

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.

Motor starters

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)
kW	HP	Reference	Reference	Rating A	
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

Motor starters (continued)

Standard power rating of 50/60 Hz 4-pole motors (1)		Drive	Circuit-breaker		Contactor (2)
		Reference	Reference	Rating	Add voltage reference to basic reference to obtain full reference (3)
kW	HP			A	
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.