

Applications

The combinations listed below can be used to assemble a complete motor starter comprising a circuit-breaker, a contactor and an Altivar 312 variable speed drive. The circuit-breaker provides protection against accidental short-circuits, disconnection and, if necessary, isolation.

The contactor controls and manages any safety features and isolates the motor on stopping.

The Altivar 312 drive is protected electronically against short-circuits between phases and between phase and earth. It therefore ensures continuity of service and thermal protection of the motor.



GV2 L14
+
LC1 D09
+
ATV 312H075M2

Motor starters

Standard power rating of 50/60 Hz 4-pole motors (1)	Drive Reference	Circuit-breaker Reference	Rating A	Contactor (2) Add voltage reference to basic reference to obtain full reference (3)
Single-phase supply voltage: 200...240 V				
0.18	0.25	ATV 312H018M2	GV2 L08	4 LC1 D09••
0.37	0.5	ATV 312H037M2	GV2 L10	6.3 LC1 D09••
0.55	0.75	ATV 312H055M2	GV2 L14	10 LC1 D09••
0.75	1	ATV 312H075M2	GV2 L14	10 LC1 D09••
1.1	1.5	ATV 312HU11M2	GV2 L16	14 LC1 D09••
1.5	2	ATV 312HU15M2	GV2 L20	18 LC1 D09••
2.2	3	ATV 312HU22M2	GV2 L22	25 LC1 D09••
Three-phase supply voltage: 200...240 V				
0.18	0.25	ATV 312H018M3	GV2 L07	2.5 LC1 D09••
0.37	0.5	ATV 312H037M3	GV2 L08	4 LC1 D09••
0.55	0.75	ATV 312H055M3	GV2 L10	6.3 LC1 D09••
0.75	1	ATV 312H075M3	GV2 L14	10 LC1 D09••
1.1	1.5	ATV 312HU11M3	GV2 L14	10 LC1 D09••
1.5	2	ATV 312HU15M3	GV2 L16	14 LC1 D09••
2.2	3	ATV 312HU22M3	GV2 L20	18 LC1 D09••
3	—	ATV 312HU30M3	GV2 L22	25 LC1 D09••
4	5	ATV 312HU40M3	GV2 L22	25 LC1 D09••
5.5	7.5	ATV 312HU55M3	GV3 L40	40 LC1 D32••
7.5	10	ATV 312HU75M3	GV3 L50	50 LC1 D32••
11	15	ATV 312HD11M3	GV3 L65	65 LC1 D50••
15	20	ATV 312HD15M3	NS100HMA	100 LC1 D80••
Three-phase supply voltage: 380...500 V				
0.37	0.5	ATV 312H037N4	GV2 L07	2.5 LC1 D09••
0.55	0.75	ATV 312H055N4	GV2 L08	4 LC1 D09••
0.75	1	ATV 312H075N4	GV2 L08	4 LC1 D09••
1.1	1.5	ATV 312HU11N4	GV2 L10	6.3 LC1 D09••
1.5	2	ATV 312HU15N4	GV2 L14	10 LC1 D09••
2.2	3	ATV 312HU22N4	GV2 L14	10 LC1 D09••
3	—	ATV 312HU30N4	GV2 L16	14 LC1 D09••
4	5	ATV 312HU40N4	GV2 L16	14 LC1 D09••
5.5	7.5	ATV 312HU55N4	GV2 L22	25 LC1 D09••
7.5	10	ATV 312HU75N4	GV2 L32	32 LC1 D18••
11	15	ATV 312HD11N4	GV3 L40	40 LC1 D25••
15	20	ATV 312HD15N4	GV3 L50	50 LC1 D32••

(1) The values expressed in HP conform to the NEC (National Electrical Code).

(2) Composition of contactors LC1-D09/D18/D25/D32/D50/D80:

3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact.

(3) Replace •• with the control circuit voltage reference indicated in the table below:

AC control circuit							
Volts ~	24	48	110	220	230	230/240	
LC1-D	50/60 Hz	B7	E7	F7	M7	P7	U7

For other voltages between 24 V and 660 V, or a DC control circuit, please refer to the "Motor starter solutions - Control and protection components" catalogue.



GV3 L40
+
LC1 D25
+
ATV 312HD15S6

PF539853

PF539854

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Motor starters (continued)

Standard power rating of 50/60 Hz 4-pole motors (1)	Drive		Circuit-breaker		Contactor (2) Add voltage reference to basic reference to obtain full reference (3)
	Reference	Rating	Reference	A	
kW	HP				
Three-phase supply voltage: 525...600 V					
0.75	1	ATV 312H075S6	GV2 L08	4	LC1 D09••
1.5	2	ATV 312HU15S6	GV2 L10	6.3	LC1 D09••
2.2	3	ATV 312HU22S6	GV2 L14	10	LC1 D09••
4	5	ATV 312HU40S6	GV2 L16	14	LC1 D09••
5.5	7.5	ATV 312HU55S6	GV2 L20	18	LC1 D09••
7.5	10	ATV 312HU75S6	GV2 L22	25	LC1 D09••
11	15	ATV 312HD11S6	GV2 L32	32	LC1 D18••
15	20	ATV 312HD15S6	GV3 L40	40	LC1 D25••

(1) The values expressed in HP conform to the NEC (National Electrical Code).

(2) Composition of contactors LC1-D09/D18/D25:

3 poles + 1 N/O auxiliary contact + 1 N/C auxiliary contact.

(3) Replace •• with the control circuit voltage reference indicated in the table below:

AC control circuit

	Volts ~	24	48	110	220	230	230/240
LC1-D	50/60 Hz	B7	E7	F7	M7	P7	U7

For other voltages between 24 V and 660 V, or a DC control circuit, please refer to the "Motor starter solutions - Control and protection components" catalogue.