

Variable speed drives for asynchronous motors

Altivar 11

ATV 11●●●●●E Europe range



ATV 11 HU18M2E



ATV 11 PU18M2E



ATV 11 HU41M2E

Europe range drives with heatsink

(frequency range from 0 to 200 Hz)

Motor	Line supply	Altivar 11				
Power indicated on plate	Max. line current (1)	Continuous output current (2)	Max. transient current (3)	Power dissipated at nominal load	Reference (4)	Weight
kW	A	A	A	W		kg
Single phase supply voltage: 200...240 V 50/60 Hz						
0.18	2.9	1.1	1.6	12	ATV 11HU05M2E	0.900
0.37	5.3	2.1	3.1	20.5	ATV 11HU09M2E	1.000
0.55	6.3	3	4.5	29	ATV 11HU12M2E	1.100
0.75	8.6	3.6	5.4	37	ATV 11HU18M2E	1.100
1.5	14.8	6.8	10.2	72	ATV 11HU29M2E, (5)	1.800
2.2	20.8	9.6	14.4	96	ATV 11HU41M2E (5)	1.800

Europe range drives on base plate

(frequency range from 0 to 200 Hz)

Motor	Line supply	Altivar 11				
Power indicated on plate	Max. line current (1)	Continuous output current (2)	Max. transient current (3)	Power dissipated at nominal load	Reference (4)	Weight
kW	A	A	A	W		kg
Single phase supply voltage: 200...240 V 50/60 Hz						
0.37	5.3	2.1	3.1	20.5	ATV 11PU09M2E	0.900
0.55	6.3	3	4.5	29	ATV 11PU12M2E	0.900
0.75	8.6	3.6	5.4	37	ATV 11PU18M2E	0.900

(1) The line current value is given for a prospective line I_{sc} of 1kA and a line voltage of 230V.

(2) The current value is given for a switching frequency of 4 kHz. If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz, 20% for 12 kHz and 30% for 16 kHz.

(3) For 60 seconds.

(4) Drive equipped with an integrated EMC filter which cannot be disconnected.

(5) With integrated fan.

Variable speed drives for asynchronous motors

Altivar 11

ATV 11●●●●●U America range



ATV 11HU18M2U



ATV 11PU18M2U



ATV 11HU41M2U



ATV 11HU41M3U

Drives with heatsink (frequency range from 0 to 200 Hz)

Motor Power indicated on plate	Line supply Max. line current (1)	Altivar 11			Reference (4)	Weight
		Continuos output current (2)	Max. transient current (3)	Power dissipated at nominal load		
kW/HP	A	A	A	W		kg
Single phase supply voltage: 100...120 V 50/60 Hz						
0.18/0.25	6	1.6 (6)	2.4	14.5	ATV 11HU05F1U	0.900
0.37/0.5	9	2.4 (6)	3.6	23	ATV 11HU09F1U	1.000
0.75/1	18	4.6 (6)	6.3	43	ATV 11HU18F1U (5)	1.800
Single phase supply voltage: 200...240 V 50/60 Hz						
0.18/0.25	3.3	1.6	2.4	14.5	ATV 11HU05M2U	0.900
0.37/0.5	6	2.4	3.6	23	ATV 11HU09M2U	1.000
0.75/1	9.9	4.6	6.3	43	ATV 11HU18M2U (5)	1.100
1.5/2	17.1	7.5	11.2	77	ATV 11HU29M2U (5)	1.800
2.2/3	24.1	10.6	15	101	ATV 11HU41M2U (5)	1.800
Three phase supply voltage: 200...230 V 50/60 Hz						
0.18/0.25	1.8	1.6	2.4	13.5	ATV 11HU05M3U	0.900
0.37/0.5	3.6	2.4	3.6	24	ATV 11HU09M3U	1.000
0.75/1	6.3	4.6	6.3	38	ATV 11HU18M3U (5)	1.100
1.5/2	11	7.5	11.2	75	ATV 11HU29M3U (5)	1.800
2.2/3	15.2	10.6	15	94	ATV 11HU41M3U (5)	1.800

Drives on base plate (frequency range from 0 to 200 Hz)

Motor Power indicated on plate	Line supply Max. line current (1)	Altivar 11			Reference (4)	Weight
		Continuos output current (2)	Max. transient current (3)	Power dissipated at nominal load		
kW/HP	A	A	A	W		kg
Single phase supply voltage: 100...120 V 50/60 Hz						
0.37/0.5	9	2.4	3.6	23	ATV 11PU09F1U	0.900
Single phase supply voltage: 200...240 V 50/60 Hz						
0.37/0.5	6	2.4	3.6	23	ATV 11PU09M2U	0.900
0.75/1	9.9	4.6	6.3	43	ATV 11PU18M2U	0.900
Three phase supply voltage: 200...230 V 50/60 Hz						
0.37/0.5	3.6	2.4	3.6	24	ATV 11PU09M3U	0.900
0.75/1	6.3	4.6	6.3	38	ATV 11PU18M3U	0.900

(1) The line current value is given for the measurement conditions indicated in the table below:

Drive power rating	Prospective Isc	Line voltage
ATV 11●UF1U	1 kA	100 V
ATV 11●UM2U	1 kA	208 V
ATV 11●UM3U	5 kA	208 V

(2) The current value is given for a switching frequency of 4kHz. If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz, 20% for 12 kHz and 30% for 16 kHz.

(3) For 60 seconds.

(4) Drive supplied without an EMC filter. To order an EMC filter separately, see page 60252/7.

(5) With integrated fan.

(6) Current given for the power supply for a 230V three phase motor.

Variable speed drives for asynchronous motors

Altivar 11

ATV 11●●●●●●A Asia range



ATV 11HU18M2A



ATV 11PU18M2A



ATV 11HU41M2A



ATV 11HU41M3A

Drives with heatsink (frequency range from 0 to 200 Hz)

Motor Power indicated on plate	Line supply Max. line current (1)	Altivar 11		Power dissipated at nominal load	Reference (4)	Weight
kW	A	Continuous output current (2)	Max. transient current (3)	W		kg
Single phase supply voltage: 100...120 V 50/60 Hz						
0.18	6	1.4 (6)	2.1	14	ATV 11HU05F1A	0.900
0.37	9	2.4 (6)	3.6	25	ATV 11HU09F1A	1.000
0.75	18	4 (6)	6	40	ATV 11HU18F1A (5)	1.800
Single phase supply voltage: 200...240 V 50/60 Hz						
0.18	3.3	1.4	2.1	14	ATV 11HU05M2A	0.900
0.37	6	2.4	3.6	25	ATV 11HU09M2A	1.000
0.75	9.9	4	6	40	ATV 11HU18M2A	1.100
1.5	17.1	7.5	11.2	78	ATV 11HU29M2A (5)	1.800
2.2	24.1	10	15	97	ATV 11HU41M2A (5)	1.800
Three phase supply voltage: 200...230 V 50/60 Hz						
0.18	1.8	1.4	2.1	13.5	ATV 11HU05M3A	0.900
0.37	3.6	2.4	3.6	24	ATV 11HU09M3A	1.000
0.75	6.3	4	6	38	ATV 11HU18M3A	1.100
1.5	11	7.5	11.2	75	ATV 11HU29M3A (5)	1.800
2.2	15.2	10	15	94	ATV 11HU41M3A (5)	1.800

Drives on base plate (frequency range from 0 to 200 Hz)

Motor Power indicated on plate	Line supply Max. line current (1)	Altivar 11		Power dissipated at nominal load	Reference (4)	Weight
kW	A	Continuous output current (2)	Max. transient current (3)	W		kg
Single phase supply voltage: 100...120 V 50/60 Hz						
0.37	9	2.4	3.6	25	ATV 11PU09F1A	0.900
Single phase supply voltage: 200...240 V 50/60 Hz						
0.37	6	2.4	3.6	25	ATV 11PU09M2A	0.900
0.75	9.9	4	6	40	ATV 11PU18M2A	0.900
Three phase supply voltage: 200...230 V 50/60 Hz						
0.37	3.6	2.4	3.6	24	ATV 11PU09M3A	0.900
0.75	6.3	4	6	38	ATV 11PU18M3A	0.900

(1) The line current value is given for the measurement conditions indicated in the table below:

Drive power rating	Prospective Isc	Line voltage
ATV 11●UF1A	1 kA	100 V
ATV 11●UM2A	1 kA	200 V
ATV 11●UM3A	5 kA	200 V

(2) The current value is given for a switching frequency of 4kHz. If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz, 20% for 12 kHz and 30% for 16 kHz.

(3) For 60 seconds.

(4) Drive supplied without an EMC filter, to order an EMC filter separately see page 60252/7.

(5) With integrated fan.

(6) Current given for the power supply for a 230V three phase motor.

Variable speed drives for asynchronous motors

Altivar 11

ATV 11●●●●●●E347 pump range



ATV 11 HU18M2E347



ATV 11 PU18M2E347

Pump range drives with heatsink

(frequency range from 0 to 200 Hz)

Motor	Line supply	Altivar 11				
Power indicated on plate	Max. line current (1)	Continuous output current (2)	Max. transient current (3)	Power dissipated at nominal load	Reference (4)	Weight
kW	A	A	A	W		kg
Single phase supply voltage: 200...240 V 50/60 Hz						
0.18	2.9	1.1	1.6	12	ATV 11HU05M2E347	0.900
0.37	5.3	2.1	3.1	20.5	ATV 11HU09M2E347	1.000
0.55	6.3	3	4.5	29	ATV 11HU12M2E347	1.100
0.75	8.6	3.6	5.4	37	ATV 11HU18M2E347	1.100
1.5	14.8	6.8	10.2	72	ATV 11HU29M2E347 (5)	1.800
2.2	20.8	9.6	14.4	96	ATV 11HU41M2E347 (5)	1.800

Pump range drives on base plate

(frequency range from 0 to 200 Hz)

Motor	Line supply	Altivar 11				
Power indicated on plate	Max. line current (1)	Continuous output current (2)	Max. transient current (3)	Power dissipated at nominal load	Reference (4)	Weight
kW	A	A	A	W		kg
Single phase supply voltage: 200...240 V 50/60 Hz						
0.37	5.3	2.1	3.1	20.5	ATV 11PU09M2E347	0.900
0.55	6.3	3	4.5	29	ATV 11PU12M2E347	0.900
0.75	8.6	3.6	5.4	37	ATV 11PU18M2E347	0.900

(1) The line current value is given for a prospective line I_{sc} of 1kA and a line voltage of 230V.

(2) The current value is given for a switching frequency of 4kHz. If operation above 4 kHz needs to be continuous, the nominal drive current should be derated by 10% for 8 kHz, 20% for 12 kHz.

(3) For 60 seconds.

(4) Drive equipped with an integrated EMC filter which cannot be disconnected.

(5) With integrated fan.

Variable speed drives for asynchronous motors

Altivar 11



VW3 A5870



VW3 A5873

Options

Description	For drives	Reference	Weight kg
PowerSuite software workshop	All ratings, E/U/A ranges	See page 60200/4	–
Converter, supplied without cable or CD-Rom, for communicating with the PowerSuite software workshop	All ratings, E/U/A ranges	VW3 A11301	0.070
EMC input filters	ATV 11HU05M2E, HU09M2E ATV 11HU12M2E, HU18M2E ATV 11HU05F1U/A, HU09F1U/A ATV 11HU05M2U/A, U09M2U/A ATV 11HU18M2U/A	VW3 A11401	0.650
	ATV 11HU29M2E, HU41M2E ATV 11HU18F1U/A, HU29M2U/A ATV 11HU41M2U/A	VW3 A11402	0.850
	ATV 11HU05M3U/A, HU09M3U/A ATV 11HU18M3U/A	VW3 A11403	0.650
	ATV 11HU29M3U/A, HU41M3U/A	VW3 A11404	0.850
Braking unit connected to the DC bus	All ratings, E/U/A ranges	VW3 A11701	0.250

Description	Ohmic value	Power W	For drives	Reference	Weight kg
Braking resistors Not protected (IP 00) (3)	100 Ω	32	ATV 11HU05●●● (1) ATV 11●U09●●● (1) ATV 11●U12M2E (1) ATV 11●U18●●● (1) ATV 11HU29●●● (2)	VW3 A58702	0.600
	68 Ω	32	ATV 11HU41●●● (2)	VW3 A58704	0.600
Braking resistors Protected (IP 30) (3)	100 Ω	32	ATV 11HU05●●● (1) ATV 11●U09●●● (1) ATV 11●U12M2E (1) ATV 11●U18●●● (1) ATV 11HU29●●● (2)	VW3 A58732	2.000
	68 Ω	32	ATV 11HU41●●● (2)	VW3 A58733	2.000

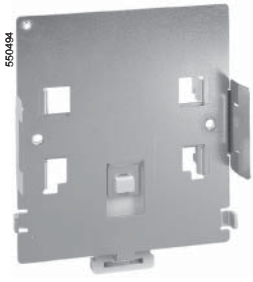
(1) Minimum value of the resistor to be connected: 75 ohms.

(2) Minimum value of the resistor to be connected: 51 ohms.

(3) If a resistor other than those specified is being used, add a thermal protection device.

Variable speed drives for asynchronous motors

Altivar 11



VW3 A11852

Accessories

Description	For drives	Reference	Weight kg
Plates for mounting on └ rail (35 mm wide)	ATV 11HU05●●● ATV 11HU09●●● ATV 11HU12M2E ATV 11HU18M●● ATV 11HU05M2E347 ATV 11HU09M2E347 ATV 11HU12M2E347 ATV 11HU18M2E347	VW3 A11851	0.220
	ATV 11HU18F1● ATV 11HU29●●● ATV 11HU41●●● ATV 11HU29M2E347 ATV 11HU41M2E347	VW3 A11852	0.300
Adaptor plate for replacing an Altivar 08 drive	ATV 11HU05M2● ATV 11●U09M2● ATV 11●U12M2E ATV 11●U18M2●	VW3 A11811	0.220
Plate for EMC mounting	All ratings	VW3 A11831	0.100
Fan kit (1)	ATV 11HU18F1● ATV 11HU18M●U ATV 11HU29●●● ATV 11HU41●●● ATV 11HU29M2E347 ATV 11HU41M2E347	VW3 A11821	0.070

(1) "Low noise" fan