TeSys motor starters - open version

D.O.L. starters with circuit-breaker and overload protection by separate thermal overload relay

0.06 to 250 kW at 400/415 V: type 1 coordination

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Circuit-breaker			Contactor	Thermal overload relay	
400/415 V			440 V			500 V			Reference	Rating	Irm *(1)*	Reference *(2)*	Reference	Setting range
P	Ie	Iq	P	Ie	Iq	P	Ie	Iq						
kW	A	kA	kW	A	kA	kW	A	kA		A	A			A
0.06	0.22	50	**0.06**	0.19	50	–	–	–	**GV2 LE03**	0.4	5	**LC1 K06**	**LR2 K0302**	0.16…0.23
–	–	–	**0.09**	0.28	50	–	–	–	**GV2 LE03**	0.4	5	**LC1 K06**	**LR2 K0303**	0.23…0.36
0.09	0.36	50	**0.12**	0.37	50	–	–	–	**GV2 LE03**	0.4	5	**LC1 K06**	**LR2 K0304**	0.36…0.54
0.12	0.42	50				–	–	–	**GV2 LE04**	0.63	8	**LC1 K06**	**LR2 K0304**	0.36…0.54
0.18	0.6	50	**0.18**	0.55	50	–	–	–	**GV2 LE04**	0.63	8	**LC1 K06**	**LR2 K0305**	0.54…0.8
–	–	–	**0.25**	0.76	50	–	–	–	**GV2 LE05**	1	13	**LC1 K06**	**LR2 K0305**	0.54…0.8
0.25	0.88	50	–	–	–	–	–	–						
0.37	1	50	**0.37**	1	50	**0.37**	1	50	**GV2 LE05**	1	13	**LC1 K06**	**LR2 K0306**	0.8…1.2
0.55	1.5	50	**0.55**	1.36	50	**0.55**	1.21	50						
–	–	–	–	–	–	**0.75**	1.5	50	**GV2 LE06**	1.6	22.5	**LC1 K06**	**LR2 K0307**	1.2…1.8
–	–	–	**0.75**	1.68	50	–	–	–	**GV2 LE07**	2.5	33.5	**LC1 K06**	**LR2 K0307**	1.2…1.8
0.75	2	50	–	–	–	–	–	–						
1.1	2.5	50	**1.1**	2.37	50	**1.1**	2	50	**GV2 LE07**	2.5	33.5	**LC1 K06**	**LR2 K0308**	1.8…2.6
1.5	3.5	50	**1.5**	3.06	50	**1.5**	2.6	50	**GV2 LE08**	4	51	**LC1 K06**	**LR2 K0310**	2.6…3.7
–	–	–	–	–	–	**2.2**	3.8	50	**GV2 LE08**	4	51	**LC1 K06**	**LR2 K0312**	3.7…5.5
2.2	5	50	**2.2**	4.4	50	**3**	5	50	**GV2 LE10**	6.3	78	**LC1 K06**	**LR2 K0312**	3.7…5.5
–	–	–	**3**	5.77	50	–	–	–	**GV2 LE10**	6.3	78	**LC1 K06**	**LR2 K0314**	5.5…8
–	–	–	**4**	7.9	15	–	–	–	**GV2 LE14**	10	138	**LC1 K09**	**LR2 K0314**	5.5…8
3	6.5	50	–	–	–	**4**	6.5	10	**GV2 LE14**	10	138	**LC1 K09**	**LR2 K0314**	5.5…8
4	8.4	50	–	–	–	–	–	–	**GV2 LE14**	10	138	**LC1 K09**	**LR2 K0316**	8…11.5
5.5	11	15	**5.5**	10.4	8	**7.5**	12	6	**GV2 LE16**	14	170	**LC1 K12**	**LR2 K0321**	10…14
–	–	–	**7.5**	13.7	8	**9**	13.9	6	**GV2 LE16**	14	170	**LC1 D18**	**LRD 21**	12…18
7.5	14.8	15	**9**	16.9	8	–	–	–	**GV2 LE20**	18	223	**LC1 D18**	**LRD 21**	12…18
9	18.1	15	–	–	–	**11**	18.4	4	**GV2 LE22**	25	327	**LC1 D25**	**LRD 22**	16…24
11	21	15	**11**	20.1	6	**15**	23	4	**GV2 LE22**	25	327	**LC1 D25**	**LRD 22**	16…24
15	28.5	10	**15**	26.5	6	**18.5**	26.5	4	**GV2 LE32**	32	416	**LC1 D32**	**LRD 32**	23…32
18.5	35	50	**18.5**	32.5	50	–	–	–	**GV3 L40**	40	560	**LC1 D38**	**LRD 35**	30…40
–	–	–	–	–	–	**22**	33	50	**GV3 L40**	40	560	**LC1 D40**	**LRD 3355**	30…40
–	–	–	**22**	39	50	–	–	–	**GV3 L50**	50	700	**LC1 D40**	**LRD 3357**	37…50

(1) Irm: setting current of the magnetic trip.
(2) For reversing operation, replace the prefix LC1 with LC2.

TeSys motor starters - open version

D.O.L. starters with circuit-breaker and overload protection by separate thermal overload relay

0.06 to 250 kW at 400/415 V: type 1 coordination (continued)

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Circuit-breaker			Contactor	Thermal overload relay	
400/415 V			440 V			500 V			Reference	Rating	Irm *(1)*	Reference *(2)*	Reference	Setting range
P	Ie	Iq	P	Ie	Iq	P	Ie	Iq						
kW	A	kA	kW	A	kA	kW	A	kA		A	A			A
22	42	50	–	–	–	**30**	40	50	**GV3 L50**	50	700	**LC1 D50**	**LRD 3357**	37…50
30	57	50	**30**	51,5	50	–	–	–	**GV3 L65**	65	910	**LC1 D65**	**LRD 3359**	48…65
–	–	–	**37**	64	65	**37**	55	50	**GV3 L65**	65	910	**LC1 D65**	**LRD 3359**	48…65
–	–	–	–	–	–	**45**	65	50	**GV3 L65**	65	910	**LC1 D80**	**LRD 3361**	48…65
37	69	70	**45**	76	65	**55**	80	25	**NS80HMA**	80	1040	**LC1 D80**	**LRD 3363**	63…80
45	81	*(3)*	–	–	–	–	–	–	**NS100●MA** *(3)*	100	1300	**LC1 D95**	**LRD 3365**	80…104
–	–	–	–	–	–	**50**	90	*(3)*	**NS100●MA** *(3)*	100	1200	**LC1 D115**	**LRD 4365**	80…104
–	–	–	–	–	–	**75**	105	*(3)*	**NS160●MA** *(3)*	150	1500	**LC1 D115**	**LRD 4367**	95…120
55	100	*(3)*	–	–	–	**–**	–	–	**NS160●MA** *(3)*	150	1350	**LC1 D115**	**LRD 4367**	95…120
75	135	*(3)*	**75**	125	*(3)*	**90**	129	*(3)*	**NS160●MA** *(3)*	150	1800	**LC1 D150**	**LRD 4369**	110…140
–	–	–	**90**	146	*(3)*	–	–	–	**NS160●MA** *(3)*	150	1950	**LC1 F185**	**LR9 F5371**	132…220
90	165	*(3)*	–	–	–	**110**	156	*(3)*	**NS250●MA** *(3)*	220	2200	**LC1 F185**	**LR9 F5371**	132…220
110	200	*(3)*	–	–	–	–	–	–	**NS250●MA** *(3)*	220	2640	**LC1 F225**	**LR9 F5371**	132…220
–	–	–	**110**	178	*(3)*	–	–	–	**NS250●MA** *(3)*	220	2420	**LC1 F225**	**LR9 F5371**	132…220
–	–	–	–	–	–	**132**	187	*(3)*	**NS250●MA** *(3)*	220	2640	**LC1 F265**	**LR9 F5371**	132…220
–	–	–	**132**	215	*(3)*	–	–	–	**NS250●MA** *(3)*	220	2860	**LC1 F265**	**LR9 F5371**	132…220
132	240	*(3)*	–	–	–	–	–	–	**NS400●MA** *(3)*	320	3200	**LC1 F265**	**LR9 F7375**	200…330
–	–	–	–	–	–	**160**	220	*(3)*	**NS400●MA** *(3)*	320	2860	**LC1 F265**	**LR9 F7375**	200…330
–	–	–	**160**	256	*(3)*	–	–	–	**NS400●MA** *(3)*	320	3520	**LC1 F330**	**LR9 F7375**	200…330
160	285	*(3)*	**200**	321	*(3)*	–	–	–	**NS400●MA** *(3)*	320	4160	**LC1 F330**	**LR9 F7375**	200…330
–	–	–	–	–	–	**200**	281	*(3)*	**NS400●MA** *(3)*	320	3840	**LC1 F330**	**LR9 F7375**	200…330
–	–	–	–	–	–	**220**	310	*(3)*	**NS400●MA** *(3)*	320	4160	**LC1 F400**	**LR9 F7379**	300…500
200	352	*(3)*	**220**	353	*(3)*	–	–	–	**NS630●MA** *(3)*	500	5000	**LC1 F400**	**LR9 F7379**	300…500
–	–	–	**250**	401	*(3)*	–	–	–	**NS630●MA** *(3)*	500	5550	**LC1 F400**	**LR9 F7379**	300…500
–	–	–	–	–	–	**250**	360	*(3)*	**NS630●MA** *(3)*	500	5000	**LC1 F400**	**LR9 F7379**	300…500
220	388	*(3)*	–	–	–	–	–	–	**NS630●MA** *(3)*	500	5500	**LC1 F400**	**LR9 F7379**	300…500
250	437	*(3)*	**280**	470	*(3)*	**315**	445	*(3)*	**NS630●MA** *(3)*	500	6000	**LC1 F500**	**LR9 F7379**	300…500
–	–	–	–	–	–	**355**	500	*(3)*	**NS630●MA** *(3)*	500	6500	**LC1 F500**	**LR9 F7381**	380…630

(1) Irm: setting current of the magnetic trip.
(2) For reversing operation, replace the prefix LC1 with LC2.
(3) Products marketed under the Merlin Gerin brand. Reference to be completed by replacing the ● with the breaking performance code:

Breaking performance Iq (kA)	NS100●MA		NS160●MA and NS250●MA		NS400●MA and NS630●MA	
400/415 V	25	70	36	70	70	130
440 V	25	65	35	65	65	130
500 V	18	50	30	50	50	70
660/690 V	8	10	8	10	20	35
Code	**N**	**H**	**N**	**H**	**H**	**L**

TeSys motor starters - open version

D.O.L. starters with circuit-breaker and overload protection by separate thermal overload relay

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

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Circuit-breaker			Contactor	Thermal overload relay	
400/415 V			440 V			500 V			Reference	Rating	Irm *(1)*	Reference *(2)*	Reference	Setting range
P	Ie	Iq	P	Ie	Iq	P	Ie	Iq						
kW	A	kA	kW	A	kA	kW	A	kA		A	A			A
0.06	0.22	130	**0.06**	0.19	130	–	–	–	**GV2 L03** or **LE03**	0.4	5	**LC1 D09**	**LRD 02**	0.16…0.25
0.09	0.36	130	**0.09**	0.28	130	–	–	–						
–	–	–	**0.12**	0.37	130	–	–	–	**GV2 L03** or **LE03**	0.4	5	**LC1 D09**	**LRD 03**	0.25…0.40
0.12	0.42	130	–	–	–	–	–	–						
0.18	0.6	130	**0.18**	0.55	130	–	–	–	**GV2 L04** or **LE04**	0.63	8	**LC1 D09**	**LRD 04**	0.4…0.63
0.25	0.88	130	**0.25**	0.76	130	–	–	–						
0.37	0.98	130	**0.37**	0.99	130	–	–	–	**GV2 L05** or **LE05**	1	13	**LC1 D09**	**LRD 05**	0.63…1
–	–	–	–	–	–	**0.37**	1	130	**GV2 L05** or **LE05**	1	13	**LC1 D09**	**LRD 06**	1…1.7
0.55	1.6	130	–	–	–	**0.55**	1.21	130						
–	–	–	**0.55**	1.36	130	**0.75**	1.5	130	**GV2 L06** or **LE06**	1.6	22.5	**LC1 D09**	**LRD 06**	1…1.7
0.75	2	130	**0.75**	1.68	130	**1.1**	2	130	**GV2 L07** or **LE07**	2.5	33.5	**LC1 D09**	**LRD 07**	1.6…2.5
1.1	2.5	130	**1.1**	2.37	130	**1.5**	2.6	130						
1.5	3.5	130	–	–	–	**2.2**	3.8	130	**GV2 L08** or **LE08**	4	51	**LC1 D09**	**LRD 08**	2.5…4
–	–	–	**1.5**	3.06	130	–	–	–	**GV2 L08** or **LE08**	4	51	**LC1 D09**	**LRD 10**	4…6
2.2	5	130	–	–	–	–	–	–						
–	–	–	–	–	–	**3**	5	13	**GV2 L10** or **LE10**	6.3	78	**LC1 D09**	**LRD 10**	4…6
–	–	–	**2.2**	4.42	50	–	–	–						
–	–	–	**3**	5.77	50	**3**	5	50	**GV2 LE10**	6.3	78	**LC1 D09**	**LRD 10**	4…6
–	–	–	**2.2**	4.42	130	–	–	–						
–	–	–	**3**	5.77	130	**3**	5	130	**GV2 L10**	6.3	78	**LC1 D09**	**LRD 10**	4…6
3	6.5	130	–	–	–	–	–	–	**GV2 L14** or **LE14**	10	10	**LC1 D09**	**LRD 12**	5.5…8
–	–	–	–	–	–	**4**	6.5	10	**GV2 LE14**	10	138	**LC1 D12**	**LRD 12**	5.5…8
–	–	–	–	–	–	**4**	6.5	50	**GV2 L14**	10	138	**LC1 D12**	**LRD 12**	5.5…8
4	8.4	130	–	–	–	–	–	–	**GV2 L14** or **LE14**	10	138	**LC1 D09**	**LRD 14**	7…10
–	–	–	**4**	7.9	15	–	–	–	**GV2 LE14**	10	138	**LC1 D09**	**LRD 14**	7…10
–	–	–	**4**	7.9	130	–	–	–	**GV2 L14**	10	138	**LC1 D09**	**LRD 14**	7…10
–	–	–	–	–	–	**5.5**	9	10	**GV2 LE14**	10	138	**LC1 D09**	**LRD 14**	7…10
–	–	–	–	–	–	**5.5**	9	50	**GV2 L14**	10	138	**LC1 D09**	**LRD 14**	7…10
5.5	11	130	**5.5**	10.4	50	**7.5**	12	42	**GV2 L16**	14	170	**LC1 D25**	**LRD 16**	9…13
–	–	–	**7.5**	13.7	50	–	–	–	**GV2 L16**	14	170	**LC1 D25**	**LRD 21**	12…18
7.5	14.8	50	**9**	16.9	20	**9**	13.9	42	**GV2 L20**	18	223	**LC1 D25**	**LRD 21**	12…18
9	18.1	50	–	–	–	–	–	–						
11	21	50	**11**	20.1	20	–	–	–	**GV2 L22**	25	327	**LC1 D25**	**LRD 22**	16…24
–	–	–	–	–	–	**11**	18.4	10						
–	–	–	–	–	–	**15**	23	10	**GV2 L22**	25	327	**LC1 D32**	**LRD 22**	16…24
15	28.5	50	**15**	26.5	20	**18.5**	28.5	10	**GV2 L32**	32	416	**LC1 D40**	**LRD 3353**	23…32
–	–	–	–	–	–	**22**	33	50	**GV3 L40**	40	560	**LC1 D40**	**LRD 3353**	30…40

(1) Irm: setting current of the magnetic trip.
(2) For reversing operation, replace the prefix LC1 with LC2.

TeSys motor starters - open version

D.O.L. starters with circuit-breaker and overload protection by separate thermal overload relay

0.06 to 250 kW at 400/415 V: type 2 coordination (continued)

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Circuit-breaker			Contactor	Thermal overload relay	
400/415 V			440 V			500 V			Reference	Rating	Irm *(1)*	Reference *(2)*	Reference	Setting range
P	Ie	Iq	P	Ie	Iq	P	Ie	Iq						
kW	A	kA	kW	A	kA	kW	A	kA		A	A			A
18.5	35	50	**18.5**	32.5	50	–	–	–	**GV3 L40**	40	560	**LC1 D40**	**LRD 3355**	30…40
22	42	50	**22**	39	50	**30**	45	50	**GV3 L50**	50	700	**LC1 D50**	**LRD 3357**	37…50
–	–	–	**30**	51.5	50	–	–	–						
30	57	50	**37**	64	50	**37**	55	50	**GV3 L65**	65	910	**LC1 D65**	**LRD 3359**	48…65
–	–	–	–	–	–	**45**	65	50	**GV3 L65**	65	910	**LC1 D80**	**LRD 3361**	48…65
37	69	70	**45**	76	65	–	–	–	**NS80HMA**	80	1000	**LC1 D80**	**LRD 3363**	63…80
–	–	–	–	–	–	**55**	80	*(3)*	**NS100●MA** *(3)*	100	1040	**LC1 D80**	**LRD 3363**	63…80
45	81	*(3)*	**55**	90	*(3)*	–	–	–	**NS100●MA** *(3)*	100	1300	**LC1 D115**	**LR9 D5367**	60…100
55	100	*(3)*	–	–	–	–	–	–	**NS160●MA** *(3)*	150	1500	**LC1 D115**	**LR9 D5369**	90…150
–	–	–	–	–	–	**75**	105	*(3)*	**NS160●MA** *(3)*	150	1050	**LC1 D115**	**LR9 D5369**	90…150
75	135	*(3)*	**75**	125	*(3)*	–	–	–	**NS160●MA** *(3)*	150	1950	**LC1 D150**	**LR9 D5369**	90…150
–	–	–	**90**	146	*(3)*	–	–	–	**NS160●MA** *(3)*	150	1950	**LC1 D150**	**LR9 D5369**	90…150
–	–	–	–	–	–	**90**	129	*(3)*	**NS160●MA** *(3)*	150	1200	**LC1 D150**	**LR9 D5369**	90…150
90	165	*(3)*	**110**	178	*(3)*	–	–	–	**NS250●MA** *(3)*	220	2420	**LC1 F185**	**LR9 F5371**	132…220
–	–	–	–	–	–	**110**	156	*(3)*	**NS250●MA** *(3)*	220	1540	**LC1 F185**	**LR9 F5371**	132…220
110	200	*(3)*	–	–	–	–	–	–	**NS250●MA** *(3)*	220	2860	**LC1 F225**	**LR9 F5371**	132…220
–	–	–	**132**	215	*(3)*	**132**	187	*(3)*	**NS250●MA** *(3)*	220	2200	**LC1 F265**	**LR9 F5371**	132…220
132	240	*(3)*	**160**	256	*(3)*	–	–	–	**NS400●MA** *(3)*	320	3520	**LC1 F265**	**LR9 F7375**	200…330
–	–	–	–	–	–	**160**	220	*(3)*	**NS400●MA** *(3)*	320	2200	**LC1 F265**	**LR9 F7375**	200…330
160	285	*(3)*	–	–	–	–	–	–	**NS400●MA** *(3)*	320	4000	**LC1 F330**	**LR9 F7375**	200…330
–	–	–	**200**	321	*(3)*	–	–	–	**NS400●MA** *(3)*	320	4000	**LC1 F330**	**LR9 F7379**	300…500
–	–	–	–	–	–	**200**	281	*(3)*	**NS400●MA** *(3)*	320	3500	**LC1 F400**	**LR9 F7375**	200…330
–	–	–	–	–	–	**220**	310	*(3)*	**NS400●MA** *(3)*	320	3500	**LC1 F400**	**LR9 F7379**	300…500
–	–	–	**220**	353	*(3)*	–	–	–						
200	352	*(3)*	**250**	401	*(3)*	–	–	–	**NS630●MA** *(3)*	500	5500	**LC1 F400**	**LR9 F7379**	300…500
–	–	–	–	–	–	**250**	360	*(3)*						
–	–	–	–	–	–	**315**	445	*(3)*	**NS630●MA** *(3)*	500	4500	**LC1 F500**	**LR9 F7379**	300…500
220	388	*(3)*	–	–	–	–	–	–						
250	437	*(3)*	–	–	–	–	–	–	**NS630●MA** *(3)*	500	6250	**LC1 F500**	**LR9 F7379**	300…500
–	–	–	–	–	–	**355**	500	*(3)*	**NS630●MA** *(3)*	500	5000	**LC1 F630**	**LR9 F7381**	380…630

(1) Irm: setting current of the magnetic trip.
(2) For reversing operation, replace the prefix LC1 with LC2.
(3) Products marketed under the Merlin Gerin brand. Reference to be completed by replacing the ● with the breaking performance code:

Breaking performance Iq (kA)	NS100●MA		NS160●MA and NS250●MA		NS400●MA and NS630●MA	
400/415 V	25	70	36	70	70	130
440 V	25	65	35	65	65	130
500 V	18	50	30	50	50	70
660/690 V	8	10	8	10	20	35
Code	**N**	**H**	**N**	**H**	**H**	**L**