100-MA	100	1100	LC1-D80	LRD-33 63	63/80	
45	85	80	100	NSX100-MA	100	1300	LC1-D115 LC1-F115	LR9-D53 67 LR9-F53 67	60/100	
55	105	100	115	NSX160-MA	150	1500	LC1-D115 LC1-F115	LR9-D53 69 LR9-F53 69	90/150	
75	140	135	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150	
90	170	160	185	NSX250-MA	220	2420	LC1-F185	LR9-F53 71	132/220	
110	210	200	220	NSX250-MA NSX400 Micrologic 1.3M	220 320	2860 2880	LC1-F225 LC1-F265	LR9-F53 71	132/220	
132	250	230	265	NSX400 Micrologic 1.3M	320	3500	LC1-F265	LR9-F73 75	200/330	
160	300	270	320	NSX400 Micrologic 1.3M	320	4160	LC1-F330	LR9-F73 75	200/330	
200	380	361	400	NSX630 Micrologic 1.3M	500	5700	LC1-F400	LR9-F73 79	300/500	
220	420	380	500	NSX630 Micrologic 1.3M	500	6500	LC1-F500	LR9-F73 79	300/500	
250	460	430	500	NSX630 Micrologic 1.3M	500	6500	LC1-F500	LR9-F73 79	300/500	
			630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630	
300	565	500	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630	
335	620	560	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630	
375	670	620	710	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000	
400	710	660	710	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000	
450	800	750	800	NS1000L Micrologic 5.0 - LR off	1000	10000	LC1-F780	TC800/5 + LRD-10	630/1000	

(1) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(2) For long starting (class 20), see the correspondence table for thermal relay.

(3) Ii for Micrologic 5.0 control unit.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

DB116486



Magnetic circuit breaker (MA)

Contactor

Thermal relay on CT

Circuit breakers, contactors and thermal relays

Performance: U = 380/415 V

Circuit breakers	N	H	L
NS80H-MA	-	70 kA	-

Starting⁽¹⁾: adjustable class 10 A to 30.

Motors P (kW)	I (A) 380 V	I (A) 415 V	I _e max (A)	Circuit breakers			Contactors ⁽²⁾	Thermal relays	
				Type	Rating (A)	I _{rm} (A)	Type	Type	I _{rth} (A) ⁽¹⁾
0.18	0.7	0.6	1	NS80H-MA	1.5	13.5	LC1-D40	LT6-P0M	0.2/1
0.25	0.9	0.8	1	NS80H-MA	1.5	13.5	LC1-D40	LT6-P0M	0.2/1
0.37	1.2	1.1	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5
0.55	1.6	1.5	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5
0.75	2	1.8	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5
1.1	2.8	2.6	5	NS80H-MA	6.3	70	LC1-D40	LT6-P0M	1/5
1.5	3.7	3.4	5	NS80H-MA	6.3	70	LC1-D40	LT6-P0M	1/5
2.2	5.3	4.8	6.3	NS80H-MA	6.3	82	LC1-D40	LT6-P0M	5/25
3	7	6.5	12.5	NS80H-MA	12.5	163	LC1-D40	LT6-P0M	5/25
4	9	8.2	12.5	NS80H-MA	12.5	163	LC1-D40	LT6-P0M	5/25
5.5	12	11	12.5	NS80H-MA	12.5	163	LC1-D40	LT6-P0M	5/25
7.5	16	14	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25
10	21	19	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25
11	23	21	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25
15	30	28	50	NS80H-MA	50	650	LC1-D80	LT6-P0M	on CT
18.5	37	34	50	NS80H-MA	50	650	LC1-D80	LT6-P0M	on CT
22	43	40	50	NS80H-MA	50	650	LC1-D80	LT6-P0M	on CT
30	59	55	80	NS80H-MA	80	1040	LC1-D80	LT6-P0M	on CT
37	72	66	80	NS80H-MA	80	1040	LC1-D80	LT6-P0M	on CT

(1) For installation with a class 30 relay, a derating of 20 % must be apply on circuit breakers.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

DB119487



With short circuit breaker protection

Contactor

Thermal relay on CT

Circuit breakers, contactors and thermal relays

Performance: U = 380/415 V

Circuit breakers	B	F	N	H	S	L
NSX100/160/250-MA	25	36	50	70	100	130
NSX400/630 Micrologic 1.3 M	25	36	50	70	100	130
NS800/1000L Micrologic 5.0	-	-	-	-	-	130

Starting⁽¹⁾: normal LRD lass 10 A, LR class 10.

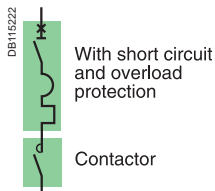
Motors P (kW)	I (A) 380 V	I (A) 415 V	I _e max (A)	Circuit breakers			Contactors ⁽²⁾		Thermal relays	
				Type	Rating (A)	I _{rm} (A) ⁽³⁾	Type	Type	I _{rt} h (A) ⁽¹⁾	
0.37	1.2	1.1	1.6	NSX100-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6	
0.55	1.6	1.5	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
0.75	2	1.8	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
1.1	2.8	2.6	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4	
1.5	3.7	3.4	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4	
2.2	5.3	4.8	6	NSX100-MA	6.3	82	LC1-D32	LRD-10	4/6	
3	7	6.5	8	NSX100-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8	
4	9	8.2	10	NSX100-MA	12.5	138	LC1-D40	LRD-33 14	7/10	
5.5	12	11	12.5	NSX100-MA	12.5	163	LC1-D40	LRD-33 16	9/13	
7.5	16	14	18	NSX100-MA	25	250	LC1-D40	LRD-33 21	12/18	
10	21	19	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25	
11	23	21	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25	
15	30	28	32	NSX100-MA	50	450	LC1-D80	LRD-33 53	23/32	
18.5	37	34	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40	
22	43	40	50	NSX100-MA	50	650	LC1-D80	LRD-33 57	37/50	
30	59	55	63	NSX100-MA	100	900	LC1-D80	LRD-33 59	48/65	
37	72	66	80	NSX100-MA	100	1100	LC1-D80	LRD-33 63	63/80	
45	85	80	100	NSX100-MA	100	1300	LC1-D115 LC1-F115	LR9-D53 67 LR9-F53 67	60/100	
55	105	100	115	NSX160-MA	150	1500	LC1-D115 LC1-F115	LR9-D53 69 LR9-F53 69	90/150	
75	140	135	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150	
90	170	160	185	NSX250-MA	220	2420	LC1-F185	LR9-F53 71	132/220	
110	210	200	220	NSX250-MA	220	2860	LC1-F225	LR9-F53 71	132/220	
				NSX400-Micrologic 1.3 M	320	2880	LC1-F265			
132	250	230	265	NSX400-Micrologic 1.3 M	320	3500	LC1-F265	LR9-F73 75	200/330	
160	300	270	320	NSX400-Micrologic 1.3 M	320	4160	LC1-F330	LR9-F73 75	200/330	
200	380	361	400	NSX630-Micrologic 1.3 M	500	5700	LC1-F400	LR9-F73 79	300/500	
220	420	380	500	NSX630-Micrologic 1.3 M	500	6500	LC1-F500	LR9-F73 79	300/500	
250	460	430	500	NSX630-Micrologic 1.3 M	500	6500	LC1-F500	LR9-F73 79	300/500	
			630	NS800L	800	8000	LC1-F630	LR9-F73 81	380/630	
				Micrologic 5.0 - LR off						
300	565	500	630	NS800L	800	8000	LC1-F630	LR9-F73 81	380/630	
				Micrologic 5.0 - LR off						
335	620	560	630	NS800L	800	8000	LC1-F630	LR9-F73 81	380/630	
				Micrologic 5.0 - LR off						
375	670	620	710	NS800L	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000	
				Micrologic 5.0 - LR off						
400	710	660	710	NS800L	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000	
				Micrologic 5.0 - LR off						
450	800	750	800	NS1000L	1000	10000	LC1-F780	TC800/5 + LRD-10	630/1000	
				Micrologic 5.0 - LR off						
375	670	620	710	NS800L	800	9600	LC1-F800/780	LT6-P0M	on CT	
				Micrologic 5.0 - LR off						
400	710	660	710	NS800L	800	9600	LC1-F800/780	LT6-P0M	on CT	
				Micrologic 5.0 - LR off						
450	800	750	800	NS1000L	1000	10000	LC1-F800/780	LT6-P0M	on CT	
				Micrologic 5.0 - LR off						

(1) For installation with a class 30 relay, a derating of 20 % must be apply on circuit breakers.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(3) I_i for Micrologic 5.0 control unit.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.



Circuit breakers, contactors

Performance: U = 440 V

Circuit breakers	B	F	N	H	S	L
NSX100/160/250 Micrologic 2.2 M/6.2 M	20 kA	35 kA	50 kA	65 kA	90 kA	130 kA
NSX400/630 Micrologic 2.3 M/6.3 M	-	30 kA	42 kA	65 kA	90 kA	130 kA
NS630b/800/1000L Micrologic 5.0	-	-	-	-	-	130 kA

Starting

Norme IEC 60947-4-1

Micrologic	2.2 M/2.3 M	6.2 M/6.3 M	5.0
Normal (class)	5, 10	5, 10	10
Long (class)	20	20, 30	20

Motors P (kW)	I (A) 440 V	I _e max (A)	Circuit breakers			I _{rm} (A) ⁽³⁾	Contactors ⁽²⁾ Type
			Type	Trip unit/t.u.	I _{rth} (A)		
7.5	13.7	25	NSX100	Micrologic 2.2 or 6.2	12/25	13I _{rth}	LC1-D80
10	19	25	NSX100	Micrologic 2.2 or 6.2	15/25	13I _{rth}	LC1-D80
11	20	25	NSX100	Micrologic 2.2 or 6.2	15/25	13I _{rth}	LC1-D80
15	26.5	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
18.5	33	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
22	39	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
30	51	80	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D80
37	64	80	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D80
45	76	80	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D80
55	90	100	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D115 or LC1-F115
75	125	150	NSX160	Micrologic 2.2 or 6.2	70/150	13I _{rth}	LC1-D150 or LC1-F150
90	146	150	NSX160	Micrologic 2.2 or 6.2	70/150	13I _{rth}	LC1-D150 or LC1-F150
110	178	185	NSX250	Micrologic 2.2 or 6.2	100/220	13I _{rth}	LC1-F185
				Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F185
132	215	220	NSX250	Micrologic 2.2 or 6.2	131/220	13I _{rth}	LC1-F225
				Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F225
160	256	265	NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F265
200	320	320	NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F330
220	353	400	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F400
250	400	400	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F400
300	460	500	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F500
				Micrologic 5.0	320/800	8000	LC1-F630
335	540	630	NS800L	Micrologic 5.0	320/800	8000	LC1-F630
375	575	630	NS800L	Micrologic 5.0	320/800	8000	LC1-F630
400	611	720	NS800L	Micrologic 5.0	320/800	9600	LC1-F780
450	720	720	NS800L	Micrologic 5.0	320/800	9600	LC1-F780
500	800	800	NS1000L	Micrologic 5.0	400/1000	10000	LC1-F780

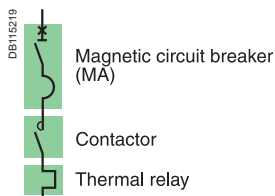
(1) Valid for 480 V NEMA.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(3) I_i for Micrologic 5.0 control unit.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 2 coordination (IEC 60947-4-1) 440 V



Circuit breakers, contactors and thermal relays

Performance ⁽¹⁾: U = 440 V

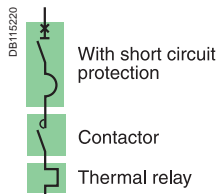
Circuit breakers	N	H	L
NS80H-MA	-	65 kA	-
Starting ⁽³⁾ : normal		LRD class 10 A	

Motors P (kW)	I (A) 440 V	I _e max (A)	Circuit breakers			Contactors ⁽²⁾		Thermal relays	
			Type	Rating (A)	I _{rm} (A)	Type	Type	I _{rth} (A) ⁽³⁾	
0.25	0.7	1	NS80H-MA	1.5	13.5	LC1-D09	LRD-05	0.63/1	
0.37	1	1.6	NS80H-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6	
0.55	1.4	1.6	NS80H-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6	
0.75	1.7	2.5	NS80H-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
1.1	2.4	2.5	NS80H-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5	
1.5	3.1	4	NS80H-MA	6.3	57	LC1-D32	LRD-08	2.5/4	
2.2	4.5	6	NS80H-MA	6.3	82	LC1-D32	LRD-10	4/6	
3	5.8	6	NS80H-MA	6.3	82	LC1-D32	LRD-10	4/6	
4	8	8	NS80H-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8	
5.5	10.5	12.5	NS80H-MA	12.5	163	LC1-D40	LRD-33 16	9/13	
7.5	13.7	16	NS80H-MA	25	250	LC1-D40	LRD-33 21	12/18	
10	19	25	NS80H-MA	25	325	LC1-D40	LRD-33 22	17/25	
11	20	25	NS80H-MA	25	325	LC1-D40	LRD-33 22	17/25	
15	26.5	32	NS80H-MA	50	450	LC1-D40	LRD-33 53	23/32	
18.5	33	40	NS80H-MA	50	550	LC1-D50	LRD-33 55	30/40	
22	39	40	NS80H-MA	50	550	LC1-D50	LRD-33 55	30/40	
30	52	63	NS80H-MA	80	880	LC1-D65	LRD-33 59	48/65	
37	63	63	NS80H-MA	80	880	LC1-D65	LRD-33 59	48/65	
45	76	80	NS80H-MA	80	1040	LC1-D80	LRD-33 63	63/80	

(1) Valid for 480 V NEMA.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(3) For long starting (class 20), see the correspondence table for thermal relay.



Circuit breakers, contactors and thermal relays

Performance ⁽¹⁾ : U = 440 V					
Circuit breakers	F	N	H	S	L
NSX100/160/250-MA	35 kA	50 kA	65 kA	90 kA	130 kA
NSX400/630 Micrologic 1.3 M	30 kA	42 kA	65 kA	90 kA	130 kA
NS630b/800/1000L Micrologic 5.0	-	-	-	-	130 kA
Starting ⁽⁴⁾ : normal	LRD class 10A, LR9 class 10.				

Motors P (kW)	Motors		Circuit breakers Type	Rating (A)	I _{rm} (A) ⁽³⁾	Contactors ⁽²⁾ Type	Thermal relays Type	I _{rt} h (A) ⁽⁴⁾
	I (A) 440 V	I _e max (A)						
0.37	1	1.6	NSX100-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6
0.55	1.4	1.6	NSX100-MA	2.5	22.5	LC1-D09	LRD-06	1/1.6
0.75	1.7	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
1.1	2.4	2.5	NSX100-MA	2.5	32.5	LC1-D09	LRD-07	1.6/2.5
1.5	3.1	4	NSX100-MA	6.3	57	LC1-D32	LRD-08	2.5/4
2.2	4.5	6	NSX100-MA	6.3	82	LC1-D32	LRD-10	4/6
3	5.8	6	NSX100-MA	6.3	82	LC1-D32	LRD-10	4/6
4	8	8	NSX100-MA	12.5	113	LC1-D40	LRD-33 12	5.5/8
5.5	10.5	12.5	NSX100-MA	12.5	163	LC1-D40	LRD-33 16	9/13
7.5	13.7	18	NSX100-MA	25	250	LC1-D40	LRD-33 21	12/18
10	19	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25
11	20	25	NSX100-MA	25	325	LC1-D40	LRD-33 22	17/25
15	26.5	32	NSX100-MA	50	450	LC1-D80	LRD-33 53	23/32
18.5	33	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40
22	39	40	NSX100-MA	50	550	LC1-D80	LRD-33 55	30/40
30	52	63	NSX100-MA	100	900	LC1-D80	LRD-33 59	48/65
37	63	63	NSX100-MA	100	900	LC1-D80	LRD-33 59	48/65
45	76	80	NSX100-MA	100	1100	LC1-D80	LRD-33 63	63/80
55	90	100	NSX100-MA	100	1300	LC1-D115 LC1-F115	LR9-D53 67 LR9-F53 67	60/100
75	125	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150
90	140	150	NSX160-MA	150	1950	LC1-D150 LC1-F150	LR9-D53 69 LR9-F53 69	90/150
110	178	185	NSX250-MA	220	2420	LC1-F185	LR9-F53 71	132/220
132	210	220	NSX250-MA	220	2860	LC1-F225	LR9-F53 71	132/220
		265	NSX400 Micrologic 1.3M	320	3500	LC1-F265		
160	256	265	NSX400 Micrologic 1.3M	320	3500	LC1-F265	LR9-F73 75	200/330
200	310	320	NSX400 Micrologic 1.3M	320	4160	LC1-F330	LR9-F73 75	200/330
220	353	400	NSX630 Micrologic 1.3M	500	5500	LC1-F400	LR9-F73 79	300/500
250	400	500	NSX630 Micrologic 1.3M	500	6500	LC1-F500	LR9-F73 79	300/500
300	460	500	NSX630 Micrologic 1.3M	500	6500	LC1-F500	LR9-F73 79	300/500
		630	NS630bL Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630
335	540	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630
375	575	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LR9-F73 81	380/630
400	611	720	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000
450	720	720	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	TC800/5 + LRD-10	630/1000
500	800	800	NS1000L Micrologic 5.0 - LR off	1000	10000	LC1-F780	TC800/5 + LRD-10	630/1000

(1) Valid for 480 V NEMA.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

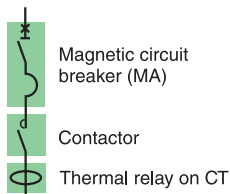
(3) li for Micrologic 5.0 control unit.

(4) For long starting (class 20), see the correspondence table for thermal relay.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 2 coordination (IEC 60947-4-1) 440 V

DB119496



Circuit breakers, contactors and thermal relays

Performance ⁽¹⁾: U = 440 V

Circuit breakers	N	H	L
NS80H-MA	-	65 kA	-

Starting ⁽³⁾: adjustable class 10 A to 30.

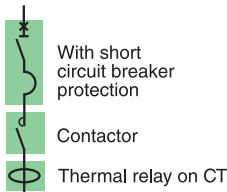
Motors P (kW)	I (A) 440 V	I _e max (A)	Circuit breakers			Contactors ⁽²⁾		Thermal relays	
			Type	Rating (A)	I _{rm} (A)	Type	Type	I _{rth} (A) ⁽³⁾	
0.25	0.7	1	NS80H-MA	1.5	13.5	LC1-D40	LT6-P0M	0.2/1	
0.37	1	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5	
0.55	1.4	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5	
0.75	1.7	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5	
1.1	2.4	2.5	NS80H-MA	2.5	32.5	LC1-D40	LT6-P0M	1/5	
1.5	3.1	4	NS80H-MA	6.3	82	LC1-D40	LT6-P0M	1/5	
2.2	4.5	5	NS80H-MA	6.3	82	LC1-D40	LT6-P0M	1/5	
3	5.8	6.3	NS80H-MA	6.3	82	LC1-D40	LT6-P0M	5/25	
4	8	12.5	NS80H-MA	12.5	163	LC1-D40	LT6-P0M	5/25	
5.5	10.5	12.5	NS80H-MA	12.5	163	LC1-D40	LT6-P0M	5/25	
7.5	13.7	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25	
10	19	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25	
11	20	25	NS80H-MA	25	325	LC1-D40	LT6-P0M	5/25	
15	26.5	50	NS80H-MA	50	550	LC1-D80	LT6-P0M	on CT	
18.5	33	50	NS80H-MA	50	550	LC1-D80	LT6-P0M	on CT	
22	39	50	NS80H-MA	50	550	LC1-D80	LT6-P0M	on CT	
30	52	80	NS80H-MA	80	1040	LC1-D80	LT6-P0M	on CT	
37	63	80	NS80H-MA	80	1040	LC1-D80	LT6-P0M	on CT	
45	76	80	NS80H-MA	80	1040	LC1-D80	LT6-P0M	on CT	

⁽¹⁾ Valid for 480 V NEMA.

⁽²⁾ Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

⁽³⁾ For installation with a class 30 relay, a derating of 20 % must be applied on circuit breakers.

DB116521



Circuit breakers, contactors and thermal relays

Performance ⁽²⁾ : U = 440 V						
Circuit breakers	B	F	N	H	S	L
NSX100/160/250-MA	20 kA	35 kA	50 kA	65 kA	90 kA	130 kA
NSX400/630-MA	-	30 kA	42 kA	65 kA	90 kA	130 kA
NS630b/800/1000L Micrologic 5.0	-	-	-	-	-	130 kA

Starting ⁽¹⁾: normal LRD class 10 A, LR9 class 10.

Motors P (kW)	I (A) 440 V	I _e max (A)	Circuit breakers Type	Rating (A)	I _{rm} (A) ⁽⁴⁾	Contactors ⁽³⁾ Type	Thermal relays Type	I _{rt} h (A) ⁽¹⁾
0.37	1	2.5	NSX100-MA	2.5	32.5	LC1-D40	LTM R08	0.4/8
0.55	1.4	2.5	NSX100-MA	2.5	32.5	LC1-D40	LTM R08	0.4/8
0.75	1.7	2.5	NSX100-MA	2.5	32.5	LC1-D40	LTM R08	0.4/8
1.1	2.4	2.5	NSX100-MA	2.5	32.5	LC1-D40	LTM R08	0.4/8
1.5	3.1	6.3	NSX100-MA	6.3	82	LC1-D40	LTM R08	0.4/8
2.2	4.5	6.3	NSX100-MA	6.3	82	LC1-D40	LTM R08	0.4/8
3	5.8	6.3	NSX100-MA	6.3	82	LC1-D40	LTM R08	0.4/8
4	8	12.5	NSX100-MA	12.5	163	LC1-D80	LTM R27	1.35/27
5.5	10.5	12.5	NSX100-MA	12.5	163	LC1-D80	LTM R27	1.35/27
7.5	13.7	25	NSX100-MA	25	325	LC1-D80	LTM R27	1.35/27
10	19	25	NSX100-MA	25	325	LC1-D80	LTM R27	1.35/27
11	20	25	NSX100-MA	25	325	LC1-D80	LTM R27	1.35/27
15	26.5	50	NSX100-MA	50	550	LC1-D80	LTM R100	5/100
18.5	33	50	NSX100-MA	50	550	LC1-D80	LTM R100	5/100
22	39	50	NSX100-MA	50	550	LC1-D80	LTM R100	5/100
30	52	80	NSX100-MA	100	1100	LC1-D80	LTM R100	5/100
37	63	80	NSX100-MA	100	1100	LC1-D80	LTM R100	5/100
45	76	80	NSX100-MA	100	1100	LC1-D80	LTM R100	5/100
55	90	100	NSX100-MA	100	1300	LC1-D115	LTM R100	5/100
						LC1-F115		
75	125	150	NSX160-MA	150	1950	LC1-D150	LTM R08	on CT
						LC1-F150		on CT
90	140	150	NSX160-MA	150	1950	LC1-D150	LTM R08	on CT
						LC1-F150		on CT
110	178	185	NSX250-MA	220	2420	LC1-F185	LTM R08	on CT
132	210	220	NSX250-MA	220	2860	LC1-F225	LTM R08	on CT
		265	NSX400-MA	320	3500	LC1-F265		on CT
160	256	265	NSX400-MA	320	3500	LC1-F265	LTM R08	on CT
200	310	320	NSX400-MA	320	4000	LC1-F330	LTM R08	on CT
220	353	400	NSX630-MA	500	5500	LC1-F400	LTM R08	on CT
250	400	500	NSX630-MA	500	6500	LC1-F500	LTM R08	on CT
300	460	500	NSX630-MA	500	6500	LC1-F500	LTM R08	on CT
		630	NS630bL Micrologic 5.0 - LR off	800	8000	LC1-F630	LTM R08	on CT
335	540	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LTM R08	on CT
375	575	630	NS800L Micrologic 5.0 - LR off	800	8000	LC1-F630	LTM R08	on CT
400	611	720	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	LTM R08	on CT
450	720	720	NS800L Micrologic 5.0 - LR off	800	9600	LC1-F780	LTM R08	on CT
500	800	800	NS1000L Micrologic 5.0 - LR off	1000	10000	LC1-F780	LTM R08	on CT

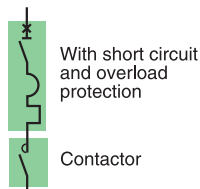
(1) For installation with a class 30 relay, a derating of 20 % must be apply on circuit breakers.

(2) Valid for 480 V NEMA.

(3) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

DB11522



Circuit breakers, contactors

Performance: U = 500/525 V

Circuit breakers	B	F	N	H	S	L
NSX100/160/250 Micrologic 2.2M/6.2M	15/12 kA	25/22 kA	36/35 kA	50/35 kA	65/40 kA	70/50 kA
NSX160/250 Micrologic 2.2M/6.2M	15/12 kA	30/22 kA	36/35 kA	50/35 kA	65/40 kA	70/50 kA
NSX400/630 Micrologic 2.3M/6.3M	-	25/22 kA	30/22 kA	50/35 kA	65/40 kA	70/50 kA
NS800L Micrologic 5.0	-	-	-	-	-	100 kA

Starting	Norme IEC 60947-4-1		
Micrologic	2.2M/2.3M	6.2M/6.3M	5.0
Normal (class)	5, 10	5, 10	10
Long (class)	20	20, 30	20

Motors P (kW)	I (A) 500 V	I (A) 525 V	I _e max (A)	Circuit breakers				Contactors ⁽¹⁾
				Type	Décl./t.u.	I _{rth} (A)	I _{rm} (A)	Type
10	15	15	25	NSX100	Micrologic 2.2 or 6.2	12/25	13I _{rth}	LC1-D80
11	18.4	18.4	25	NSX100	Micrologic 2.2 or 6.2	12/25	13I _{rth}	LC1-D80
15	23	23	25	NSX100	Micrologic 2.2 or 6.2	12/25	13I _{rth}	LC1-D80
18.5	28.5	28.5	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
22	33	33	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
30	45	45	50	NSX100	Micrologic 2.2 or 6.2	25/50	13I _{rth}	LC1-D80
37	55	55	80	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D80
45	65	65	80	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D80
55	75	75	100	NSX100	Micrologic 2.2 or 6.2	50/100	13I _{rth}	LC1-D115 or LC1-F115
75	105	105	115	NSX160	Micrologic 2.2 or 6.2	70/150	13I _{rth}	LC1-D115 or LC1-F115
90	130	130	150	NSX160	Micrologic 2.2 or 6.2	70/150	13I _{rth}	LC1-D150 or LC1-F150
110	155	155	185	NSX250	Micrologic 2.2 or 6.2	100/220	13I _{rth}	LC1-F185
				NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F185
132	185	185	220	NSX250	Micrologic 2.2 or 6.2	100/220	13I _{rth}	LC1-F265
				NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F265
160	220	220	265	NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F265
200	280	280	320	NSX400	Micrologic 2.3 or 6.3	160/320	13I _{rth}	LC1-F400
220	310	310	500	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F500
250	360	360	500	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F500
315	445	445	500	NSX630	Micrologic 2.3 or 6.3	250/500	13I _{rth}	LC1-F500
			630	NS800L	Micrologic 5.0	320/800	7200	LC1-F630
335	460	460	630	NS800L	Micrologic 5.0	320/800	8800	LC1-F630
355	500	500	630	NS800L	Micrologic 5.0	320/800	8800	LC1-F630
375	530	530	630	NS800L	Micrologic 5.0	320/800	8800	LC1-F630
400	570	570	710	NS800L	Micrologic 5.0	320/800	9600	LC1-F780
450	630	630	710	NS800L	Micrologic 5.0	320/800	9600	LC1-F780

(1) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

DB116216



Electronic
circuit-breaker

Contactor

Circuit breakers, contactors

Performance: U = 690 V

Circuit breakers	L
NS100L-STR22ME	75 kA
NS400L-STR43ME	75 kA
NS630LB/NS800LB - Micrologic 5.0	75 kA

	Norme IEC 947-4-1	
	STR22ME	STR43ME
Normal (class)	10	10
Long (class)	-	20

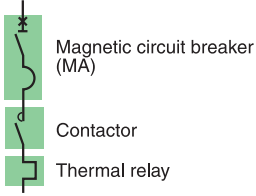
Motors P (kW)	I (A) 690 V	Ie max (A)	Circuit breakers				Contactors ⁽¹⁾
			Type	Trip unit/t.u.	I _{rt} h (A)	I _{rm} (A) ⁽²⁾	Type
10	11.5	20	NS100L	STR22ME	12/20	13I _{rt} h	LC1-D80
15	17	20	NS100L	STR22ME	12/20	13I _{rt} h	LC1-D80
18.5	20.2	25	NS100L	STR22ME	12/20	13I _{rt} h	LC1-D80
22	24.2	40	NS100L	STR22ME	24/40	13I _{rt} h	LC1-D80
30	33	50	NS100L	STR22ME	30/50	13I _{rt} h	LC1-D80
37	40	50	NS100L	STR22ME	30/50	13I _{rt} h	LC1-D80
45	47	50	NS100L	STR22ME	30/50	13I _{rt} h	LC1-D80
55	58	63	NS100L	STR22ME	48/80	13I _{rt} h	LC1F-115
75	76	80	NS100L	STR22ME	60/100	13I _{rt} h	LC1F-115
		165	NS400L	STR43ME	60/120	13I _{rt} h	LC1F-265
90	94	165	NS400L	STR43ME	60/120	13I _{rt} h	LC1F-265
110	113	165	NS400L	STR43ME	100/200	13I _{rt} h	LC1F-265
132	135	165	NS400L	STR43ME	100/200	13I _{rt} h	LC1F-265
160	165	165	NS400L	STR43ME	100/200	13I _{rt} h	LC1F-265
200	203	230	NS400L	STR43ME	160/320	13I _{rt} h	LC1F-330
220	224	230	NS400L	STR43ME	160/320	13I _{rt} h	LC1F-330
250	253	255	NS400L	STR43ME	160/320	13I _{rt} h	LC1F-400
315	315	500	NS630LB	Micrologic 5.0	630	6900	LC1-F630
355	355	500	NS630LB	Micrologic 5.0	630	6900	LC1-F630
400	400	500	NS630LB	Micrologic 5.0	630	6900	LC1-F630
500	500	500	NS630LB	Micrologic 5.0	630	6900	LC1-F630
560	560	630	NS800LB	Micrologic 5.0	800	8800	LC1-F630
630	630	630	NS800LB	Micrologic 5.0	800	8800	LC1-F630

⁽¹⁾ Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

⁽²⁾ Ii for Micrologic 5.0 control unit.

Type 2 coordination (IEC 60947-4-1) 690 V

DB162719



Circuit breakers, contactors

Performance: U = 690 V

Circuit breakers	L
NS100L-MA	75 kA
NS400L-MA	75 kA
NS630LB/NS800LB - Micrologic 5.0	75 kA
Starting ⁽¹⁾ :	LRD class 10 A class 10
normal	
other	

Motors P (kW)	I (A) 690 V	I _e max (A)	Circuit breakers			Contactors ⁽²⁾		Thermal relays	
			Type	Rating (A)	I _{rm} (A) ⁽³⁾	Type	Type	I _{rth} (A)	
0.75	1.2	1.6	NS100L MA	2,5	22,5	LC1-D09	LRD-06	1/1,6	
1	1.5	2	NS100L MA	2,5	27,5	LC1-D09	LRD-06	1,25/2	
1.5	2	2.5	NS100L MA	2,5	32,5	LC1-D09	LRD-07	1,6/2,5	
2.2	2.8	4	NS100L MA	6,3	57	LC1-D40	LRD-33 08	2,5/4	
3	3.8	4	NS100L MA	6,3	57	LC1-D40	LRD-33 08	2,5/4	
4	4.9	6	NS100L MA	6,3	82	LC1-D40	LRD-33 10	4/6	
5.5	6.6	8	NS100L MA	12,5	113	LC1-D80	LRD-33 12	5,5/8	
7.5	8.9	10	NS100L MA	12,5	138	LC1-D80	LRD-33 14	7/10	
10	11.5	13	NS100L MA	25	175	LC1-D80	LRD-33 16	9/13	
15	17	18	NS100L MA	25	250	LC1-D80	LRD-33 21	12/18	
18.5	20.2	25	NS100L MA	25	325	LC1-D80	LRD-33 22	17/25	
22	24.2	25	NS100L MA	25	325	LC1-D80	LRD-33 22	17/25	
25	27.5	32	NS100L MA	50	350	LC1-D80	LRD-33 53	23/32	
30	33	40	NS100L MA	50	650	LC1-D80	LRD-33 55	30/40	
37	40	50	NS100L MA	50	650	LC1-D80	LRD-33 57	37/50	
45	47	50	NS100L MA	50	650	LC1-D80	LRD-33 57	37/50	
55	58	80	NS100L MA	100	1100	LC1F-115	LR9-F53 63	48/80	
75	76	80	NS100L MA	100	1100	LC1F-115	LR9-F53 63	48/80	
90	94	100	NS400L MA	320	2880	LC1F-265	LR9-F53 67	60/100	
110	113	150	NS400L MA	320	2880	LC1F-265	LR9-F53 69	90/150	
132	135	150	NS400L MA	320	2880	LC1F-265	LR9-F53 69	90/150	
160	165	165	NS400L MA	320	2880	LC1F-265	LR9-F53 71	132/220	
200	203	230	NS400L MA	320	2880	LC1F-330	LR9-F73 75	200/330	
220	224	230	NS400L MA	320	2880	LC1F-330	LR9-F73 75	200/330	
250	253	255	NS400L MA	320	3520	LC1F-400	LR9-F73 75	200/330	
315	315	500	NS630LB	Micrologic 5.0 - LR off	6900	LC1-F630	LR9-F73 79	300/500	
355	355	500	NS630LB	Micrologic 5.0 - LR off	6900	LC1-F630	LR9-F73 79	300/500	
400	400	500	NS630LB	Micrologic 5.0 - LR off	6900	LC1-F630	LR9-F73 79	300/500	
500	500	500	NS630LB	Micrologic 5.0 - LR off	6900	LC1-F630	LR9-F73 81	380/630	
560	560	630	NS800LB	Micrologic 5.0 - LR off	8800	LC1-F630	LR9-F73 81	380/630	
630	630	630	NS800LB	Micrologic 5.0 - LR off	8800	LC1-F630	LR9-F73 81	380/630	

(1) For long starting (class 20), see the correspondence table for thermal relay.

(2) Reversers: replace LC1 by LC2; star-delta starter: replace LC1 by LC3.

(3) li for Micrologic 5.0 control unit.

Type 1 coordination (IEC 60947-4-1)

DB116219



Magnetic circuit breaker
(MA)

Contactor

Thermal relay

NS80H-MA circuit breakers, contactors and thermal relays

Direct-on-line starting

Reverser

"I_q" breaking performance: equal to the breaking capacity of the circuit breaker alone.

Starting ⁽¹⁾: normal

LR2 class 10 A, LR9 class 10.

Motors												Circuit breakers		Contactors ⁽³⁾	Thermal relays	
220/230 V		380 V		415 V		440 V ⁽²⁾		500/525 V		660/690 V		Type	Rating (A)	Type	Type	I _{rtth} ⁽¹⁾ (A)
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	Type	Rating (A)	Type	Type	I _{rtth} ⁽¹⁾ (A)
		0.37	1.2	0.37	1.1	0.37	1	0.55	1.2	0.75	1.2	NS80H-MA	2.5	LC1-D09	LRD-06	1/1.6
		0.55	1.6	0.55	1.5	0.55	1.4	0.75	1.5	1	1.5	NS80H-MA	2.5	LC1-D09	LRD-06	1/1.6
0.37	1.8	0.75	3	0.75	1.8	0.75	1.7					NS80H-MA	2.5	LC1-D09	LRD-07	1.6/2.5
						1.1	2.4	1.1	2	1.5	2	NS80H-MA	2.5	LC1-D09	LRD-07	1.6/2.5
0.55	2.8	1.1	2.8	1.1	2.5			1.5	2.6	2.2	2.8	NS80H-MA	6.3	LC1-D09	LRD-08	2.5/4
		1.5	3.7	1.5	3.5	1.5	3.1			3	3.8	NS80H-MA	6.3	LC1-D09	LRD-08	2.5/4
1.1	4.4	2.2	5	2.2	4.8	2.2	4.5	3	5	4	4.9	NS80H-MA	6.3	LC1-D09	LRD-10	4/6
1.5	6.1	3	6.6	3	6.5	3	5.8	4	6.5	5.5	6.6	NS80H-MA	12.5	LC1-D09	LRD-12	5.5/8
2.2	8.7	4	8.5	4	8.2	4	7.9	5.5	9			NS80H-MA	12.5	LC1-D09	LRD-14	7/10
										7.5	8.9	NS80H-MA	12.5	LC1-D12	LRD-14	7/10
3	11.5	5.5	11.5	5.5	11	5.5	10.4	7.5	12			NS80H-MA	12.5	LC1-D12	LRD-16	9/13
4	14.5	7.5	15.5	7.5	14	7.5	13.7	9	14			NS80H-MA	25	LC1-D18	LRD-21	12/18
				9	17	9	16.9	10	15			NS80H-MA	25	LC1-D18	LRD-21	12/18
5.5	20	11	22	11	21	11	20.1	11	18.4	10	11.5	NS80H-MA	25	LC1-D18	LRD-16	9/13
												NS80H-MA	25	LC1-D25	LRD-22	16/24
										15	17	NS80H-MA	25	LC1-D25	LRD-21	12/18
										18.5	21.3	NS80H-MA	50	LC1-D32	LRD-22	16/24
7.5	28	15	30	15	28	15	26.5	18.5	28.5			NS80H-MA	50	LC1-D32	LRD-32	23/32
								22	33	30	34.6	NS80H-MA	50	LC1-D40	LRD-33 55	30/40
11	39	18.5	37	22	40	22	39					NS80H-MA	50	LC1-D40	LRD-33 57	37/50
		22	44	25	47			30	45	33	39	NS80H-MA	50	LC1-D50	LRD-33 57	37/50
15	52					30	51.5					NS80H-MA	50	LC1-D50	LRD-33 59	48/65
										37	42	NS80H-MA	50	LC1-D65	LRD-33 57	37/50
18.5	64	30	59	30	55	37	64	37	55			NS80H-MA	80	LC1-D65	LRD-33 59	48/65
				37	66							NS80H-MA	80	LC1-D65	LRD-33 61	55/70
										45	49	NS80H-MA	80	LC1-D80	LRD-33 57	37/50
22	75	37	72	45	80	45	76	55	80			NS80H-MA	80	LC1-D80	LRD-33 63	63/80
										55	60	NS80H-MA	80	LC1-D115	LR9-D53 67	60/100
										75	80			LC1-F115	LR9-F53 63	48/80

(1) For installation with a class 30 relay, a derating of 20 % must be apply on circuit breakers.

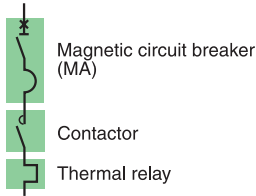
(2) Valid for 480 V NEMA.

(3) Reversers: replace LC1 by LC2.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 1 coordination (IEC 60947-4-1)

DB162519



NSX100 circuit breakers, contactors and thermal relays

Direct-on-line starting

Reverser

"Iq" breaking performance: equal to the breaking capacity of the circuit breaker alone.

Starting⁽¹⁾: normal

LRD class 10, others class 10.

Motors												Circuit breakers		Contact.	Thermal relays	
220/230 V		380 V		415 V		440 V ⁽²⁾		500/525 V		660/690 V		Type	Rating (A)	Type	Type	Irth ⁽¹⁾ (A)
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	Type	Rating (A)	Type	Type	Irth ⁽¹⁾ (A)
		0.37	1.2	0.37	1.1	0.37	1	0.55	1.2	0.75	1.2	NSX100B/F/N/H/S/L-MA	2.5	LC1-D09	LRD-06	1/1.6
		0.55	1.6	0.55	1.5	0.55	1.4	0.75	1.5	1	1.5	NSX100B/F/N/H/S/L-MA	2.5	LC1-D09	LRD-06	1/1.6
0.37	1.8	0.75	2	0.75	1.8	0.75	1.7					NSX100B/F/N/H/S/L-MA	2.5	LC1-D09	LRD-07	1.6/2.5
						1.1	2.4	1.1	2	1.5	2	NSX100B/F/N/H/S/L-MA	2.5	LC1-D09	LRD-07	1.6/2.5
0.55	2.8	1.1	2.8	1.1	2.5			1.5	2.6	2.2	2.8	NSX100B/F/N/H/S/L-MA	6.3	LC1-D09	LRD-08	2.5/4
		1.5	3.7	1.5	3.5	1.5	3.1			3	3.8	NSX100B/F/N/H/S/L-MA	6.3	LC1-D09	LRD-08	2.5/4
1.1	4.4	2.2	5	2.2	4.8	2.2	4.5	3	5	4	4.9	NSX100B/F/N/H/S/L-MA	6.3	LC1-D09	LRD-10	4/6
1.5	6.1	3	6.6	3	6.5	3	5.8	4	6.5	5.5	6.6	NSX100B/F/N/H/S/L-MA	12.5	LC1-D09	LRD-33 12	5.5/8
2.2	8.7	4	8.5	4	8.2	4	7.9	5.5	9			NSX100B/F/N/H/S/L-MA	12.5	LC1-D09	LRD-33 14	7/10
										7.5	8.9	NSX100B/F/N/H/S/L-MA	12.5	LC1-D12	LRD-33 14	7/10
3	11.5	5.5	11.5	5.5	11	5.5	10.4	7.5	12			NSX100B/F/N/H/S/L-MA	12.5	LC1-D12	LRD-33 16	9/13
4	14.5	7.5	15.5	7.5	14	7.5	13.7	9	14			NSX100B/F/N/H/S/L-MA	25	LC1-D18	LRD-33 21	12/18
				9	17	9	16.9	10	15			NSX100B/F/N/H/S/L-MA	25	LC1-D18	LRD-33 21	12/18
										10	11.5	NSX100B/F/N/H/S/L-MA	25	LC1-D18	LRD-33 16	9/13
5.5	20	11	22	11	21	11	20.1	11	18.4			NSX100B/F/N/H/S/L-MA	25	LC1-D25	LRD-33 22	16/24
										15	17	NSX100B/F/N/H/S/L-MA	25	LC1-D25	LRD-33 21	12/18
										18.5	21.3	NSX100B/F/N/H/S/L-MA	50	LC1-D32	LRD-33 22	16/24
7.5	28	15	30	15	28	15	26.5	18.5	28.5			NSX100B/F/N/H/S/L-MA	50	LC1-D32	LRD-33 32	23/32
								22	33	30	34.6	NSX100B/F/N/H/S/L-MA	50	LC1-D40	LRD-33 55	30/40
11	39	18.5	37	22	40	22	39					NSX100B/F/N/H/S/L-MA	50	LC1-D40	LRD-33 57	37/50
		22	44	25	47			30	45	33	39	NSX100B/F/N/H/S/L-MA	50	LC1-D50	LRD-33 57	37/50
										37	42	NSX100B/F/N/H/S/L-MA	50	LC1-D65	LRD-33 57	37/50
15	52	30	59	30	55	30	51.5					NSX100B/F/N/H/S/L-MA	100	LC1-D65	LRD-33 59	48/65
18.5	64					37	64	37	55			NSX100B/F/N/H/S/L-MA				
										45	49	NSX100B/F/N/H/S/L-MA	100	LC1-D80	LRD-33 57	37/50
22	75	37	72	37	72	45	76	55	80			NSX100B/F/N/H/S/L-MA	100	LC1-D80	LRD-33 63	63/80
		45	80									NSX100B/F/N/H/S/L-MA				
25	85	45	85									NSX100B/F/N/H/S/L-MA	100	LC1-D95	LRD-33 65	80/104
										55	60	NSX100B/F/N/H/S/L-MA	100	LC1-D115	LR9-D53 63	48/80
30	100			55	100	55	96			75	80	NSX100B/F/N/H/S/L-MA	100	LC1-D115	LR9-D53 67	60/100

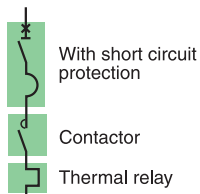
(1) For installation with a class 30 relay, a derating of 20 % must be apply on circuit breakers.

(2) Valid for 480 V NEMA.

(3) Reversers: replace LC1 by LC2.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

DB116520



NSX160 to NS1250 circuit breakers, contactors and thermal relays

Direct-on-line starting

Reverser

"I_q" breaking performance: equal to the breaking capacity of the circuit breaker alone.

Starting⁽¹⁾: normal class 10.

Motors												Circuit breaker		Contactors ⁽²⁾	Thermal relays ⁽¹⁾	
220/230 V		380 V		415 V		440 V ⁽²⁾		500/525 V		660/690 V		Type	Rating (A)	Type	Type	I _{rt} h (A)
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)					
37	125	55	105	75	135	75	124	75	110	90	100	NSX160B/F/N/H/S/L MA	150	LC1-D150	LR9-D53 69	90/150
45	150	75	140					90	130	110	120			LC1-F150	LR9-F53 69	100/160
55	180	90	170	90	160	90	156	110	156			NSX250B/F/N/H/S/L MA	220	LC1-F185	LR9-F53 71	132/220
		110	210	110	200	132	215					NSX250B/F/N/H/S/L MA	220	LC1-F225	LR9-F53 71	132/220
								132	190	132	140	NSX250B/F/N/H/S/L MA	220	LC1-F265	LR9-F53 71	132/220
										160	175					
75	250	132	250	132	230	160	256	160	228			NSX400F/N/H/S/L Micrologic 1.3M	320	LC1-F265	LR9-F73 75	200/330
90	312	160	300	160	270			200	281	200	220	NSX400F/N/H/S/L Micrologic 1.3M	320	LC1-F330	LR9-F73 75	200/330
110	360	200	380	220	380	220	360	220	310			NSX630F/N/H/S/L Micrologic 1.3M	500	LC1-F400	LR9-F73 79	300/500
										250	270	NSX630F/N/H/S/L Micrologic 1.3M	500	LC1-F400	LR9-F73 75	200/330
		220	420			250	401			335	335	NSX630F/N/H/S/L Micrologic 1.3M	500	LC1-F500	LR9-F73 79	300/500
150	480	250	480	250	430			315	445			NSX630F/N/H/S/L Micrologic 1.3M	500	LC1-F500	LR9-F73 79	300/500
						300	480			375	400	NSX630F/N/H/S/L Micrologic 1.3M	500	LC1-F630	LR9-F73 81	380/630
										450	480					
160	520	300	570	300	510	335	540	355	500			NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-F630	LR9-F73 81	380/630
								375	530							
								400	570							
200	630	335	630	335	580	375	590	450	630			NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-F630	LR9-F73 81	380/630
220	700	375	700	375	650	400	650					NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-F800	LR2-F83 83	500/800
		400	750	400	690	450	720					NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-F800	LR2-F83 83	500/800
										500	530	NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-BL33	LR2-F83 83	500/800
										560	580	NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC1-BL33	LR2-F83 83	500/800
250	800	450	800	450	750			500	700			NS1000N/H Micrologic 5.0 - LR off	1000	LC1-BM33	LR2-F83 83	500/800
		500	900	500	830	500	800	560	760			NS1000N/H Micrologic 5.0 - LR off	1000	LC1-BM33	LR2-F83 85	630/1000
						560	900	600	830			NS1000N/H Micrologic 5.0 - LR off	1000	LC1-BM33	LR2-F83 85	630/1000
300	970	560	1000	560	920	600	960	670	920			NS1250N/H Micrologic 5.0 - LR off	1250	LC1-BP33	LR2-F83 85	630/1000
		600	1100	600	1000	670	1080	750	1020							

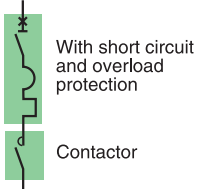
(1) For long starting (class 20), see the correspondence table for thermal relay.

(2) Reversers: replace LC1 by LC2.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 1 coordination (IEC 60947-4-1)

DB11522



NS160 to NS1250 circuit breakers, contactors

Direct-on-line starting

Reverser

"Iq" breaking performance: equal to the breaking capacity of the circuit breaker alone.

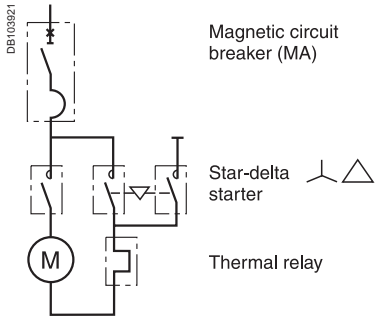
Starting	Norme IEC 60947-4-1		
Micrologic	2.2M/2.3M	6.2M/6.3M	5.0
Normal (class)	5, 10	5, 10	10
Long (class)	20	20, 30	20

Motors										Circuit breakers			Contactors ⁽²⁾		
220/230 V		380 V		415 V		440 V ⁽¹⁾		500/525 V		660/690 V		Type	Trip unit	Irth (A)	Type
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	Type			
7,5	28	15	30	15	28	15	26,5	19	28,5			NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	25/50	LC1-D32
11	39	19	37	22	40	22	39	22	33	30	34,6	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	25/50	LC1-D40
		22	44	25	47			30	45	33	39	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	25/50	LC1-D50
15	52	30	59	30	55	30	51,5			37	42	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	48/80	LC1-D65
19	64					37	64	37	55			NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	50/100	LC1-D65
22	75	37	72	37	72	45	76	55	80	45	49	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	48/80	LC1-D80
25	85	45	85									NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	50/100	LC1-D95
										55	60	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	50/100	LC1-D115 or LC1-F115
30	100			55	100	55	96			75	80	NSX100B/F/N/H/S/L	Micrologic 2.2 or 6.2	50/100	LC1-D115 or LC1-F115
37	125	55	105	75	135	75	124	75	110	90	100	NSX160B/F/N/H/S/L	Micrologic 2.2 or 6.2	70/150	LC1-D150 or LC1-F150
45	150	75	140					90	130	110	120				
55	180	90	170	90	160	90	156	110	156			NSX250B/F/N/H/S/L	Micrologic 2.2 or 6.2	100/220	LC1-F185
		110	210	110	200	132	215					NSX250B/F/N/H/S/L	Micrologic 2.2 or 6.2	100/220	LC1-F225
								132	190	132	140	NSX250B/F/N/H/S/L	Micrologic 2.2 or 6.2	100/220	LC1-F265
										160	175				
75	250	132	250	132	230	160	256	160	228			NSX400F/N/H/S/L	Micrologic 2.3 or 6.3	160/320	LC1-F265
90	312	160	300	160	270			200	281	200	220	NSX400F/N/H/S/L	Micrologic 2.3 or 6.3	160/320	LC1-F330
		220	420					220	240						
110	360	200	380	220	380	220	360	220	310	250	270	NSX630F/N/H/S/L	Micrologic 2.3 or 6.3	250/500	LC1-F400
		220	420			250	401	315	445	335	335	NSX630F/N/H/S/L	Micrologic 2.3 or 6.3	250/500	LC1-F500
150	480	250	480	250	430			335	460			NSX630F/N/H/S/L	Micrologic 2.3 or 6.3	250/500	LC1-F500
						300	480	355	500	375	400	NSX630F/N/H/S/L	Micrologic 2.3 or 6.3	250/500	LC1-F630
								375	530	450	480				
160	520	300	570	300	510	335	540	400	570			NS800N/H	Micrologic 5.0	320/800	LC1-F630
												NS1000L		400/1000	
200	630	335	630	335	580	375	590	450	630			NS800N/H	Micrologic 5.0	320/800	LC1-F630
												NS1000L		400/1000	
220	700	375	700	375	650	400	650					NS800N/H	Micrologic 5.0	320/800	LC1-F800
												NS1000L		400/1000	
		400	750	400	690	450	720					NS800N/H	Micrologic 5.0	320/800	LC1-F800
												NS1000L		400/1000	LC1-BL33
										500	530	NS800N/H	Micrologic 5.0	320/800	LC1-BL33
										560	580	NS1000L		400/1000	
250	800	450	800	450	750			500	700			NS1000N/H	Micrologic 5.0	400/1000	LC1-BM33
								560	760						
		500	900	500	830	500	800	600	830			NS1000N/H	Micrologic 5.0	400/1000	LC1-BM33
						560	900								
300	970	560	1000	560	920	600	960	670	920			NS1250N/H	Micrologic 5.0	630/1250	LC1-BP33
		600	1100	600	1000	670	1080	750	1020			NS1250N/H	Micrologic 5.0	630/1250	LC1-BP33

(1) Valid for 480 V NEMA.

(2) Reversers: replace LC1 by LC2.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.



NS80H-MA and NSX100 circuit breakers, contactors and thermal relays

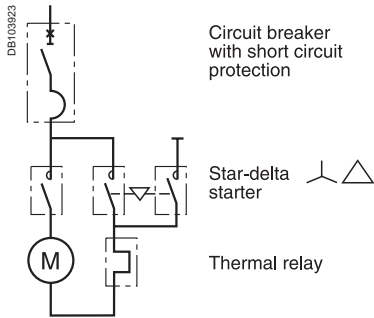
Star-delta starting

"Iq" breaking performance: equal to the breaking capacity of the circuit breaker.
Starting: normal.

Motors								Circuit breakers		Contactors	Thermal relays	
220/230 V		380 V		415 V		440 V ⁽¹⁾		Type	Rating (A)	Type	Type	Irth (A)
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)					
0.55	2.8	1.5	3.7	1.5	3.5	1.5	3.1	NS80H-MA	6.3	LC3-D09	LRD-07	1.6/2.5
1.1	4.4	2.2	5	2.2	4.8	2.2	4.5	NS80H-MA	6.3	LC3-D09	LRD-08	2.5/4
1.5	6.1	3	6.6	3	6.5	3	5.8	NS80H-MA	12.5	LC3-D09	LRD-08	2.5/4
2.2	8.7	4	8.5	4	8.2	4	7.9	NS80H-MA	12.5	LC3-D09	LRD-10	4/6
3	11.5	5.5	11.5	5.5	11	5.5	10.4	NS80H-MA	12.5	LC3-D09	LRD-12	5.5/8
4	14.5	7.5	15.5	7.5	14	7.5	13.7	NS80H-MA	25	LC3-D09	LRD-14	7/10
5.5	20			9	17	9	16.9	NS80H-MA	25	LC3-D12	LRD-16	9/13
		11	22	11	21	11	20.1	NS80H-MA	25	LC3-D12	LRD-16	9/13
7.5	28	15	30	15	28	15	26.5	NS80H-MA	50	LC3-D18	LRD-21	12/18
11	39	18.5	37	22	40	22	39	NS80H-MA	50	LC3-D18	LRD-22	17/25
		22	44	25	47			NS80H-MA	50	LC3-D32	LRD-32	23/32
15	52					30	51.5	NS80H-MA	80	LC3-D32	LRD-32	23/32
				30	55			NS80H-MA	80	LC3-D32	LRD-32	23/32
18.5	64	30	59	37	66	37	64	NS80H-MA	80	LC3-D40	LR2-D33 55	30/40
		37	72					NS80H-MA	80	LC3-D40	LR2-D33 57	37/50
22	75			45	80	45	76	NS80H-MA	80	LC3-D50	LR2-D33 57	37/50
0.55	2.8	1.5	3.7	1.5	3.5	1.5	3.1	NSX100B/F/N/H/S/L-MA	6.3	LC3-D09	LRD-07	1.6/2.5
1.1	4.4	2.2	5	2.2	4.8	2.2	4.5	NSX100B/F/N/H/S/L-MA	6.3	LC3-D09	LRD-08	2.5/4
1.5	6.1	3	6.6	3	6.5	3	5.8	NSX100B/F/N/H/S/L-MA	12.5	LC3-D09	LRD-08	2.5/4
2.2	8.7	4	8.5	4	8.2	4	7.9	NSX100B/F/N/H/S/L-MA	12.5	LC3-D09	LRD-10	4/6
3	11.5	5.5	11.5	5.5	11	5.5	10.4	NSX100B/F/N/H/S/L-MA	12.5	LC3-D09	LRD-12	5.5/8
4	14.5	7.5	15.5	7.5	14	7.5	13.7	NSX100B/F/N/H/S/L-MA	25	LC3-D09	LRD-14	7/10
5.5	20			9	17	9	16.9	NSX100B/F/N/H/S/L-MA	25	LC3-D12	LRD-16	9/13
		11	22	11	21	11	20.1	NSX100B/F/N/H/S/L-MA	25	LC3-D12	LRD-16	9/13
7.5	28	15	30	15	28	15	26.5	NSX100B/F/N/H/S/L-MA	50	LC3-D18	LRD-21	12/18
11	39	18.5	37	22	40	22	39	NSX100B/F/N/H/S/L-MA	50	LC3-D18	LRD-22	17/25
		22	44	25	47			NSX100B/F/N/H/S/L-MA	100	LC3-D32	LRD-32	23/32
15	52					30	51.5	NSX100B/F/N/H/S/L-MA	100	LC3-D32	LRD-32	23/32
				30	55			NSX100B/F/N/H/S/L-MA	100	LC3-D32	LRD-32	23/32
18.5	64	30	59	37	66	37	64	NSX100B/F/N/H/S/L-MA	100	LC3-D40	LR2-D33 55	30/40
		37	72					NSX100B/F/N/H/S/L-MA	100	LC3-D40	LR2-D33 57	37/50
22	75			45	80	45	76	NSX100B/F/N/H/S/L-MA	100	LC3-D50	LR2-D33 57	37/50
25	85	45	85					NSX100B/F/N/H/S/L-MA	100	LC3-D50	LR2-D33 57	37/50
30	100			55	100	55	96	NSX100B/F/N/H/S/L-MA	100	LC3-D50	LR2-D33 59	48/65

(1) Valid for 480 V NEMA.

Type 1 coordination (IEC 60947-4-1)



NSX160 to NS1000 circuit breakers, contactors and thermal relays

Star-delta starting

"Iq" breaking performance: equal to the breaking capacity of the circuit breaker alone.

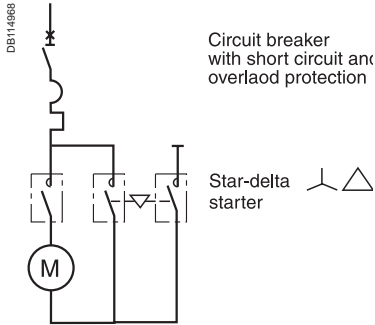
Starting: normal.

Motors								Circuit breakers		Contactors	Thermal relays	
220/230 V		380 V		415 V		440 V ⁽¹⁾		Type	Rating (A)	Type	Type	I _{rt} h (A)
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)					
		55	105					NSX160B/F/N/H/S/L-MA	150	LC3-D80	LR2-D33 59	48/65
37	125	75	140	75	135	75	124	NSX160B/F/N/H/S/L-MA	150	LC3-D80	LR2-D33 63	63/80
45	150	75	140					NSX160B/F/N/H/S/L-MA	150	LC3-D115 LC3-F115	LR9-D53 67 LR9-F53 67	60/100
		90	170	90	160	90	156	NSX250B/F/N/H/S/L-MA	220	LC3-D115 LC3-F115	LR9-D53 67 LR9-F53 67	60/100
55	180					110	180	NSX250B/F/N/H/S/L-MA	220	LC3-D115 LC3-F115	LR9-D53 69 LR9-F53 67	90/150
		110	210	110	200			NSX250B/F/N/H/S/L-MA	220	LC3-D115 LC3-F115	LR9-D53 69 LR9-F53 69	90/150
						132	215	NSX250B/F/N/H/S/L-MA	220	LC3-D150 LC3-F150	LR9-D53 69 LR9-F53 69	90/150
75	250	132	250	132	230			NSX400F/N/H/S/L Micrologic 1.3M	320	LC3-D150 LC3-F150	LR9-D53 69 LR9-F53 69	90/150
90	312	160	300	160	270	160	256	NSX400F/N/H/S/L Micrologic 1.3M	320	LC3-F185	LR9-F53 71	132/220
110	360	200	380	220	380	220	360	NSX630F/N/H/S/L Micrologic 1.3M	500	LC3-F265	LR9-F73 75	200/330
		220	420			250	401	NSX630F/N/H/S/L Micrologic 1.3M	500	LC3-F265	LR9-F73 75	200/330
150	480	250	480	250	430			NSX630F/N/H/S/L Micrologic 1.3M	500	LC3-F330	LR9-F73 75	200/330
						300	480	NSX630F/N/H/S/L Micrologic 1.3M	500	LC3-F330	LR9-F73 75	200/330
160	520	300	570	300	510	335	540	NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC3-F400	LR9-F73 75	200/330
				335	580	375	590	NS800N/H-NS1000L Micrologic 5.0 - LR off	800 1000	LC3-F400	LR9-F73 79	300/500

⁽¹⁾ Valid for 480 V NEMA.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.

Type 1 coordination (IEC 60947-4-1)



NSX100 to NS1000 circuit breakers contactors

Star-delta starting

"Iq" breaking performance: equal to the breaking capacity of the circuit breaker alone.

Starting: normal.

Motors								Circuit breakers			Contactors
220/230 V		380 V		415 V		440 V ⁽¹⁾		Type	Trip unit	I _{rt} h (A)	Type
P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)	P (kW)	I (A)				
7.5	28	15	30	15	28	15	26.5	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	25/50	LC3-D18
11	39	18.5	37	22	40	22	39	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	25/50	LC3-D18
		22	44	25	47			NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	25/50	LC3-D32
15	52					30	51.5	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D32
				30	55			NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D32
18.5	64	30	59	37	66	37	64	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D40
		37	72					NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D40
22	75			45	80	45	76	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D50
25	85	45	85					NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D50
30	100			55	100	55	96	NSX100B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	50/100	LC3-D50
		55	105					NSX160B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	70/150	LC3-D80
37	125	75	140	75	135	75	124	NSX160B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	70/150	LC3-D80
45	150	75	140					NSX160B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	70/150	LC3-D115 or LC3-F115
		90	170	90	160	90	156	NSX250B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	100/220	LC3-D115 or LC3-F115
55	180	110	210	110	200	110	180	NSX250B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	100/220	LC3-D115 or LC3-F115
						132	215	NSX250B/F/N/H/S/L	Micrologic 2.2M or 6.2E-M	100/220	LC3-D150 or LC3-F150
75	250	132	250	132	230			NSX400F/N/H/S/L	Micrologic 2.3M or 6.3E-M	160/320	LC3-D150 or LC3-F150
90	312	160	300	160	270	160	256	NSX400F/N/H/S/L	Micrologic 2.3M or 6.3E-M	160/320	LC3F-185
110	360	200	380	220	380	220	360	NSX630F/N/H/S/L	Micrologic 2.3M or 6.3E-M	250/500	LC3-F265
		220	420			250	401	NSX630F/N/H/S/L	Micrologic 2.3M or 6.3E-M	250/500	LC3-F265
150	480	250	480	250	430			NSX630F/N/H/S/L	Micrologic 2.3M or 6.3E-M	250/500	LC3-F330
						300	480	NSX630F/N/H/S/L	Micrologic 2.3M or 6.3E-M	250/500	LC3-F330
160	520	300	570	300	510	335	540	NS800N/H	Micrologic 5.0	320/800	LC3-F400
				335	580	375	590	NS1000L	Micrologic 5.0	400/1000	LC3-F400
								NS1000L	Micrologic 5.0	400/1000	LC3-F400

(1) Valid for 480 V NEMA.

Note: where more than one association is possible for a rated power, if the motor starting current is high or unknown, the highest association should be applied.