Variable speed drives
Altivar Machine ATV340
Motor starters
Supply voltage 380...415 V

PB108363

GV3L65

+

PB108335

LC1D65A●●

+

ATV340_63441_CPMGU18001

ATV340D22N4S

Applications

Circuit breaker/contactor/drive combinations help to ensure continuity of service in the installation.

The type of circuit breaker/contactor coordination selected can reduce maintenance costs in the event of a short-circuit on the drive input by minimizing the time required to make the necessary repairs and the cost of replacement equipment. The suggested combinations provide coordination according to the drive rating.

The drive controls the motor, provides a monitoring function against short-circuits between the drive and the motor, and helps protect the motor cable against overloads. Overload monitoring is provided by the drive's motor thermal monitoring function if this has been enabled. Otherwise, an external monitoring device such as a probe or thermal overload relay should be provided.
The circuit breaker helps protect the drive's power cables against short-circuits.

IEC standard motor starters

Motor Power *(1)*		Drive Reference	Circuit breaker Reference *(2)*	Rating	Irm	Line contactor Reference *(3) (4)*
kW	*HP*			A	A	
Three-phase supply voltage: 380…415 V 50/60 Hz						
0.75	*1*	**ATV340U07N4●**	**GV2L08**	4	51	**LC1D09●●**
1.5	*2*	**ATV340U15N4●**	**GV2L10**	6.3	78	**LC1D09●●**
2.2	*3*	**ATV340U22N4●**	**GV2L14**	10	138	**LC1D09●●**
3	*4*	**ATV340U30N4●**	**GV2L16**	14	170	**LC1D18●●**
4	*5*	**ATV340U40N4●**				
5.5	*7.5*	**ATV340U55N4●**	**GV2L22**	25	327	**LC1D25●●**
7.5	*10*	**ATV340U75N4●**	**GV3L32**	32	448	**LC1D40A●●**
11	*15*	**ATV340D11N4●**	**GV3L40**	40	560	**LC1D40A●●**
15	*20*	**ATV340D15N4●**	**GV3L50**	50	700	**LC1D50A●●**
18.5	*25*	**ATV340D18N4●**	**GV3L65**	65	910	**LC1D65A●●**
22	*30*	**ATV340D22N4●**				
30	*40*	**ATV340D30N4E**	**GV4L/LE80●**	80	1040	**LC1D65A●●**
37	*50*	**ATV340D37N4E**				**LC1D80●●**
45	*60*	**ATV340D45N4E**	**GV4L/LE115●**	115	1495	**LC1D115●●**
55	*75*	**ATV340D55N4E**				
75	*100*	**ATV340D75N4E**	**NSX250●MA220**	220	2420	**LC1G185●●●●**

(1) Standard power ratings for 400 V 50/60 Hz 4-pole motors.
The values expressed in HP conform to the NEC (National Electrical Code).

(2) For references to be completed, replace the dot with the letter corresponding to the breaking performance of the circuit breaker (B, F, N, H, S, or L).
Breaking capacity of circuit breakers according to standard IEC 60947-2:

Circuit breaker	Icu (kA) for 380…415 V						
		B	F	N	H	S	L
GV2L08…L14	100	–	–	–	–	–	–
GV2L16...L22	50	–	–	–	–	–	–
GV3L32...L65	50	–	–	–	–	–	–
GV4L/LE80...115●	–	25	–	50	–	100	–
NSX250●MA220	–	–	36	50	70	100	150

(3) Composition of contactors:
LC1D09...D115: 3 poles + 1 NO auxiliary contact + 1 NC auxiliary contact
LC1F185: 3 poles
To add auxiliary contacts or other accessories, please refer to the TeSys - Motor control and protection components catalog.

(4) Replace ●● or ●●●● with the control circuit voltage code indicated in the table below:

	Volts ∼	24	48	110	220	230	240
LC1D09…D115	50 Hz	**B5**	**E5**	**F5**	**M5**	**P5**	**U5**
	60 Hz	**B6**	**E6**	**F6**	**M6**	–	**U6**
	50/60 Hz	**B7**	**E7**	**F7**	**M7**	**P7**	**U7**

	Volts ∼	24...48	48...130	110...250	200...500
LC1G185		**BEEA**	**EHEN**	**KUEN**	**LSEA**

For other voltages available between 24 V ∼ and 660 V ∼, or a DC control circuit, please contact our Customer Care Center.

References: page 18
Configuration and runtime tools: page 26
Dimensions: page 58

Variable speed drives
Altivar Machine ATV340
Motor starters
Supply voltage 440 V

PB114910

GV4L80●

+

PB108313

LC1D80●●

+

ATV340_63441_CPSCT16031A

ATV340D45N4E

IEC standard motor starters

Motor Power (1)		Drive Reference	Circuit breaker Reference (2)	Rating	Irm	Line contactor Reference (3) (4)
kW	HP			A	A	
Three-phase supply voltage:440 V 50/60 Hz						
0.75	1	**ATV340U07N4●**	**GV2L08**	4	51	**LC1D09●●**
1.5	2	**ATV340U15N4●**	**GV2L10**	6.3	78	**LC1D09●●**
2.2	3	**ATV340U22N4●**	**GV2L14**	10	138	**LC1D09●●**
3	4	**ATV340U30N4●**				**LC1D18●●**
4	5	**ATV340U40N4●**	**GV2L16**	14	170	**LC1D18●●**
5.5	7.5	**ATV340U55N4●**	**GV2L20**	18	223	**LC1D25●●**
7.5	10	**ATV340U75N4●**	**GV3L25**	25	350	**LC1D32●●**
11	15	**ATV340D11N4●**	**GV3L32**	32	448	**LC1D40A●●**
15	20	**ATV340D15N4●**	**GV3L50**	50	700	**LC1D50A●●**
18.5	25	**ATV340D18N4●**				
22	30	**ATV340D22N4●**				
30	40	**ATV340D30N4E**	**GV3L65**	65	910	**LC1D65A●●**
37	50	**ATV340D37N4E**	**GV4L/LE80●**	80	1040	**LC1D65A●●**
45	60	**ATV340D45N4E**				**LC1D80●●**
55	75	**ATV340D55N4E**	**GV4L/LE115●**	115	1495	**LC1D115●●**
75	100	**ATV340D75N4E**	**NSX160●MA150**	150	1500	**LC1D115●●**

(1) Standard power ratings for 400 V 50/60 Hz 4-pole motors.
The values expressed in HP conform to the NEC (National Electrical Code).

(2) For references to be completed, replace the dot with the letter corresponding to the breaking performance of the circuit breaker (B, F, N, H, S, or L). Breaking capacity of circuit breakers according to standard IEC 60947-2:

Circuit breaker	Icu (kA) for 440 V						
		B	F	N	H	S	L
GV2L08…L10	100	–	–	–	–	–	–
GV2L14…L20	20	–	–	–	–	–	–
GV3L25...L65	50	–	–	–	–	–	–
GV4L/LE80...115	–	20	–	50	–	70	–
NSX160●MA150	–	–	35	50	65	90	130

(3) Composition of contactors:
LC1D09...D115: 3 poles + 1 NO auxiliary contact + 1 NC auxiliary contact
To add auxiliary contacts or other accessories, please refer to the TeSys - Motor control and protection components catalog.

(4) Replace ●● with the control circuit voltage code indicated in the table below:

	Volts ∼	24	48	110	220	230	240
LC1D09...D115	50 Hz	**B5**	**E5**	**F5**	**M5**	**P5**	**U5**
	60 Hz	**B6**	**E6**	**F6**	**M6**	–	**U6**
	50/60 Hz	**B7**	**E7**	**F7**	**M7**	**P7**	**U7**

For other voltages available between 24 V ∼ and 660 V ∼, or a DC control circuit, please contact our Customer Care Center.

References: page 18
Configuration and runtime tools: page 26
Dimensions: page 58