

Drive references

Single phase supply voltage: 200...240 V 50/60 Hz

3-phase motor 200...240 V

Motor	Line supply (input)				Drive (output)			Altivar 31 Reference	
	Max. line current (2)		Max. prospective line I _{sc}	Apparent power	Max. inrush current (3)	Nominal current I _n (1)	Max. transient current (1) (4)		Power dissipated at nominal load
Power indicated on plate (1)	at 200 V	at 240 V						kA	
0.18 / 0.25	3.0	2.5	1	0.6	10	1.5	2.3	24	ATV31C018M2
0.37 / 0.5	5.3	4.4	1	1.0	10	3.3	5.0	41	ATV31C037M2
0.55 / 0.75	6.8	5.8	1	1.4	10	3.7	5.6	46	ATV31C055M2
0.75 / 1	8.9	7.5	1	1.8	10	4.8/4.2 (5)	7.2	60	ATV31C075M2
1.1 / 1.5	12.1	10.2	1	2.4	19	6.9	10.4	74	ATV31CU11M2
1.5 / 2	15.8	13.3	1	3.2	19	8.0	12.0	90	ATV31CU15M2
2.2 / 3	21.9	18.4	1	4.4	19	11.0	16.5	123	ATV31CU22M2

3-phase supply voltage: 380...500 V 50/60 Hz

3-phase motor 380...500 V

Motor	Line supply (input)				Drive (output)			Altivar 31 Reference	
	Max. line current (2)		Max. prospective line I _{sc}	Apparent power	Max. inrush current (3)	Nominal current I _n (1)	Max. transient current (1) (4)		Power dissipated at nominal load
Power indicated on plate (1)	at 380 V	at 500 V						kA	
0.37 / 0.5	2.2	1.7	5	1.5	10	1.5	2.3	32	ATV31C037N4
0.55 / 0.75	2.8	2.2	5	1.8	10	1.9	2.9	37	ATV31C055N4
0.75 / 1	3.6	2.7	5	2.4	10	2.3	3.5	41	ATV31C075N4
1.1 / 1.5	4.9	3.7	5	3.2	10	3.0	4.5	48	ATV31CU11N4
1.5 / 2	6.4	4.8	5	4.2	10	4.1	6.2	61	ATV31CU15N4
2.2 / 3	8.9	6.7	5	5.9	10	5.5	8.3	79	ATV31CU22N4
3 / 3	10.9	8.3	5	7.1	10	7.1	10.7	125	ATV31CU30N4
4 / 5	13.9	10.6	5	9.2	10	9.5	14.3	150	ATV31CU40N4
5.5 / 7.5	21.9	16.5	22	15.0	30	14.3	21.5	232	ATV31CU55N4
7.5 / 10	27.7	21.0	22	18.0	30	17.0	25.5	269	ATV31CU75N4
11 / 15	37.2	28.4	22	25.0	97	27.7	41.6	397	ATV31CD11N4
15 / 20	48.2	36.8	22	32.0	97	33.0	49.5	492	ATV31CD15N4

(1) These power ratings and currents are for a maximum ambient temperature of 40°C and a switching frequency of 4 kHz in continuous operation. The switching frequency is adjustable from 2 to 16 kHz.

Above 4 kHz, the drive will reduce the switching frequency in the event of excessive temperature rise. The temperature rise is controlled by a PTC probe in the power module. Nonetheless, the nominal drive current should be derated if operation above 4 kHz needs to be continuous.

Derating curves are shown on page 4 as a function of switching frequency and ambient temperature.

(2) Current on a line supply with the "Max. prospective line I_{sc}" indicated.

(3) Peak current on power-up, for the max. voltage (240 V + 10%, 500 V + 10%).

(4) For 60 seconds.

(5) 4.8 A at 200 V/4.6 A at 208 V/4.2 A at 230 V and 240 V.