

TeSys motor starters - open version

Star-delta starters with fuse protection (NF C or DIN fuses), contactor and thermal overload relay

1.5 to 315 kW at 400/415 V: type 1 coordination

Maximum operating rate: LC3 K and LC3 F: 12 starts/hour; LC3 D: 30 starts/hour.

Maximum starting time: LC3 K and LC3 D: 30 seconds; LC3 F: 20 seconds.

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3								Fuse carrier (basic block)	aM fuses		Star-delta contactors	Thermal overload relay	
400/415 V				440 V				Reference	Size	Rating	Reference	Reference	Setting range
P	Ie	IrD ⁽¹⁾	Iq	P	Ie	IrD ⁽¹⁾	Iq						
kW	A	A	kA	kW	A	A	kA			A			A
1.5	3.5	2	50	1.5	3.06	2	50	LS1D32	10 x 38	4	LC3K06	LR2K0308	1.8...2.6
2.2	5	3	50	—	—	—	—	LS1D32	10 x 38	6	LC3K06	LR2K0310	2.6...3.7
—	—	—	—	2.2	4.42	3	50	LS1D32	10 x 38	8	LC3K06	LR2K0310	2.6...3.7
—	—	—	—	3	5.77	3	50	LS1D32	10 x 38	8	LC3K06	LR2K0312	3.7...5.5
3	6.5	4	50	—	—	—	—	LS1D32	10 x 38	8	LC3K06	LR2K0312	3.7...5.5
4	8.4	5	50	4	7.9	5	50	LS1D32	10 x 38	12	LC3K06	LR2K0312	3.7...5.5
5.5	11	6	50	5.5	10.4	6	50	LS1D32	10 x 38	16	LC3K06	LR2K0314	5.5...8
7.5	14.8	9	50	7.5	13.7	8	50	LS1D32	10 x 38	16	LC3K09	LR2K0316	8...11.5
9	18.1	10	100	9	16.9	10	50	LS1D32	10 x 38	20	LC3D12A	LRD16	9...13
11	21	12	100	11	20.1	12	100	GK1EK	14 x 51	25	LC3D12A	LRD16	9...13
15	28.5	16	100	15	26.5	15	100	GK1EK	14 x 51	32	LC3D18A	LRD21	12...18
18.5	35	20	100	18.5	32.8	19	100	GK1EK	14 x 51	40	LC3D18A	LRD22	16...24
—	—	—	—	22	39	23	100	GS●J	22 x 58	50	LC3D18A	LRD22	16...24
22	42	24	100	—	—	—	—	GS●J	22 x 58	50	LC3D32A	LRD32	23...32
—	—	—	—	30	51.5	30	100	GS●J	22 x 58	63	LC3D32A	LRD32	23...32
30	57	33	100	37	64	37	100	GS●J	22 x 58	80	3 x LC1D40A	LRD340	30...40
37	69	40	100	—	—	—	—	GS●J	22 x 58	80	3 x LC1D40A	LRD350	37...50
—	—	—	—	45	76	44	100	GS●J	22 x 58	80	3 x LC1D50A	LRD350	37...50
45	81	47	100	—	—	—	—	GS●J	22 x 58	100	3 x LC1D50A	LRD350	37...50
—	—	—	—	55	90	52	100	GS●K	22 x 58	100	3 x LC1D50A	LRD365	48...65
55	100	58	100	—	—	—	—	GS●K	22 x 58	125	3 x LC1D65A	LRD365	48...65
75	135	78	100	75	125	72	100	GS●L	T0	160	LC3D80	LRD3363	63...80
—	—	—	—	90	146	84	100	GS●L	T0	160	LC3D115	LRD4365	80...104
90	165	95	100	—	—	—	—	GS●N	T1	200	LC3D115	LRD4367	95...120
110	200	115	100	110	178	103	100	GS●N	T1	200	LC3D115	LRD4367	95...120
132	240	139	100	132	215	124	100	GS●QQ	T2	250	LC3D150	LRD4369	110...140
160	285	165	100	160	256	148	100	GS●QQ	T2	315	LC3F185	LR9F5371	132...220
—	—	—	—	200	321	185	100	GS●QQ	T2	400	LC3F225	LR9F5369	132...220
220	388	225	100	—	—	—	—	GS●QQ	T2	400	LC3F265	LR9F7375	200...330
—	—	—	—	250	401	233	100	GS2S	T3	500	LC3F265	LR9F7375	200...330
280	480	278	100	—	—	—	—	GS2S	T3	500	LC3F330	LR9F7375	200...330
—	—	—	—	315	505	293	100	GS2S	T3	630	LC3F330	LR9F7375	200...330
315	555	322	100	355	518	300	100	GS2S	T3	630	LC3F330	LR9F7375	200...330
—	—	—	—	375	575	334	100	GS2S	T3	630	LC3F400	LR9F7379	300...500

(1) IrD: current in the motor windings in delta connection.

TeSys motor starters - open version

Star-delta starters with fuse protection (NF C or DIN fuses), contactors and thermal overload relay

1.5 to 355 kW at 400/415 V: type 2 coordination

Maximum operating rate: LC1 D: 30 starts/hour; LC1 F: 12 starts/hour.

Maximum starting time: LC1 D: 30 seconds; LC1 F: 20 seconds.

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3						Switch- disconnecter-fuse	aM fuses		Star-delta contactors	Thermal overload relay	
400/415 V			440 V				Reference	Size		Rating	Reference
P	I _e	I _q	P	I _e	I _q			A			A
kW	A	kA	kW	A	kA						
1.5	3.5	50	1.5	3.06	50	GS1DD	10 x 38	4	3 x LC1D09	LRD08	2.5...4
2.2	5	50	2.2	4.42	50	GS1DD	10 x 38	6	3 x LC1D09	LRD10	4...6
3	6.5	50	3	5.77	50	GS1DD	10 x 38	8	3 x LC1D09	LRD12	5.5...8
4	8.4	50	4	7.9	50	GS1DD	10 x 38	10	3 x LC1D09	LRD14	7...10
5.5	11	50	5.5	10.4	50	GS1DD	10 x 38	16	3 x LC1D12	LRD16	9...13
7.5	14.8	50	7.5	13.7	50	GS1DD	10 x 38	16	3 x LC1D18	LRD21	12...18
9	18.1	100	9	16.9	100	GS●F	14 x 51	25	3 x LC1D25	LRD22	16...24
11	21	100	11	20.1	100						
15	28.5	100	15	26.5	100						
18.5	35	100	18.5	32.8	100	GS●F	14 x 51	40	3 x LC1D40A	LRD340	30...40
22	42	100	22	39	100	GS●J	22 x 58	50	3 x LC1D50A	LRD350	37...50
30	57	100	30	51.5	100	GS●J	22 x 58	80	3 x LC1D65A	LRD365	48...65
37	69	100	37	64	100	GS●J	22 x 58	80	3 x LC1D80	LRD3363	63...80
–	–	–	45	76	100	GS●J	22 x 58	80	3 x LC1D80	LRD3365	80...93
45	81	100	–	–	–	GS●J	22 x 58	100	3 x LC1D115	LR9D5367	60...100
–	–	–	55	90	100	GS●L	T0	125	3 x LC1D115	LR9D5369	90...150
55	100	100	–	–	–	GS●L	T0	125	3 x LC1D150	LR9D5369	90...150
–	–	–	75	125	100	GS●L	T0	160	3 x LC1D150	LR9D5369	90...150
75	135	100	–	–	–	GS●L	T0	160	3 x LC1F185	LR9D5369	90...150
90	165	100	90	146	100	GS●N	T1	200	3 x LC1F185	LR9F5371	132...220
110	200	100	110	178	100	GS●N	T1	250	3 x LC1F225	LR9F5371	132...220
132	240	100	132	215	100	GS●QQ	T2	315	3 x LC1F265	LR9F7375	200...330
160	285	100	160	256	100	GS●QQ	T2	400	3 x LC1F330	LR9F7375	200...330
–	–	–	200	321	100	GS●QQ	T2	400	3 x LC1F330	LR9F7379	300...500
200	352	100	220	353	100	GS2S	T3	500	3 x LC1F400	LR9F7379	300...500
220	388	100	250	401	100						
250	437	100	–	–	–	GS2S	T3	500	3 x LC1F500	LR9F7379	300...500
315	555	100	315	505	100	GS2S	T3	630	3 x LC1F630	LR9F7381	380...630
–	–	–	355	549	100	GS2V	T4	800	3 x LC1F630	LR9F7381	380...630
–	–	–	400	611	100						
355	605	100	–	–	–	GS2V	T4	800	3 x LC1F780	LR9F7381	380...630

Combination starters for customer assembly - Coordination and standards

TeSys motor starters - open version

Star-delta starters with fuse protection (BS fuses), contactors and thermal overload relay

1.5 to 375 kW at 415 V: type 2 coordination

Maximum operating rate: LC1 D: 30 starts/hour; LC1 F: 12 starts/hour.

Maximum starting time: LC1 D: 30 seconds; LC1 F: 20 seconds.

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3						Switch-disconnector-fuse Reference	BS fuses		Star-delta contactors Reference	Thermal overload relay		
415 V			440 V				Size	Rating		Reference	Reference	Setting range
P	I _e	I _q	P	I _e	I _q							
kW	A	kA	kW	A	kA			A			A	
1.5	3.5	50	1.5	3.06	50	GS1DDB	A1	NIT 16	3 x LC1D09	LRD08	2.5...4	
2.2	5	50	2.2	4.42	50	GS1DDB	A1	NIT 16	3 x LC1D09	LRD10	4...6	
3	6.5	50	3	5.77	50	GS1DDB	A1	NIT 20	3 x LC1D09	LRD12	5.5...8	
4	8.4	50	4	7.9	50	GS1DDB	A1	NIT 20	3 x LC1D09	LRD14	7...10	
5.5	11	50	5.5	10.4	50	GS1DDB	A1	NIT 20M25	3 x LC1D12	LRD16	9...13	
7.5	14.8	50	7.5	13.7	50	GS1DDB	A1	NIT 20M32	3 x LC1D18	LRD21	12...18	
9	18.1	50	9	16.9	50	GS2GB	A2	TIA 32M35	3 x LC1D18	LRD21	12...18	
11	21	50	11	20.1	50	GS2GB	A2	TIA 32M50	3 x LC1D25	LRD22	16...24	
15	28.5	50	15	26.5	50	GS2GB	A2	TIA 32M63	3 x LC1D32	LRD32	23...32	
22	42	50	22	39	50	GS2GB	A3	TIS 63M80	3 x LC1D50A	LRD350	37...50	
–	–	–	30	51.5	50	GS2GB	A3	TIS 63M100	3 x LC1D65A	LRD365	48...65	
30	57	50	–	–	–	GS2GB	A3	TIS 63M100	3 x LC1D65A	LRD365	48...65	
45	81	50	45	76	50	GS2LLB	A4	TCP 100M125	3 x LC1D80	LRD3363	63...80	
55	100	80	55	90	80	GS2LLB	A4	TCP 100M160	3 x LC1D115	LR9D5369	90...150	
80	138	80	80	132	80	GS2LB	B2	TF 200M250	3 x LC1D150	LR9D5369	90...150	
100	182	80	100	162	80	GS2MMB	B2	TF 200M250	3 x LC1F185	LR9F5371	132...220	
110	196	80	110	178	80	GS2MMB	B2	TF 200M315	3 x LC1F225	LR9F5371	132...220	
140	250	80	140	226	80	GS2NB	B3	TFK 315M355	3 x LC1F265	LR9F7375	200...330	
160	285	80	160	256	80	GS2QQB	B3	TFK 315M355	3 x LC1F330	LR9F7375	200...330	
220	388	80	220	353	80	GS2QQB	B4	TMF 400M450	3 x LC1F400	LR9F7379	300...500	
257 270	450 460	80 80	257 270	412 433	80 80	GS2SB	C2	TTM 500	3 x LC1F500	LR9F7379	300...500	
375	610	80	375	577	80	GS2SB	C2	TTM 630	3 x LC1F630	LR9F7381	380...630	

Coordination and standards

TeSys motor starters - open version

Star-delta starters with circuit breaker and overload protection built into the circuit breaker

1.5 to 110 kW at 400/415 V: type 1 coordination

Maximum operating rate: LC3 K: 12 starts/hour; LC3 D: 30 starts/hour.

Maximum starting time: 30 seconds.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3								Circuit breaker		Star-delta contactors
400/415 V				440 V				Reference	Setting range of thermal trips	Reference
P	I _e	I _{rD} ⁽¹⁾	I _q ⁽²⁾	P	I _e	I _{rD} ⁽¹⁾	I _q ⁽²⁾	References in italics are available in CEE zone only	A	
kW	A	A	kA	kW	A	A	kA			
1.5	3.6	2	50	1.5	3.06	1.8	50	GV2ME08 GV2ME08AP	2.5...4	LC3K06
2.2	4.9	2.9	50	2.2	4.42	2.6	50	GV2ME10 GV2ME10AP	4...6.3	LC3K06
—	—	—	—	3	5.77	3.3	50			
3	6.5	3.8	50	—	—	—	—	GV2ME14 GV2ME14AP	6...10	LC3K06
4	8.5	4.9	50	4	7.9	4.6	15			
5.5	11.5	6.4	15	5.5	10.4	6	8	GV2ME16 GV2ME16AP	9...14	LC3K06
7.5	15.5	8.6	15	7.5	13.7	7.9	8	GV2ME20 GV2ME20AP	13...18	LC3K09
—	—	—	—	9	16.9	9.8	8	GV2ME20 GV2ME20AP	13...18	LC3D12A
9	18.1	10	15	11	20.1	12	6	GV2ME21 GV2ME21AP	17...23	LC3D12A
11	22	12	15	—	—	—	—	GV2ME22 GV2ME22AP	20...25	LC3D12A
15	29	17	10	15	26.5	15	6	GV2ME32 GV2ME32AP	24...32	LC3D18A
18.5	35	20	50	18.5	32.8	19	50	GV3P40	30...40	LC3D18A
—	—	—	—	22	39	23	50	GV3P50	37...50	LC3D32A
22	41	24	50	30	51.5	30	50	GV3P50	37...50	LC3D32A
30	55	33	50	30	51.5	30	50	GV3P65	48...65	LC3D32A
37	66	40	50	37	64	37	50	GV3P65	48...65	3 x LC1D40A ⁽³⁾
37	66	40	100	37	64	37	70	GV4P80	40...80	3 x LC1D40A ⁽³⁾
—	—	—	—	45	76	44	70	GV4P80	40...80	2 x LC1D50A +1 x LC1D40A ⁽³⁾
45	80	47	100	—	—	—	—	GV4P115	65...115	2 x LC1D50A +1 x LC1D40A ⁽³⁾
55	97	58	100	55	90	52	70	GV4P115	65...115	2 x LC1D65A +1 x LC1D40A ⁽³⁾
75	132	78	35	75	125	72	35	GV5P150F	70...150	LC3D80
—	—	—	—	90	146	84	35	GV5P150F	0...150	LC3D115
90	160	95	35	110	178	103	35	GV5P220F	100...220	LC3D115
110	195	115	35	—	—	—	—			
—	—	—	—	132	215	124	35	GV5P220F	100...220	LC3D150
132	230	135	36	—	—	—	—	GV6P320F	160...320	LC3D150 or 3 x LC1F150
160	270	158	36	160	256	94	35	GV6P320F	160...320	3 x LC1F185
220	380	220	36	250	401	146	35	GV6P500F	250...500	3 x LC1F265
250	430	250	36	300	480	175	35	GV6P500F	250...500	3 x LC1F330

⁽¹⁾ I_{rD}: current in the motor windings in delta connection.

⁽²⁾ The breaking performance of circuit breakers **GV2 ME** can be increased by adding a current limiter **GV1 L3**, see page B6/23.

⁽³⁾ For mounting 3 contactors **LC1 D●●A**, star-delta starter kit **LAD 9SD3** must be ordered separately, see page B8/30.

TeSys motor starters - open version

Star-delta starters with circuit breaker and overload protection built into the circuit breaker

1.5 to 110 kW at 400/415 V: type 2 coordination

Maximum operating rate: LC1 D: 30 starts/hour; LC1 F: 12 starts/hour.

Maximum starting time: LC1 D: 30 seconds; LC1 F: 20 seconds.

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3								Circuit breaker		Star-delta contactors
400/415 V				440 V				Reference	Setting range of thermal trips	Reference
P	I _e	I _{rD} ⁽⁸⁾	I _q	P	I _e	I _{rD} ⁽⁸⁾	I _q ⁽¹⁾			
kW	A	A	kA	kW	A	A	kA		A	
1.5	3.6	—	130	1.5	3.06	—	130	GV2P08	2.5...4	3 x LC1D09 ⁽²⁾
2.2	4.9	—	130	2.2	4.42	—	130	GV2P10	4...6.3	3 x LC1D18 ⁽³⁾
—	—	—	—	3	5.77	—	130	GV2P10	4...6.3	3 x LC1D18 ⁽³⁾
3	6.5	—	130	—	—	—	—	GV2P14	6...10	3 x LC1D18 ⁽³⁾
4	8.5	—	130	4	7.9	—	130	GV2P14	6...10	3 x LC1D18 ⁽³⁾
5.5	11.5	—	130	5.5	10.4	—	50	GV2P16	9...14	3 x LC1D25 ⁽³⁾
—	—	—	—	7.5	13.7	—	50	GV2P16	9...14	3 x LC1D25 ⁽³⁾
7.5	15.5	—	50	9	16.9	—	20	GV2P20	13...18	3 x LC1D25 ⁽³⁾
9	18.1	—	50	11	20.1	—	20	GV2P21	17...23	3 x LC1D25 ⁽³⁾
11	22	—	50	—	—	—	—	GV2P22	20...25	3 x LC1D25 ⁽³⁾
15	29	—	50	15	26.5	—	50	GV3P32	23...32	3 x LC1D40A ⁽⁴⁾
18.5	35	—	50	—	—	—	—	GV3P40	30...40	2 x LC1D50A + 1 x LC1D40A ⁽³⁾
—	—	—	—	18.5	32.8	—	50	GV3P40	30...40	2 x LC1D65A + 1 x LC1D40A ⁽⁴⁾
22	41	—	50	—	—	—	—	GV3P50	37...50	2 x LC1D50A + 1 x LC1D40A ⁽³⁾
—	—	—	—	22	39	—	50	GV3P50	37...50	2 x LC1D65A + 1 x LC1D40A ⁽⁴⁾
30	55	—	50	30	51.5	—	50	GV3P65	48...65	2 x LC1D65A + 1 x LC1D40A ⁽⁴⁾
37	66	—	100	45	76	—	70	GV4P80	40...80	3 x LC1D80 ⁽⁵⁾
—	—	—	—	37	64	—	70	GV4P80	40...80	3 x LC1D65A ⁽⁴⁾
45	80	—	100	—	—	—	—	GV4P115	65...115	3 x LC1D115 ⁽⁶⁾
55	97	—	100	55	90	—	70	GV4P115	65...115	3 x LC1D115 ⁽⁶⁾
75	132	78	70	75	125	74	65	GV5P150H	70...150	3 x LC1D150 ⁽⁶⁾
—	—	—	—	90	146	86	65	GV5P150H	70...150	3 x LC1D150 ⁽⁶⁾
90	160	95	70	110	178	104	65	GV5P220H	100...220	3 x LC1F185 ⁽⁷⁾
110	195	115	70	132	215	126	65	GV5P220H	100...220	3 x LC1F225 ⁽⁷⁾
132	230	135	70	—	—	—	—	GV6P320H	160...320	LC3D150 or 3 x LC1F150
160	270	156	70	160	256	150	65	GV6P320H	160...320	3 x LC1F185
220	380	220	70	250	401	234	65	GV6P500H	250...500	3 x LC1F265
250	430	250	70	300	480	279	65	GV6P500H	250...500	3 x LC1F330

⁽¹⁾ The breaking performance of circuit breakers **GV2 P** can be increased by adding a current limiter **GV1 L3**, see page B6/54.

⁽²⁾ For mounting 3 contactors **LC1 D09**, star-delta starter kit **LAD 91217** must be ordered separately, see page B8/30.

⁽³⁾ For mounting 3 contactors **LC1 D18** or **LC1 D25**, star-delta starter kit **LAD 93217** must be ordered separately, see page B8/30.

⁽⁴⁾ For mounting 3 contactors **LC1 D●●A**, star-delta starter kit **LAD 9SD3** must be ordered separately, see page B8/30.

⁽⁵⁾ For mounting 3 contactors **LC1 D80**, star-delta starter kit **LA9 D8017** must be ordered separately, see page B8/30.

⁽⁶⁾ For mounting 3 contactors **LC1 D115** or **LC1 D150**, see A2/13.

⁽⁷⁾ For mounting 3 contactors **LC1 F185** or **LC1 F225**, see pages A2/15 and A2/17.

⁽⁸⁾ IrD: current in the motor windings in delta connection.

TeSys motor starters - open version

Star-delta starters with circuit breaker, contactors and thermal overload relay

1.5 to 315 kW at 400/415 V: type 1 coordination

Maximum operating rate: LC3 K and LC3 F: 12 starts/hour; LC3 D: 30 starts/hour.

Maximum starting time: LC3 K and LC3 D: 30 seconds; LC3 F: 20 seconds.

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3								Circuit breaker			Star-delta contactors	Thermal overload relay	
400/415 V				440 V				Reference	Rating	I _{rm} ⁽²⁾	Reference	Reference	Setting range
P	I _e	I _{rD} ⁽¹⁾	I _q	P	I _e	I _{rD} ⁽¹⁾	I _q		A	A			A
kW	A	A	kA	kW	A	A	kA						
—	—	—	—	1.5	3.06	1.8	50	LC3D32A	4	51	LC3K06	LR2K0308	1.8...2.6
1.5	3.6	2	50	2.2	4.42	3	50						
2.2	4.9	3	50	3	5.77	3	50	GV2LE10	6.3	78	LC3K06	LR2K0310	2.6...3.7
3	6.5	4	50	—	—	—	—	GV2LE14	10	138	LC3K06	LR2K0312	3.7...5.5
—	—	—	—	4	7.9	5	50	GV2LE10	6.3	78	LC3K06	LR2K0312	3.7...5.5
4	8.5	5	50	—	—	—	—	GV2LE14	10	138	LC3K06	LR2K0312	3.7...5.5
—	—	—	—	5.5	10.4	6	15	GV2LE14	10	138	LC3K06	LR2K0314	5.5...8
5.5	11.5	6	15	—	—	—	—	GV2LE16	14	170	LC3K06	LR2K0314	5.5...8
—	—	—	—	7.5	13.7	8	8	GV2LE16	14	170	LC3K09	LR2K0316	8...11.5
7.5	15.5	9	15	—	—	—	—	GV2LE20	18	223	LC3K09	LR2K0316	8...11.5
—	—	—	—	9	16.9	1	8	GV2LE16	14	170	LC3D12A	LRD16	9...13
9	18.1	10	15	—	—	—	—	GV2LE22	25	327	LC3K12	LR2K0316	8...11.5
—	—	—	—	11	20.1	12	8	GV2LE20	18	223	LC3K12	LR2K0321	10...14
11	22	12	15	—	—	—	—	GV2LE22	25	327	LC3K12	LR2K0321	10...14
—	—	—	—	15	26.5	15	6	GV2LE22	25	327	LC3D18A	LRD21	12...18
15	29	16	10	—	—	—	—	GV2LE32	32	384	LC3D18A	LRD21	12...18
18.5	35	20	50	18.5	32.8	19	50	GV3L40	40	560	LC3D18A	LRD22	16...24
22	41	24	50	22	39	23	50	GV3L50	50	700	LC3D32A	LRD32	23...32
—	—	—	—	30	51.5	30	50	GV3L65	65	910	LC3D32A	LRD32	23...32
30	55	33	50	—	—	—	—	GV3L65	65	910	LC3D32A	LRD35	30...38
—	—	—	—	37	64	37	50	GV3L65	65	910	3 x LC1D40A ⁽⁴⁾	LRD340	30...40
37	66	40	100	—	—	—	—	GV4L80	80	640	3 x LC1D40A ⁽⁴⁾	LRD350	37...50
—	—	—	—	37	64	37	70	GV4L80	80	640	3 x LC1D40A ⁽⁴⁾	LRD340	30...40
—	—	—	—	45	76	44	70	GV4L80	80	800	2 x LC1D50A + 1 x LC1D40A ⁽⁴⁾	LRD350	30...40
45	80	47	100	—	—	—	—	GV4L115	115	805	2 x LC1D50A + 1 x LC1D40A ⁽⁴⁾	LRD350	30...40
55	97	58	100	55	90	52	70	GV4L115	115	805	2 x LC1D50A + 1 x LC1D40A ⁽⁴⁾	LRD350	30...40
—	—	—	—	75	125	72	—	NSX160●MA ⁽³⁾	150	1200	LC3D80	LRD3363	63...80
75	132	78	—	—	—	—	—	NSX160●MA ⁽³⁾	150	1200	LC3D80	LRD3363	63...80
—	—	—	—	90	146	85	—	NSX160●MA ⁽³⁾	150	1200	LC3D115	LRD4365	80...104
90	160	96	—	110	178	103	—	NSX250●MA ⁽³⁾	220	1760	LC3D115	LRD4365	80...104
—	—	—	—	132	215	125	—	NSX250●MA ⁽³⁾	220	1760	LC3D150	LRD4369	110...140
110	195	116	—	—	—	—	—	NSX250●MA ⁽³⁾	220	1760	LC3D115	LRD4367	95...120
—	—	—	—	160	256	148	—	NSX400● + Micrologic 1.3M ⁽³⁾	320	2240	LC3D150	LR9D5369	90...150
—	—	—	—	200	321	186	—	NSX630● + Micrologic 1.3M ⁽³⁾	500	3150	LC3F225	LR9F5371	132...220
132	230	139	—	—	—	—	—	NSX400● + Micrologic 1.3M ⁽³⁾	320	2240	LC3D150	LRD4369	110...140
160	280	165	—	—	—	—	—	NSX400● + Micrologic 1.3M ⁽³⁾	320	2560	LC3F185	LR9F5371	132...220
200	350	204	—	220	353	204	—	NSX630● + Micrologic 1.3M ⁽³⁾	500	3150	LC3F225	LR9F5371	132...220
220	388	225	—	250	401	233	—	NSX630● + Micrologic 1.3M ⁽³⁾	500	3500	LC3F265	LR9F7375	200...330
280	480	278	—	—	—	—	—	NSX630● + Micrologic 1.3M ⁽³⁾	500	4000	LC3F330	LR9F7375	200...330
—	—	—	—	315	505	295	—	NSX800● + Micrologic 5.0 - LR off	800	4000	LC3F330	LR9F7375	200...330
315	540	322	—	355	518	300	—	NSX800● + Micrologic 5.0 - LR off	800	4500	LC3F330	LR9F7375	200...330
—	—	—	—	375	575	334	—	NSX800● + Micrologic 5.0 - LR off	800	5000	LC3F400	LR9F7379	300...500

(1) I_{rD}: current in the motor windings in delta connection.(2) I_{rm}: setting current of the magnetic trip.

(3) Products marketed under the Merlin Gerin brand. Reference to be completed by replacing the ● with the breaking performance code:

Breaking performance I _q (kA)	NSX100●MA		NSX160●MA, NSX250●MA		NSX400●, NSX630●		NS800●	
400/415 V	36	70	36	70	70	150	70	150
440 V	35	65	35	65	65	130	65	130
Code	F	H	F	H	H	L	H	L

(4) For mounting 3 contactors LC1 D●●A, star-delta starter kit LAD 9SD3 must be ordered separately, see page B8/30.

TeSys motor starters - open version

Star-delta starters with circuit breaker, contactors and thermal overload relay

1.5 to 250 kW at 400/415 V: type 2 coordination

Maximum operating rate: LC3 D: 30 starts/hour; LC3 F: 12 starts/hour.

Maximum starting time: LC3 D: 30 seconds; LC3 F: 20 seconds.

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3						Circuit breaker			Star-delta contactors	Thermal overload relay	
400/415 V			440 V			Reference	Rating	I _{rm} ⁽¹⁾	Reference	Reference	Setting range
P	I _e	I _q	P	I _e	I _q		A	A			A
kW	A	kA	kW	A	kA						
1.5	3.6	130	1.5	3.06	130	GV2L08	4	51	3 x LC1D09	LRD08	2.5...4
2.2	4.9	130	2.2	4.42	130	GV2L10	6.3	78	3 x LC1D09	LRD10	4...6
3	6.5	130	3	5.77	130						
—	—	—	4	7.9	20	GV2L14	10	138	3 x LC1D18	LRD14	7...10
4	8.5	130	—	—	—	GV2L14	10	138	3 x LC1D18	LRD16	9...13
5.5	11.5	50	5.5	10.4	20	GV2L16	14	170	3 x LC1D25	LRD16	9...13
7.5	15.5	50	7.5	13.7	20	GV2L20	18	223	3 x LC1D25	LRD21	12...18
—	—	—	9	16.9	20	GV2L22	25	327	3 x LC1D25	LRD21	12...18
9	18.1	50	—	—	—	GV2L22	25	327	3 x LC1D25	LRD22	16...24
11	22	50	11	20.1	20						
15	29	50	15	26.5	50	GV3L32	32	448	3 x LC1D40A ⁽²⁾	LRD332	23...32
18.5	35	50	—	—	—	GV3L40	40	560	2 x LC1D50A +1 x LC1D40A ⁽²⁾	LRD340	30...40
—	—	—	18.5	32.8	50	GV3L40	40	560	2 x LC1D65A +1 x LC1D40A ⁽²⁾	LRD340	30...40
22	41	50	—	—	—	GV3L50	50	700	2 x LC1D50A +1 x LC1D40A ⁽²⁾	LRD350	37...50
—	—	—	22	39	50	GV3L50	50	700	2 x LC1D65A +1 x LC1D40A ⁽²⁾	LRD350	37...50
30	55	50	30	51.5	50	GV3L65	65	910	2 x LC1D65A +1 x LC1D40A ⁽²⁾	LRD365	48...65
—	—	—	37	64	50	GV3L65	65	910	3 x LC1D80	LRD3359	48...65
37	66	100	—	—	—	GV4L80	80	640	3 x LC1D80	LRD3363	63...80
—	—	—	45	76	70	GV4L80	80	800	3 x LC1D80	LRD3363	63...80
45	80	100	—	—	—	GV4L115	115	805	3 x LC1D115	LR9D5367	60...100
—	—	—	55	90	70	GV4L115	115	920	3 x LC1D115	LR9D5367	60...100
55	97	100	—	—	—	GV4L115	115	920	3 x LC1D115	LR9D5369	90...150
55	97	⁽³⁾	—	—	—	NSX160●MA ⁽³⁾	150	1200	3 x LC1D115	LR9D5369	90...150
—	—	—	75	125	⁽³⁾	NSX160●MA ⁽³⁾	150	1200	3 x LC1D150	LR9D5369	90...150
75	132	⁽³⁾	90	146	⁽³⁾	NSX160●MA ⁽³⁾	150	1200	3 x LC1D150	LR9D5369	90...150
90	160	⁽³⁾	110	178	⁽³⁾	NSX250●MA ⁽³⁾	220	1760	3 x LC1F185	LR9F5371	132...220
110	195	⁽³⁾	—	—	—	NSX250●MA ⁽³⁾	220	1760	3 x LC1F225	LR9F5371	132...220
—	—	—	132	215	⁽³⁾	NSX250●MA ⁽³⁾	220	1760	3 x LC1F225	LR9F7375	200...330
132	230	⁽³⁾	160	256	⁽³⁾	NSX400● + Micrologic 1.3M ⁽³⁾	320	2240	3 x LC1F265	LR9F7375	200...330
160	280	⁽³⁾	—	—	—	NSX400● + Micrologic 1.3M ⁽³⁾	320	2560	3 x LC1F330	LR9F7375	200...330
—	—	—	200	321	⁽³⁾	NSX400● + Micrologic 1.3M ⁽³⁾	320	2880	3 x LC1F330	LR9F7379	300...500
200	350	⁽³⁾	220	353	⁽³⁾	NSX630● + Micrologic 1.3M ⁽³⁾	500	3150	3 x LC1F400	LR9F7379	300...500
220	388	⁽³⁾	250	401	⁽³⁾	NSX630● + Micrologic 1.3M ⁽³⁾	500	3500	3 x LC1F400	LR9F7379	300...500
250	430	⁽³⁾	—	—	—	NSX630● + Micrologic 1.3M ⁽³⁾	500	4000	3 x LC1F500	LR9F7379	300...500

⁽¹⁾ I_{rm}: setting current of the magnetic trip.

⁽²⁾ For mounting 3 contactors LC1D●●A, star-delta starter kit LAD 9SD3 must be ordered separately, see page B8/30.

⁽³⁾ Products marketed under the Merlin Gerin brand. Reference to be completed by replacing the ● with the breaking performance code:

Breaking performance I _q (kA)	NSX100●MA		NSX160●MA, NSX250●MA		NSX400●, NSX630●	
400/415 V	36	70	36	70	70	150
440 V	35	65	35	65	65	130
Code	F	H	F	H	H	L