

Variable speed drives

Altivar 71

Supply voltage: 200...240 V 50/60 Hz

IP 20 drives

107472



ATV 71HU22M3Z

101001



ATV 71H037M3

101010



ATV 71HD37M3X

IP 20 drives

Motor		Line supply				Altivar 71			Reference (3)	Weight
Power indicated on rating plate (1)		Line current (2)	Apparent power	Max. prospective line Isc	Maximum continuous current (1)	Max. transient current for				
kW	HP					230 V	60 s	2 s		
		200 V	240 V	240 V						
		A	A	kVA	kA	A	A	A		kg

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

0.37	0.5	6.9	5.8	1.4	5	3	4.5	4.9	ATV 71H075M3	3.000
0.75	1	12	9.9	2.4	5	4.8	7.2	7.9	ATV 71HU15M3	3.000
1.5	2	18.2	15.7	3.7	5	8	12	13.2	ATV 71HU22M3	4.000
2.2	3	25.9	22.1	5.3	5	11	16.5	18.1	ATV 71HU30M3	4.000
3	—	25.9	22	5.3	5	13.7	20.6	22.6	ATV 71HU40M3 (4)	4.000
4	5	34.9	29.9	7	5	17.5	26.3	28.8	ATV 71HU55M3 (4)	5.500
5.5	7.5	47.3	40.1	9.5	22	27.5	41.3	45.3	ATV 71HU75M3 (4)	7.000

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

0.37	0.5	3.5	3.1	1.3	5	3	4.5	4.9	ATV 71H037M3	3.000
0.75	1	6.1	5.3	2.2	5	4.8	7.2	7.9	ATV 71H075M3	3.000
1.5	2	11.3	9.6	4	5	8	12	13.2	ATV 71HU15M3	3.000
2.2	3	15	12.8	5.3	5	11	16.5	18.1	ATV 71HU22M3	4.000
3	—	19.3	16.4	6.8	5	13.7	20.6	22.6	ATV 71HU30M3	4.000
4	5	25.8	22.9	9.5	5	17.5	26.3	28.8	ATV 71HU40M3	4.000
5.5	7.5	35	30.8	12.8	22	27.5	41.3	45.3	ATV 71HU55M3	5.500
7.5	10	45	39.4	16.4	22	33	49.5	54.5	ATV 71HU75M3	7.000
11	15	53.3	45.8	19	22	54	81	89.1	ATV 71HD11M3X (5)	22.000
15	20	71.7	61.6	25.6	22	66	99	109	ATV 71HD15M3X (5)	22.000
18.5	25	77	69	28.7	22	75	112	124	ATV 71HD18M3X (5)	30.000
22	30	88	80	33.3	22	88	132	145	ATV 71HD22M3X (5)	30.000
30	40	124	110	45.7	22	120	180	198	ATV 71HD30M3X (5)	37.000
37	50	141	127	52.8	22	144	216	238	ATV 71HD37M3X (5)	37.000
45	60	167	147	61.1	22	176	264	290	ATV 71HD45M3X (5)	37.000
55	75	200	173	71.9	35	221	332	365	ATV 71HD55M3X (5) (6)	100.000
75	100	271	232	96.4	35	285	428	470	ATV 71HD75M3X (5) (6)	122.000

Dimensions (overall)

Drives	W x H x D mm
ATV 71H037M3...HU15M3	130 x 230 x 175
ATV 71HU22M3...HU40M3	155 x 260 x 187
ATV 71HU55M3	175 x 295 x 187
ATV 71HU75M3	210 x 295 x 213
ATV 71HD11M3X, HD15M3X	230 x 400 x 213
ATV 71HD18M3X, HD22M3X	240 x 420 x 236
ATV 71HD30M3X...HD45M3X	320 x 550 x 266
ATV 71HD55M3X	320 x 920 x 377
ATV 71HD75M3X	360 x 1022 x 377

(1) These values are given for a nominal switching frequency of 4 kHz up to ATV 71HD15M3X or 2.5 kHz for ATV 71HD18M3X...HD75M3X drives for use in continuous operation.

The switching frequency is adjustable from 1...16 kHz up to ATV 71HD45M3X and from 1...8 kHz for ATV 71HD55M3X and ATV 71HD75M3X drives. Above 2.5 or 4 kHz, depending on the rating, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Variants available (see page 22).

(4) A line choke must be used (see page 78).

(5) Drive supplied without EMC filter. EMC filters are available as an option (see page 84).

(6) Drive supplied without EMC mounting plate. It is included in the UL Type 1 or IP 31 conformity kit, which must be ordered separately (see pages 28 and 29).

Note: Consult the summary tables of possible drive, option and accessory combinations (see page 40).

Variable speed drives

Altivar 71

Supply voltage: 380...480 V 50/60 Hz

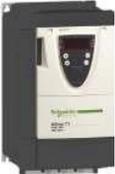
IP 20 drives

107464



ATV 71HU22N4

107478



ATV 71HU40N4Z

101016



ATV 71HC28N4

IP 20 drives

Motor		Line supply				Altivar 71				Reference (3)	Weight
Power indicated on rating plate (1)	Line current (2)	Apparent power	Max. prospective line Isc	Maximum continuous current (1)		Max. transient current for					
				380 V (IEC)	460 V (NEC)	60 s	2 s				
kW	HP	A	A	kVA	kA	A	A	A	A	kg	
Three-phase supply voltage: 380...480 V 50/60 Hz											
0.75	1	3.7	3	2.4	5	2.3	2.1	3.5	3.8	ATV 71H075N4	3.000
1.5	2	5.8	5.3	3.8	5	4.1	3.4	6.2	6.8	ATV 71HU15N4	3.000
2.2	3	8.2	7.1	5.4	5	5.8	4.8	8.7	9.6	ATV 71HU22N4	3.000
3	–	10.7	9	7	5	7.8	6.2	11.7	12.9	ATV 71HU30N4	4.000
4	5	14.1	11.5	9.3	5	10.5	7.6	15.8	17.3	ATV 71HU40N4	4.000
5.5	7.5	20.3	17	13.4	22	14.3	11	21.5	23.6	ATV 71HU55N4	5.500
7.5	10	27	22.2	17.8	22	17.6	14	26.4	29	ATV 71HU75N4	5.500
11	15	36.6	30	24.1	22	27.7	21	41.6	45.7	ATV 71HD11N4	7.000
15	20	48	39	31.6	22	33	27	49.5	54.5	ATV 71HD15N4	22.000
18.5	25	45.5	37.5	29.9	22	41	34	61.5	67.7	ATV 71HD18N4	22.000
22	30	50	42	32.9	22	48	40	72	79.2	ATV 71HD22N4	30.000
30	40	66	56	43.4	22	66	52	99	109	ATV 71HD30N4	37.000
37	50	84	69	55.3	22	79	65	118.5	130	ATV 71HD37N4	37.000
45	60	104	85	68.5	22	94	77	141	155	ATV 71HD45N4	44.000
55	75	120	101	79	22	116	96	174	191	ATV 71HD55N4	44.000
75	100	167	137	109.9	22	160	124	240	264	ATV 71HD75N4	44.000
90	125	166	134	109.3	35	179	179	269	295	ATV 71HD90N4 (4)	100.000
110	150	202	163	133	35	215	215	323	355	ATV 71HC11N4 (4)	122.000
132	200	239	192	157.3	35	259	259	388	427	ATV 71HC13N4 (4)	116.000
160	250	289	233	190.2	50	314	314	471	518	ATV 71HC16N4 (4)	163.000
200	300	357	286	235	50	387	387	580	638	ATV 71HC20N4 (4)	207.000
220	350	396	320	260.6	50	427	427	640	704	ATV 71HC25N4 (4)	207.000
250	400	444	357	292.2	50	481	481	721	793		
280	450	494	396	325.1	50	550	550	825	907	ATV 71HC28N4 (4)	207.000
315	500	555	444	365.3	50	616	616	924	1016	ATV 71HC31N4 (4)	320.000
355	–	637	512	419.3	50	671	671	1006	1107	ATV 71HC40N4 (4)	330.000
400	600	709	568	466.6	50	759	759	1138	1252		
500	700	876	699	576.6	50	941	941	1411	1552	ATV 71HC50N4 (4)	435.000

Dimensions (overall)

Drives	W x H x D mm
ATV 71H075N4...HU22N4	130 x 230 x 175
ATV 71HU30N4, HU40N4	155 x 260 x 187
ATV 71HU55N4, HU75N4	175 x 295 x 187
ATV 71HD11N4	210 x 295 x 213
ATV 71HD15N4, HD18N4	230 x 400 x 213
ATV 71HD22N4	240 x 420 x 236
ATV 71HD30N4, HD37N4	240 x 550 x 266
ATV 71HD45N4...HD75N4	320 x 630 x 290
ATV 71HD90N4	320 x 920 x 377
ATV 71HC11N4	360 x 1022 x 377
ATV 71HC13N4	340 x 1190 x 377
ATV 71HC16N4	440 x 1190 x 377
ATV 71HC20N4...HC28N4	595 x 1190 x 377
ATV 71HC31N4, HC40N4	890 x 1390 x 377
ATV 71HC50N4	1120 x 1390 x 377

(1) These values are given for a nominal switching frequency of 4 kHz up to ATV 71HD30N4 or 2.5 kHz for ATV 71HD37N4...HC50N4 drives for use in continuous operation.

The switching frequency is adjustable from 1...16 kHz up to ATV 71HD75N4 and from 2.5...8 kHz for ATV 71HD90N4...ATV 71HC50N4 drives.

Above 2.5 or 4 kHz, depending on the rating, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Variants available (see page 22).

(4) Drive supplied without EMC mounting plate. It is included in the UL Type 1 or IP 31 kit, which must be ordered separately (see pages 28 and 29).

Note: Consult the summary tables of possible drive, option and accessory combinations (see page 42).

Variable speed drives

Altivar 71

Supply voltage: 380...480 V 50/60 Hz

IP 20 drives

107472



ATV 71PU40N4Z

IP 20 drives on base plate with integrated category C2 EMC filter

Motor		Line supply				Altivar 71				Reference (3) (4) (5)	Weight
Power indicated on rating plate (1)		Line current (2)		Apparent power	Max. prospective line Isc	Maximum continuous current (1)		Max. transient current for			
		380 V	480 V			380 V	380 V	460 V	60 s	2 s	
kW	HP	A	A	kVA	kA	A	A	A	A		kg
Three-phase supply voltage: 380...480 V 50/60 Hz											
0.75	1	3.7	3	2.4	5	2.3	2.1	3.5	3.8	ATV 71P075N4Z	2.700
1.5	2	5.8	5.3	3.8	5	4.1	3.4	6.2	6.8	ATV 71PU15N4Z	2.700
2.2	3	8.2	7.1	5.4	5	5.8	4.8	8.7	9.6	ATV 71PU22N4Z	2.700
3	–	10.7	9	7	5	7.8	6.2	11.7	12.9	ATV 71PU30N4Z	3.600
4	5	14.1	11.5	9.3	5	10.5	7.6	15.8	17.3	ATV 71PU40N4Z	3.600
5.5	7.5	20.3	17	13.4	22	14.3	11	21.5	23.6	ATV 71PU55N4Z	5.000
7.5	10	27	22.2	17.8	22	17.6	14	26.4	29	ATV 71PU75N4Z	5.000
11	15	36.6	30	24.1	22	27.7	21	41.6	45.7	ATV 71PD11N4Z	7.000

Water-cooled IP 20 drives

Motor		Line supply				Altivar 71				Reference (4)	Weight
Power indicated on rating plate (1)		Line current (2)		Apparent power	Max. prospective line Isc	Maximum continuous current (1)		Max. transient current for			
		380 V	480 V			380 V	380 V	460 V	60 s	2 s	
kW	HP	A	A	kVA	kA	A	A	A	A		kg
Three-phase supply voltage: 380...480 V 50/60 Hz											
90	125	166	134	109.3	35	179	179	269	295	ATV 71QD90N4	80.000
110	150	202	163	133	35	215	215	323	355	ATV 71QC11N4	80.000
132	200	239	192	157.3	35	259	259	388	427	ATV 71QC13N4	80.000
160	250	289	233	190.2	50	314	314	471	518	ATV 71QC16N4	140.000
200	300	357	286	235	50	387	387	580	638	ATV 71QC20N4	140.000
220	350	396	320	260.6	50	427	427	640	704	ATV 71QC25N4	140.000
250	400	444	357	292.2	50	481	481	721	793		
315	500	555	444	365.3	50	616	616	924	1016	ATV 71QC31N4	300.000
355	–	637	512	419.3	50	671	671	1006	1107	ATV 71QC40N4	300.000
400	600	709	568	466.6	50	759	759	1138	1252		
500	700	876	699	576.6	50	941	941	1411	1552	ATV 71QC50N4	300.000

Dimensions (overall)

Drives	W x H x D mm	Drives	W x H x D mm
ATV 71P075N4Z, PU22N4Z	130 x 230 x 149	ATV 71QD90N4...QC13N4	330 x 950 x 377
ATV 71PU30N4Z, PU40N4Z	155 x 260 x 161	ATV 71QC16N4...QC25N4	585 x 950 x 377
ATV 71P55N4Z, PU75N4Z	175 x 295 x 161	ATV 71QC31N4...QC50N4	1110 x 1150 x 377
ATV 71PD11N4Z	210 x 295 x 187		

(1) These values are given for a nominal switching frequency in continuous operation:

- 4 kHz for ATV 71P●●●N4Z

- 2.5 kHz for ATV 71Q●●●N4

The switching frequency is adjustable from:

- 1...16 kHz for ATV 71P●●●N4Z

- 2.5...8 kHz for ATV 71Q●●●N4

Above 4 kHz, the drive will reduce the switching frequency automatically in the event of excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Variants available (see page 22).

(4) A DC choke must be used (see page 76).

(5) ATV 71P●●●N4Z drives supplied with a plate for EMC mounting and a thermal liner for mounting on the machine frame (see page 27).

Note: Consult the summary tables of possible drive, options and accessory combinations on pages 42 and 46.

Variable speed drives

Altivar 71

Supply voltage: 380...480 V 50/60 Hz

IP 54 drives

107473



ATV 71W075N4

IP 54 drives with integrated category C2 EMC filter

Motor		Line supply				Altivar 71				Reference (3) (4)	Weight
Power indicated on rating plate (1)		Line current(2)		Apparent power	Max. prospective line Isc	Maximum continuous current (1)		Max. transient current for			
		380 V	480 V			380 V	380 V	460 V	60 s		
kW	HP	A	A	kVA	kA	A	A	A	A		kg
Three-phase supply voltage: 380...480 V 50/60 Hz											
0.75	1	3.7	3	2.4	5	2.3	2.1	3.5	3.8	ATV 71W075N4	12.000
1.5	2	5.8	5.3	3.8	5	4.1	3.4	6.2	6.8	ATV 71WU15N4	12.000
2.2	3	8.2	7.1	5.4	5	5.8	4.8	8.7	9.6	ATV 71WU22N4	12.000
3	—	10.7	9	7	5	7.8	6.2	11.7	12.9	ATV 71WU30N4	13.000
4	5	14.1	11.5	9.3	5	10.5	7.6	15.8	17.3	ATV 71WU40N4	13.000
5.5	7.5	20.3	17	13.4	22	14.3	11	21.5	23.6	ATV 71WU55N4	16.000
7.5	10	27	22.2	17.8	22	17.6	14	26.4	29	ATV 71WU75N4	16.000
11	15	36.6	30	24.1	22	27.7	21	41.6	45.7	ATV 71WD11N4	21.000
15	20	48	39	31.6	22	33	27	49.5	54.5	ATV 71WD15N4	31.000
18.5	25	45.5	37.5	29.9	22	41	34	61.5	67.7	ATV 71WD18N4	31.000
22	30	50	42	32.9	22	48	40	72	79.2	ATV 71WD22N4	30.500
30	40	66	56	43.4	22	66	52	99	109	ATV 71WD30N4	38.500
37	50	84	69	55.3	22	79	65	118.5	130	ATV 71WD37N4	38.500
45	60	104	85	68.5	22	94	77	141	155	ATV 71WD45N4	61.500
55	75	120	101	79	22	116	96	174	191	ATV 71WD55N4	61.500
75	100	167	137	109.9	22	160	124	240	264	ATV 71WD75N4	61.500

107541



ATV 71E5D11N4

IP 54 drives with Vario and integrated category C2 EMC filter

Three-phase supply voltage: 380...480 V 50/60 Hz											
Power indicated on rating plate (1)		Line current(2)		Apparent power	Max. prospective line Isc	Maximum continuous current (1)		Max. transient current for		Reference (3) (4)	Weight
		380 V	480 V			380 V	380 V	460 V	60 s		
kW	HP	A	A	kVA	kA	A	A	A	A		
0.75	1	3.7	3	2.4	5	2.3	2.1	3.5	3.8	ATV 71E5075N4	14.400
1.5	2	5.8	5.3	3.8	5	4.1	3.4	6.2	6.8	ATV 71E5U15N4	14.400
2.2	3	8.2	7.1	5.4	5	5.8	4.8	8.7	9.6	ATV 71E5U22N4	14.400
3	—	10.7	9	7	5	7.8	6.2	11.7	12.9	ATV 71E5U30N4	15.400
4	5	14.1	11.5	9.3	5	10.5	7.6	15.8	17.3	ATV 71E5U40N4	15.400
5.5	7.5	20.3	17	13.4	22	14.3	11	21.5	23.6	ATV 71E5U55N4	18.400
7.5	10	27	22.2	17.8	22	17.6	14	26.4	29	ATV 71E5U75N4	18.400
11	15	36.6	30	24.1	22	27.7	21	41.6	45.7	ATV 71E5D11N4	29.700
15	20	48	39	31.6	22	33	27	49.5	54.5	ATV 71E5D15N4	40.400
18.5	25	45.5	37.5	29.9	22	41	34	61.5	67.7	ATV 71E5D18N4	40.400
22	30	50	42	32.9	22	48	40	72	79.2	ATV 71E5D22N4	46.700
30	40	66	56	43.4	22	66	52	99	109	ATV 71E5D30N4	57.800
37	50	84	69	55.3	22	79	65	118.5	130	ATV 71E5D37N4	57.800
45	60	104	85	68.5	22	94	77	141	155	ATV 71E5D45N4	80.400
55	75	120	101	79	22	116	96	174	191	ATV 71E5D55N4	80.400
75	100	167	137	109.9	22	160	124	240	264	ATV 71E5D75N4	80.400

Dimensions (overall)

Drives	W x H x D mm	Drives	W x H x D mm
ATV 71W075N4...WU22N4	240 x 490 x 272	ATV 71E5075N4...E5U22N4	240 x 490 x 296
ATV 71WU30N4, WU40N4	240 x 490 x 286	ATV 71E5U30N4, E5U40N4	240 x 490 x 310
ATV 71WU55N4, WU75N4	260 x 525 x 286	ATV 71E5U55N4, E5U75N4	260 x 525 x 310
ATV 71WD11N4	295 x 560 x 315	ATV 71E5D11N4	295 x 560 x 339
ATV 71WD15N4, WD18N4	315 x 665 x 315	ATV 71E5D15N4, E5D18N4	315 x 665 x 340
ATV 71WD22N4	285 x 720 x 315	ATV 71E5D22N4	285 x 720 x 335
ATV 71WD30N4, WD37N4	285 x 880 x 343	ATV 71E5D30N4, E5D37N4	285 x 880 x 383
ATV 71WD45N4...WD75N4	362 x 1000 x 364	ATV 71E5D45N4...E5D75N4	362 x 1000 x 404

(1) These values are given for a nominal switching frequency of 4 kHz up to ATV 71WD30N4 or ATV 71E5D30N4, or 2.5 kHz for ATV 71WD37N4...WD75N4 or ATV 71E5D37N4...E5D75N4 used in continuous operation.

The switching frequency is adjustable from 1...16 kHz for all ratings.

Above 2.5 or 4 kHz, depending on the rating, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) Variants available (see page 22).

(4) Drives supplied with a plate for EMC mounting.

Note: Consult the summary tables of possible drive, option and accessory combinations (see page 44).

Variable speed drives

Altivar 71

Supply voltage: 500...690 V 50/60 Hz

IP 20 drives

101014



ATV 71HU22Y

IP 20 drives									
Motor		Line supply			Altivar 71				
Power indicated on rating plate (1)		Line current (2)		Max. prospective line Isc	Maximum continuous current (1) (3)		Reference (4)	Weight	
500 V	575 V	500 V	600 V		500 V	575 V		A	A
kW	HP	A	A	kA	A	A			
Three-phase supply voltage: 500...600 V 50/60 Hz									
1.5	2	5.6	4.9	22	3.2	2.7	ATV 71HU15S6X	7.500	
2.2	3	7.6	6.7	22	4.5	3.9	ATV 71HU22S6X	7.500	
3	–	9.9	10	22	5.8	–	ATV 71HU30S6X	7.500	
4	5	12.5	10.9	22	7.5	6.1	ATV 71HU40S6X	7.500	
5.5	7.5	16.4	14.2	22	10	9	ATV 71HU55S6X	7.500	
7.5	10	21.4	18.4	22	13.5	11	ATV 71HU75S6X	7.500	

107538



ATV 71HD37Y

IP 20 drives													
Motor			Line supply				Altivar 71			Reference (4)	Weight		
Power indicated on rating plate (1)			Line current (2)			Max. prospective line Isc	Maximum continuous current (1) (3)						
500 V	575 V	690 V	500 V	600 V	690 V		kA	500 V	575 V	690 V	A	A	A
kW	HP	kW	A	A	A	kA	A	A	A				
Three-phase supply voltage: 500...690 V 50/60 Hz													
1.5	2	2.2	3.8	3.2	4	22	3.2	2.7	4	ATV 71HU22Y	30.000		
2.2	3	3	5.2	4.4	5.2	22	4.5	3.9	4.5	ATV 71HU30Y	30.000		
3	–	4	6.8	–	6.6	22	5.8	–	5.5	ATV 71HU40Y	30.000		
4	5	5.5	8.6	7.2	8.6	22	7.5	6.1	7.5	ATV 71HU55Y	30.000		
5.5	7.5	7.5	11.2	9.5	11.2	22	10	9	10	ATV 71HU75Y	30.000		
7.5	10	11	14.6	12.3	15.5	22	13.5	11	13.5	ATV 71HD11Y	30.000		
11	15	15	19.8	16.7	20.2	22	18.5	17	18.5	ATV 71HD15Y	30.000		
15	20	18.5	24	21	24	22	24	22	24	ATV 71HD18Y	30.000		
18.5	25	22	29	24	27	22	29	27	27	ATV 71HD22Y	30.000		
22	30	30	33	28	34	22	35	32	35	ATV 71HD30Y	30.000		
30	40	37	48	41	47	22	47	41	43	ATV 71HD37Y	68.000		
37	50	45	62	51	55	22	59	52	54	ATV 71HD45Y	68.000		
45	60	55	68	57	63	22	68	62	62	ATV 71HD55Y	68.000		
55	75	75	84	70.5	88	22	85	77	84	ATV 71HD75Y	68.000		
75	100	90	109	92	101	22	110	99	104	ATV 71HD90Y	68.000		
90	125	110	128	113	117	28	136	125	125	ATV 71HC11Y (5) (6)	102.000		
110	150	132	153	133	137	28	165	144	150	ATV 71HC13Y (5) (6)	102.000		
132	–	160	182	–	163	35	200	–	180	ATV 71HC16Y (5) (6)	102.000		
160	200	200	227	204	212	35	240	192	220	ATV 71HC20Y (5) (6)	181.000		
200	250	250	277	249	256	35	312	242	290	ATV 71HC25Y (5) (6)	181.000		
250	350	315	342	311	317	35	390	336	355	ATV 71HC31Y (5) (6)	181.000		
315	450	400	439	401	409	35	462	412	420	ATV 71HC40Y (5) (6)	383.000		
400	550	500	544	491	498	35	590	528	543	ATV 71HC50Y (5) (6)	383.000		
500	700	630	673	613	616	42	740	672	675	ATV 71HC63Y (5) (6)	383.000		

107540



ATV 71HC25Y

+

107532



VW3 A4 372 (line choke mandatory) (5)

Dimensions (overall)

Drives	W x H x D mm
ATV 71HU15S6X...HU75S6X	210 x 295 x 213
ATV 71HU22Y...HD30Y	240 x 420 x 236
ATV 71HD37Y...HD90Y	320 x 630 x 290
ATV 71HC11Y...HC16Y	340 x 1190 x 377
ATV 71HC20Y...HC31Y	595 x 1190 x 377
ATV 71HC40Y...HC63Y	1120 x 1390 x 377

(1) These values are given for a nominal switching frequency of 4 kHz for ATV 71HU●●S6X and for ATV 71HU22Y...HD30Y or 2.5 kHz for ATV 71HD37Y...HC63Y for use in continuous operation.

The switching frequency is adjustable from 2.5...6 kHz for ATV 71HU●●S6X and for ATV 71HU22Y...HD30Y, and 2.5...4.9 kHz for ATV 71HD37Y...ATV 71HC63Y drives.

Above 2.5 kHz or 4 kHz, depending on the rating, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) The maximum transient current for:

- 60 seconds is equal to 150% of the maximum continuous current

- 2 seconds is equal to 165% of the maximum continuous current

(4) Variants available (see page 22).

(5) Line choke mandatory for ATV 71HC11Y...HC63Y drives, unless a special transformer is used (12-pulse). The line choke must be ordered separately (see page 78).

(6) Drive supplied without EMC mounting plate. It is included in the UL Type 1 or IP 31 kit, which must be ordered separately (see pages 28 and 29).

Note: Consult the summary tables of possible drive, option and accessory combinations (see pages 46 and 48).

Variable speed drives

Altivar 71

Supply voltage: 500...690 V 50/60 Hz

IP 20 drives



ATV 71QC11Y

Water-cooled IP 20 drives

Water-cooled IP 20 drives											
Motor			Line supply				Altivar 71				
Power indicated on rating plate (1)			Line current (2)			Max. prospective line Isc	Maximum continuous current (1) (3)			Reference	Weight
500 V	575 V	690 V	500 V 600 V 690 V			kA	500 V 575 V 690 V				kg
kW	HP	kW	A	A	A		A	A	A		
Three-phase supply voltage: 500...690 V 50/60 Hz											
90	125	110	128	113	117	28	136	125	125	ATV 71QC11Y	80.000
110	150	132	153	133	137	28	165	144	150	ATV 71QC13Y	80.000
132	–	160	182	–	163	35	200	–	180	ATV 71QC16Y	80.000
160	200	200	227	204	212	35	240	192	220	ATV 71QC20Y	140.000
200	250	250	277	249	256	35	312	242	290	ATV 71QC25Y	140.000
250	350	315	342	311	317	35	390	336	355	ATV 71QC31Y	140.000
315	450	400	439	401	409	35	462	412	420	ATV 71QC40Y	300.000
400	550	500	544	491	498	35	590	528	543	ATV 71QC50Y	300.000
500	700	630	673	613	616	42	740	672	675	ATV 71QC63Y	300.000

Dimensions (overall)

Drives	W x H x D mm
ATV 71QC11Y...QC16Y	330 x 950 x 377
ATV 71QC20Y...QC31Y	585 x 950 x 377
ATV 71QC40Y...QC63Y	1110 x 1150 x 377

(1) These values are given for a nominal switching frequency of 2.5 kHz for use in continuous operation.

The switching frequency is adjustable from 2.5...4.9 kHz.

Above 2.5 kHz, depending on the rating, the drive will reduce the switching frequency automatically in the event of an excessive temperature rise. For continuous operation above the nominal switching frequency, derate the nominal drive current (see derating curves on our website www.schneider-electric.com).

(2) Typical value for the indicated motor power and for the maximum prospective line Isc.

(3) The maximum transient current for:

- 60 seconds is equal to 150% of the maximum continuous current

- 2 seconds is equal to 165% of the maximum continuous current

Note: Consult the summary tables of possible drive, option and accessory combinations (see page 48).

Variable speed drive for synchronous motor with speed feedback

The drives are supplied as standard for asynchronous motors with or without sensor feedback.

ATV 71H075N4...HD75N4 drives can control not only those motors included in the standard offer, but also synchronous motors with speed feedback, by adding **383** at the end of the reference.

Example: ATV 71H075N4 becomes **ATV 71H075N4383**.
See page 52 for the available encoder interface cards.

Variable speed drive with additional power supply

When the total power consumption does not exceed 200 mA, ATV 71W●●●N4 drives can be supplied with an additional 24 V $\overline{\text{---}}$ power supply, which allows additional consumption of 250 mA.

In this case, add **A24** at the end of the reference. Example: ATV 71W075N4 becomes **ATV 71W075N4A24**.

Variable speed drive in a reinforced version

This variant enables variable speed drives to operate in difficult ambient pollution conditions and complies with standard IEC60721-3-3 class 3C2.
ATV 71HD55M3X, HD75M3X, ATV 71HD90N4...HC50N4, ATV71H●●●Y and ATV 71W●●●N4A24 drives are supplied as standard in a reinforced version.

To order ATV 71H●●●M3 and ATV 71H075N4...HD75N4 variable speed drives in a reinforced version, add **S337** at the end of the reference.
Example: ATV 71H075M3 becomes **ATV 71H075M3S337**.

To order ATV 71HD11M3X...HD45M3X drives in this version, add **337** at the end of the reference.
Example: ATV 71HD11M3X becomes **ATV 71HD11M3X337**.

In the reinforced version, the variable speed drive is supplied with a remote graphic display terminal.

Variable speed drive with integrated terminal

Except for ATV 71P●●●N4Z drives on base plates supplied with a integrated display terminal, all drives come with a remote graphic display terminal and an integrated terminal as standard.

ATV 71H037M3...HD15M3X and ATV 71H075N4...HD75N4 drives can be ordered without a remote graphic display terminal. They will then have the integrated terminal only. In this case, add **Z** at the end of the reference.
Example: ATV 71H075M3 becomes **ATV 71H075M3Z**.

To order ATV 71H075N4383...HD75N4383 drives without a graphic display terminal, please contact our Customer Care Centre.

Variable speed drive without DC choke

ATV 71HD90N4...HC50N4 drives are supplied as standard with a DC choke which must be used when connecting drives to the three-phase supply.

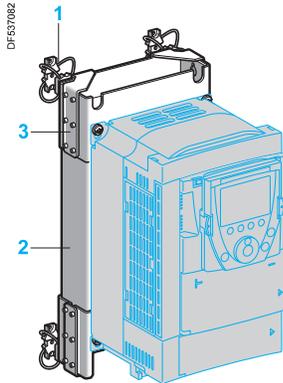
They can be ordered without a DC choke for connections to the DC bus or when using a line choke (see page 78), by adding **D** at the end of the reference.
Example: ATV 71HD90N4 becomes **ATV 71HD90N4D**.

Variable speed drive with EMC plate conforming to NEMA type 12 standard

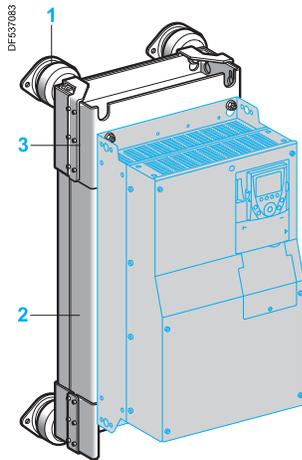
ATV 71W●●●N4 drives are supplied as standard with a European version EMC plate. To order drives with an EMC plate conforming to NEMA type 12 standard, add **U** at the end of the reference. This plate is supplied without a drill hole.
Example: ATV 71W075N4 becomes **ATV 71W075N4U**.

Note:

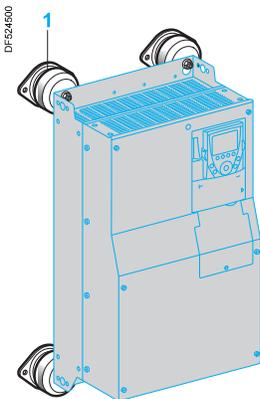
- ATV 71H037M3...HD45M3X, ATV 71H075N4...HD75N4, ATV 71H●●●S6X and ATV 71HU22Y...HD90Y drives are supplied as standard with a European version EMC plate.
- ATV 71HD55M3X, HD75M3X, ATV 71HD90N4...HC50N4, ATV 71P●●●N4Z and ATV71HC11Y...HC63Y drives are supplied as standard without a plate for EMC mounting.
Depending on the reference, the European version EMC plate is included in the UL Type 1 or IP 31 kit (see pages 28 and 29).



ATV 71HD11M3X drive
mounted on DNV kit VW3 A9 625



ATV 71HD45N4 drive
mounted on DNV kit VW3 A9 628



ATV 71H...Y drive
mounted on DNV kit VW3 A9 642

DNV kit

This kit enables Altivar 71 variable speed drives to satisfy the requirements of the DNV certification body.

For the following variable speed drives:

- ATV 71H...M3
- ATV 71HD11M3X...HD45M3X
- ATV 71H075N4...HD75N4

the kit includes:

- Shock-absorbing mounts 1
- An additional EMC input filter 2
- EMC filter supports 3
- Fixing accessories

It is mounted on the back of the variable speed drive on the additional EMC filter supplied with the DNV kit as standard.

References

For drives	Reference	Weight kg
ATV 71H037M3...HU15M3 ATV 71H075N4...HU22N4	VW3 A9 621	5.400
ATV 71HU22M3...HU40M3 ATV 71HU30N4, HU40N4	VW3 A9 622	7.400
ATV 71HU55M3 ATV 71HU55N4, HU75N4	VW3 A9 623	9.800
ATV 71HU75M3 ATV 71HD11N4	VW3 A9 624	11.200
ATV 71HD11M3X, HD15M3X ATV 71HD15N4, HD18N4	VW3 A9 625	16.500
ATV 71HD18M3X, HD22M3X ATV 71HD22N4	VW3 A9 626	20.000
ATV 71HD30N4, HD37N4	VW3 A9 627	22.500
ATV 71HD30M3X...HD45M3X ATV 71HD45N4...HD75N4	VW3 A9 628	53.500

For ATV 71HU22Y...HD30Y variable speed drives, the kit includes:

- Shock-absorbing mounts 1
- An EMC input filter
- Fixing accessories

The shock-absorbing mounts are mounted on the back of the variable speed drive. The EMC filter is positioned beside the unit.

Reference

For drives	Reference	Weight kg
ATV 71HU22Y...HD30Y	VW3 A9 642	9.000

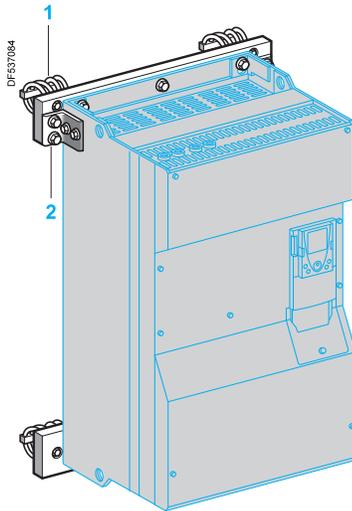
For ATV 71HD37Y...HD90Y variable speed drives, the kit includes:

- Shock-absorbing mounts 1
- An EMC input filter
- A line choke
- Fixing accessories

The shock-absorbing mounts are mounted on the back of the variable speed drive. The EMC filter is positioned beside the unit. The line choke must be installed upstream of the drive.

Reference

For drives	Reference	Weight kg
ATV 71HD37Y...HD90Y	VW3 A9 643	23.000



ATV 71HC11N4D drive
mounted on DNV kit VW3 A9 631

DNV kit (continued)

For the following variable speed drives:

- ATV 71HD55M3X, HD75M3X
- ATV 71HD90N4D...HC50N4D
- ATV 71HC11Y...HC63Y

the kit includes:

- Shock-absorbing mounts 1
- The mechanical fittings (rails and brackets) required for mounting 2
- Fixing accessories

It is mounted on the back of the variable speed drive using the mechanical fittings.

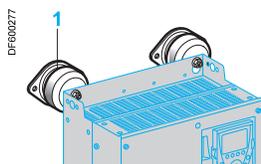
References

For drives	Line choke (1)	EMC filter (2)	Reference	Weight kg
ATV 71HD55M3X (3)	VW3 A4 562	VW3 A4 410	VW3 A9 629	–
ATV 71HD90N4D	VW3 A4 558	VW3 A4 410	VW3 A9 629	–
ATV 71HD75M3XD (3)	VW3 A4 563	VW3 A4 410	VW3 A9 631	–
ATV 71HC11N4D	VW3 A4 559	VW3 A4 410	VW3 A9 631	–
ATV 71HC13N4D	VW3 A4 560	VW3 A4 410	VW3 A9 633	–
ATV 71HC16N4D	VW3 A4 561	VW3 A4 411	VW3 A9 635	–
ATV 71HC20N4D	VW3 A4 569	VW3 A4 411	VW3 A9 637	–
ATV 71HC25N4D, HC28N4D	VW3 A4 564	VW3 A4 411	VW3 A9 638	–
ATV 71HC31N4D	VW3 A4 565	VW3 A4 412	VW3 A9 639	–
ATV 71HC40N4D	2 x VW3 A4 569	VW3 A4 412	VW3 A9 640	–
ATV 71HC50N4D	2 x VW3 A4 564	VW3 A4 413	VW3 A9 641	–
ATV 71HC11Y (4)	VW3 A4 570	–	VW3 A9 644	–
ATV 71HC13Y, HC16Y (4)	VW3 A4 571	–	VW3 A9 645	–
ATV 71HC20Y (4)	VW3 A4 560	–	VW3 A9 646	–
ATV 71HC25Y, HC31Y (4)	VW3 A4 572	–	VW3 A9 647	–
ATV 71HC40Y (4)	2 x VW3 A4 568	–	VW3 A9 648	–
ATV 71HC50Y, HC63Y (4)	2 x VW3 A4 572	–	VW3 A9 649	–

DNV shock-absorbing mounts

These mounts 1 are mounted on ATV 71H075N4...HD37N4 and ATV 71HU22Y...HD90Y drives.

They are supplied with the fixing accessories necessary for fixing the shock-absorbing mounts on the back of the drive.



DNV shock-absorbing mounts

References

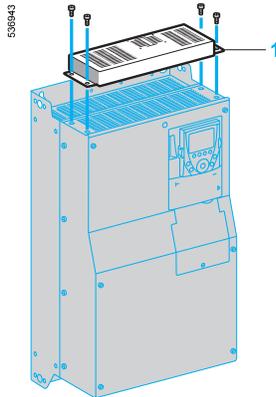
Description	For drives	Reference	Weight kg
DNV shock-absorbing mounts 1 supplied with fixing accessories	ATV 71H075N4...HU75N4	VW3 A9 650	0.215
	ATV 71HD11N4...HD18N4	VW3 A9 651	0.345
	ATV 71HD22N4...HD37N4	VW3 A9 652	0.650
	ATV 71HU22Y...HD30Y	VW3 A9 653	2.700
	ATV 71HD37Y...HD90Y	VW3 A9 654	2.700

(1) A line choke must be used which must be ordered separately (see page 78).

(2) An EMC filter must be used which must be ordered separately (see page 84).

(3) If using the DNV kit, do not mount the DC choke supplied as standard with the drive.

(4) When using a DNV kit, the variable speed drive and the transformer for the fan are mounted separately. Please refer to the dimensions on our website www.schneider-electric.com.



Control card fan kit

Control card fan kit (for ATV 71H●●●●● drives on heatsink)

This kit is required for ATV 71HD18M3X...HD45M3X, ATV 71HD22N4...HD75N4 and ATV 71HU22Y...HD90Y drives in order that they can operate at ambient temperatures between 50°C and 60°C, for example if they are mounted in an IP 54 enclosure. The circulation of air around the electronic cards prevents the formation of hot spots.

To ascertain the derating to be applied to the drive nominal current, please refer to the curves on our website www.schneider-electric.com.

The kit 1 is mounted on the upper part of the drive. It is powered by the drive and includes:

- A fan subassembly
- Fixing accessories
- A manual

References

For drives	Reference	Weight kg
ATV 71HD18M3X, HD22M3X ATV 71HD22N4 ATV 71HU22Y...HD30Y	VW3 A9 404	—
ATV 71HD30N4, HD37N4	VW3 A9 405	—
ATV 71HD30M3X...HD45M3X	VW3 A9 406	—
ATV 71HD45N4...HD75N4 ATV 71HD37Y...HD90Y	VW3 A9 407	—

Adaptor for 115 V ~ logic inputs

This adaptor is used to connect 115 V ~ logic signals to the logic inputs on the drive or an I/O extension card.

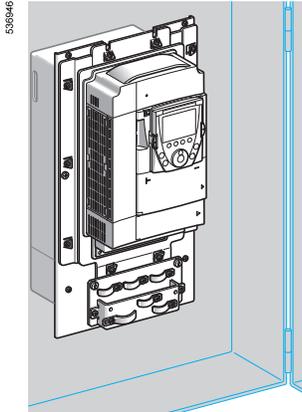
7 logic inputs with capacitive impedance at 60 Hz of 0.22 µF are available for connecting the logic signals:

- Max. current: 200 mA
- Response time: 5 ms to change from state 0 to state 1, 20 ms to change from state 1 to state 0
- Logic state 0 for a voltage below 20 V, logic state 1 for a voltage between 70 V and 132 V

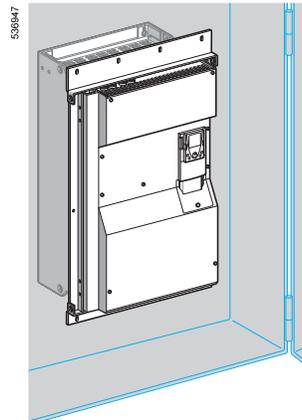
The power supply must be provided by a 115 V external power supply (min. 70 V, max. 132 V).

Reference

Description	Reference	Weight kg
Adaptor for 115 V ~ logic inputs	VW3 A3 101	—



ATV 71HU75N4 flush-mounted drive



ATV 71HC28N4D flush-mounted drive

Kit for flush-mounting in a dust and damp proof enclosure (for ATV 71H●●●●● drives on heatsink)

This kit can be used to mount the power section of the drive outside the enclosure (IP 54 degree of protection), which reduces the power dissipated into the enclosure (1).

It is available for ATV 71H●●●M3, ATV 71H●●●M3X, ATV 71H075N4...HC28N4, ATV 71HD90N4D...HC28N4D and ATV 71HU22Y...HC31Y drives.

With this type of mounting, the maximum internal temperature in the enclosure can then reach 60°C without it being necessary to derate the drive current.

Between 50°C and 60°C, a control card fan kit must be used for ATV 71HD18M3X...HD45M3X, ATV 71HD22N4...HD75N4, ATV 71H●●●S6X and ATV 71HU22Y...HD90Y drives to prevent hot spots (see page 25).

The back of the enclosure must be drilled and cut out for this type of mounting.

The kit includes:

- A metal frame of the right size for the drive rating
- Corner pieces
- Seals
- A fan support (this can be used to move the fans so that they can be accessed from the front of the enclosure)
- Fixing accessories
- A manual

References

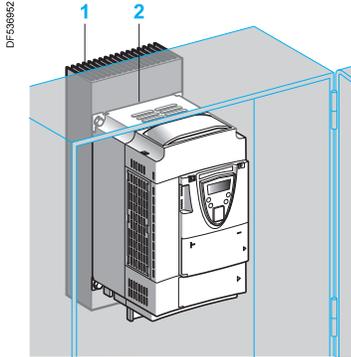
For drives	Reference	Weight kg
ATV 71H037M3...HU15M3 ATV 71H075N4...HU22N4	VW3 A9 501	2.700
ATV 71HU22M3...HU40M3 ATV 71HU30N4, HU40N4	VW3 A9 502	3.100
ATV 71HU55M3 ATV 71HU55N4, HU75N4	VW3 A9 503	3.700
ATV 71HU75M3 ATV 71HD11N4 ATV 71HU15S6X...HU75S6X	VW3 A9 504	4.600
ATV 71HD11M3X, HD15M3X ATV 71HD15N4, HD18N4	VW3 A9 505	4.900
ATV 71HD18M3X, HD22M3X ATV 71HD22N4 ATV 71HU22Y...HD30Y	VW3 A9 506	3.900
ATV 71HD30N4, HD37N4	VW3 A9 507	4.200
ATV 71HD30M3X...HD45M3X	VW3 A9 508	4.900
ATV 71HD45N4...HD75N4 ATV 71HD37Y...HD90Y	VW3 A9 509	5.200
ATV 71HD55M3X (2) ATV 71HD90N4 (2) ATV 71HD90N4D (3)	VW3 A9 510	5.100
ATV 71HD75M3X (2) ATV 71HC11N4 (2) ATV 71HC11N4D (3)	VW3 A9 511	3.600
ATV 71HC13N4 (2) ATV 71HC13N4D (3) ATV 71HC11Y...HC16Y (4)	VW3 A9 512	4.300
ATV 71HC16N4 (2) ATV 71HC16N4D (3)	VW3 A9 513	4.400
ATV 71HC20N4...HC28N4 (2)	Without braking unit VW3 A9 514	4.700
ATV 71HC20N4D...HC28N4D (3)	With braking unit VW3 A9 515	4.700
ATV 71HC20Y...HC31Y (4)		

(1) Power dissipated in the enclosure for dust and damp proof flush-mounting: please consult our website www.schneider-electric.com.

(2) Drives supplied as standard with a DC choke. In this case, cut out and drill the enclosure for the choke.

(3) Drives supplied without DC choke.

(4) Drives supplied as standard with a transformer for the fan. In this case, cut out and drill the enclosure for the transformer.



ATV 71PU22N4Z drive
in a dust and damp proof enclosure

Kit for mounting in a dust and damp proof enclosure (for ATV 71P●●●N4Z drives on base plate)

This kit can be used to mount a drive “on a base plate” inside a dust and damp proof enclosure (IP 54 degree of protection). Heat is dissipated via a heatsink mounted outside the enclosure.

This type of mounting simply requires that a hole be drilled in the enclosure at the same level as the drive fixing holes used to mount the heatsink.

The kit includes:

- A heatsink 1
- A thermal liner 2
- Sealing joints
- A manual

Enclosure characteristics

The steel used for the floor-standing or wall-mounted enclosure which is to house the drive must meet the following requirements:

- Thickness 1.5 to 3 mm
- Steel: Stainless or paint-finished smooth steel
- Heat-treated epoxy paintwork (lacquer finish not permitted), max. depth 70 µm, fine or medium texture

References

For drives	Reference	Weight kg
ATV 71P075N4Z...PU22N4Z	VW3 A9 801	—
ATV 71PU30N4Z, PU40N4Z	VW3 A9 802	—
ATV 71PU55N4Z, PU75N4Z	VW3 A9 803	—

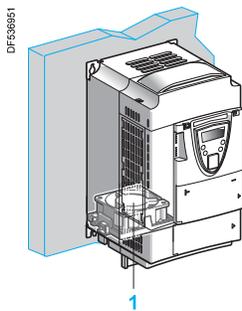
Fan for variable speed drives on base plate

This fan 1 is required for ATV 71P●●●N4Z drives if they are not equipped with a DC choke (see page 76).

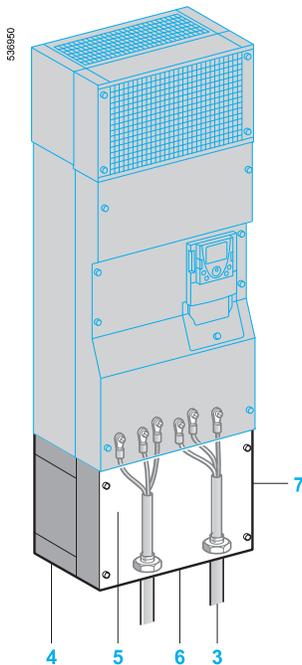
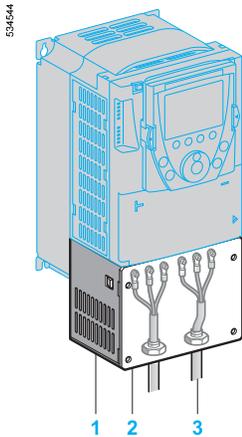
It is mounted on the underside of the drive, thereby enabling installation dimensions to be optimized. It is powered by the drive.

References

For drives	Reference	Weight kg
ATV 71P075N4Z...PU22N4Z	VZ3 V1 203	—
ATV 71PU30N4Z, PU40N4Z	VZ3 V1 209	—
ATV 71PU55N4Z, PU75N4Z	VZ3 V1 204	—
ATV 71PD11N4Z	VZ3 V1 210	—



ATV 71PU22N4Z drive with
VZ3 V1 203 fan



UL Type 1 conformity kits

UL Type 1 conformity kit (for mounting outside the enclosure)

When the drive is mounted directly on a wall outside the enclosure, this kit can be used to ensure UL Type 1 conformity when connecting the cables with a tube. The shielding is connected inside the kit.

For ATV 71H●●●M3, ATV 71HD11M3X...HD45M3X, ATV 71H075N4...HD75N4, ATV 71P●●●N4Z, ATV 71H●●●S6X and ATV 71HU22Y...HD90Y drives, the kit includes:

- All the mechanical fittings **1** including a pre-cut plate **2** for connecting the tubes **3**
- Fixing accessories
- A manual

For ATV 71HD55M3X, HD75M3X, ATV 71HD90N4...HC28N4, ATV 71HD90N4D...HC28N4D and ATV 71HC11Y...HC31Y drives, the kit includes:

- An IP 54 casing **4** used to maintain the IP 54 degree of protection for the power section
- An EMC plate **5**
- A UL Type 1 cover **7**
- A pre-drilled plate **6** for connecting the tubes **3**
- Fixing accessories
- A manual

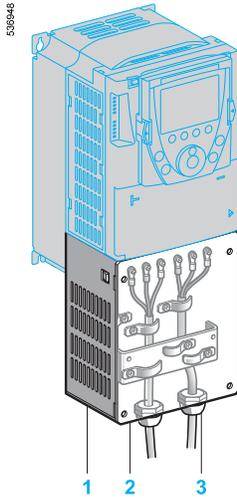
References

For drives	Reference	Weight kg
ATV 71H037M3...HU15M3 ATV 71H075N4...HU22N4 ATV 71P075N4Z...PU22N4Z	VW3 A9 201	1.300
ATV 71HU22M3...HU40M3 ATV 71HU30N4, HU40N4 ATV 71PU30N4Z, PU40N4Z	VW3 A9 202	1.500
ATV 71HU55M3 ATV 71HU55N4, HU75N4 ATV 71PU55N4Z, PU75N4Z	VW3 A9 203	1.800
ATV 71HU75M3 ATV 71HD11N4 ATV 71HU15S6X...HU75S6X	VW3 A9 204	2.000
ATV 71HD11M3X, HD15M3X ATV 71HD15N4, HD18N4	VW3 A9 205	2.800
ATV 71HD18M3X, HD22M3X ATV 71HD22N4 ATV 71HU22Y...HD30Y	VW3 A9 206	4.000
ATV 71HD30N4, HD37N4	VW3 A9 207	5.000
ATV 71HD30M3X...HD45M3X	VW3 A9 217	7.000
ATV 71HD45N4...HD75N4 ATV 71HD37Y...HD90Y	VW3 A9 208	7.200
ATV 71HD55M3X (1) ATV 71HD90N4 (1) ATV 71HD90N4D (2)	VW3 A9 209	9.400
ATV 71HD75M3X (1) ATV 71HC11N4 (1) ATV 71HC11N4D (2)	VW3 A9 210	11.800
ATV 71HC13N4 (1) ATV 71HC13N4D (2) ATV 71HC11Y...HC16Y (3)	VW3 A9 211	11.600
ATV 71HC16N4 (1) ATV 71HC16N4D (2)	VW3 A9 212	14.600
ATV 71HC20N4...HC28N4 (1) Without braking unit	VW3 A9 213	19.500
ATV 71HC20N4D...HC28N4D (2) With braking unit	VW3 A9 214	19.500
ATV 71HC20Y...HC31Y (3)		

(1) Drives supplied as standard with a DC choke.

(2) Drives supplied without DC choke.

(3) Drives supplied as standard with a transformer for the fan.



IP 21 conformity kit

IP 21 or IP 31 conformity kit (mounting outside the enclosure)

When the drive is mounted directly on a wall outside the enclosure, this kit can be used to ensure IP 21 or IP 31 degree of protection when connecting the cables with a cable gland.

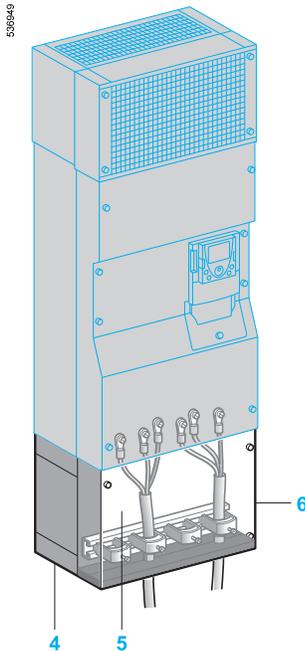
The shielding is connected inside the kit.

For ATV 71H●●●M3, ATV 71HD11M3X...HD45M3X, ATV 71H075N4...HD75N4, ATV 71P●●●N4Z, ATV 71H●●●S6X and ATV 71HU22Y...HD90Y drives, the kit conforms to IP 21 degree of protection and includes:

- All the mechanical fittings 1 including a drilled plate 2 for attaching the cable glands 3
- Fixing accessories
- A manual

For ATV 71HD55M3X, HD75M3X, ATV 71HD90N4...HC50N4 and ATV 71HC11Y...HC63Y drives, the kit conforms to IP 31 degree of protection and includes:

- An IP 54 casing 4 used to maintain the IP 54 degree of protection for the power section
- An EMC plate with cable clamps 5
- An IP 31 cover 6
- Fixing accessories
- A manual



IP 31 conformity kit

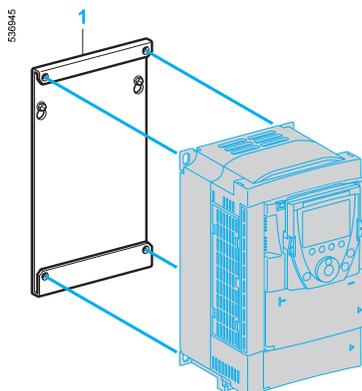
References

For drives	Degree of protection	Reference	Weight kg
ATV 71H037M3...HU15M3 ATV 71H075N4...HU22N4 ATV 71P075N4Z...PU22N4Z	IP 21	VW3 A9 101	1.300
ATV 71HU22M3...HU40M3 ATV 71HU30N4, HU40N4 ATV 71PU30N4Z, PU40N4Z	IP 21	VW3 A9 102	1.500
ATV 71HU55M3 ATV 71HU55N4, HU75N4 ATV 71PU55N4Z, PU75N4Z	IP 21	VW3 A9 103	1.800
ATV 71HU75M3 ATV 71HD11N4 ATV 71HU15S6X...HU75S6X	IP 21	VW3 A9 104	2.000
ATV 71HD11M3X, HD15M3X ATV 71HD15N4, HD18N4	IP 21	VW3 A9 105	2.800
ATV 71HD18M3X, HD22M3X ATV 71HD22N4 ATV 71HU22Y...HD30Y	IP 21	VW3 A9 106	4.000
ATV 71HD30N4, HD37N4	IP 21	VW3 A9 107	5.000
ATV 71HD30M3X...HD45M3X	IP 21	VW3 A9 117	7.000
ATV 71HD45N4...HD75N4 ATV 71HD37Y...HD90Y	IP 21	VW3 A9 108	7.000
ATV 71HD55M3X (1) ATV 71HD90N4 (1) ATV 71HD90N4D (2)	IP 31	VW3 A9 109	9.400
ATV 71HD75M3X (1) ATV 71HC11N4 (1) ATV 71HC11N4D (2)	IP 31	VW3 A9 110	11.800
ATV 71HC13N4 (1) ATV 71HC13N4D (2) ATV 71HC11Y...HC16Y (3)	IP 31	VW3 A9 111	11.600
ATV 71HC16N4 (1) ATV 71HC16N4D (2)	IP 31	VW3 A9 112	14.600
ATV 71HC20N4...HC28N4 (1) ATV 71HC20N4D...HC28N4D (2) ATV 71HC20Y...HC31Y (3)	Without braking unit IP 31 With braking unit IP 31	VW3 A9 113 VW3 A9 114	19.500 19.500
ATV 71HC31N4, HC40N4 (1) ATV 71HC31N4D, HC40N4D (2)	IP 31	VW3 A9 115	25.000
ATV 71HC50N4 (1) ATV 71HC50N4D (2) ATV 71HC40Y...HC63Y (3)	IP 31	VW3 A9 116	35.000

(1) Drives supplied as standard with a DC choke.

(2) Drives supplied without DC choke.

(3) Drives supplied as standard with a transformer for the fan.



Substitution kit VW3 A9 304

Substitution kit for Altivar 58 or Altivar 58F drives

This kit 1 is used to install an Altivar 71 drive in the place of an Altivar 58 or Altivar 58F drive using the same fixing holes. It includes the mechanical adaptors required for mounting.

High torque application (170% Tn)

Old drive	Motor Power		Replaced by	Reference	Weight
	kW	HP			
200...240 V single-phase supply voltage					
ATV 58HU09M2	0,37	0,5	ATV 71HU075M3	VW3 A9 301	—
ATV 58HU18M2	0,75	1	ATV 71HU15M3	VW3 A9 301	—
ATV 58HU29M2	1,5	2	ATV 71HU22M3	VW3 A9 303	—
ATV 58HU41M2	2,2	3	ATV 71HU30M3	VW3 A9 303	—
ATV 58HU72M2	3	—	ATV 71HU40M3	VW3 A9 304	—
ATV 58HU90M2	4	5	ATV 71HU55M3	VW3 A9 306	—
ATV 58HD12M2	5,5	7,5	ATV 71HU75M3	VW3 A9 307	—

200...240 V three-phase supply voltage

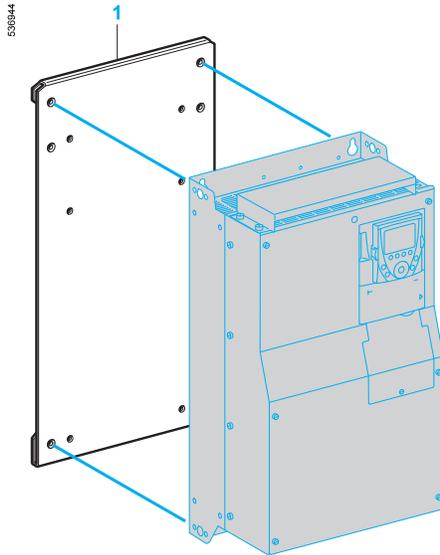
ATV 58HU29M2	1,5	2	ATV 71HU15M3	VW3 A9 302	—
ATV 58HU41M2	2,2	3	ATV 71HU22M3	VW3 A9 303	—
ATV 58HU54M2	3	—	ATV 71HU30M3	VW3 A9 304	—
ATV 58HU72M2	4	5	ATV 71HU40M3	VW3 A9 304	—
ATV 58HU90M2	5,5	7,5	ATV 71HU55M3	VW3 A9 306	—
ATV 58HD12M2	7,5	10	ATV 71HU75M3	VW3 A9 307	—
ATV 58HD16M2X	11	15	ATV 71HD11M3X	VW3 A9 309	—
ATV 58HD23M2X	15	20	ATV 71HD15M3X	VW3 A9 309	—
ATV 58HD28M2X	18,5	25	ATV 71HD18M3X	VW3 A9 312	—
ATV 58HD33M2X	22	30	ATV 71HD22M3X	VW3 A9 312	—
ATV 58HD46M2X	30	40	ATV 71HD30M3X	VW3 A9 314	—

380...480 V three-phase supply voltage

ATV 58HU18N4	0,75	1	ATV 71HU075N4	VW3 A9 302	—
ATV 58HU29N4	1,5	2	ATV 71HU15N4	VW3 A9 302	—
ATV 58HU41N4	2,2	3	ATV 71HU22N4	VW3 A9 302	—
ATV 58HU54N4	3	—	ATV 71HU30N4	VW3 A9 304	—
ATV 58HU72N4	4	5	ATV 71HU40N4	VW3 A9 304	—
ATV 58HU90N4	5,5	7,5	ATV 71HU55N4	VW3 A9 305	—
ATV 58HD12N4	7,5	10	ATV 71HU75N4	VW3 A9 306	—
ATV 58HD16N4	11	15	ATV 71HD11N4	VW3 A9 307	—
ATV 58HD23N4	15	20	ATV 71HD15N4	VW3 A9 308	—
ATV 58HD28N4	18,5	25	ATV 71HD18N4	VW3 A9 309	—
ATV 58HD33N4	22	30	ATV 71HD22N4	VW3 A9 310	—
ATV 58HD46N4	30	40	ATV 71HD30N4	VW3 A9 310	—
ATV 58HD54N4	37	50	ATV 71HD37N4	VW3 A9 312	—
ATV 58HD64N4	45	60	ATV 71HD45N4	VW3 A9 312	—
ATV 58HD79N4	55	75	ATV 71HD55N4	VW3 A9 312	—

500 V three-phase supply voltage

ATV 58HU18N4	0,75	1	ATV 71HU22Y	VW3 A9 310	—
ATV 58HU29N4	1,5	2	ATV 71HU22Y	VW3 A9 310	—
ATV 58HU41N4	2,2	3	ATV 71HU30Y	VW3 A9 310	—
ATV 58HU54N4	3	—	ATV 71HU40Y	VW3 A9 310	—
ATV 58HU72N4	4	5	ATV 71HU55Y	VW3 A9 310	—
ATV 58HU90N4	5,5	7,5	ATV 71HU75Y	VW3 A9 310	—
ATV 58HD12N4	7,5	10	ATV 71HD11Y	VW3 A9 310	—
ATV 58HD16N4	11	15	ATV 71HD15Y	VW3 A9 310	—
ATV 58HD23N4	15	20	ATV 71HD18Y	VW3 A9 310	—
ATV 58HD28N4	18,5	25	ATV 71HD22Y	VW3 A9 310	—
ATV 58HD33N4	22	30	ATV 71HD30Y	VW3 A9 310	—
ATV 58HD46N4	30	40	ATV 71HD37Y	VW3 A9 312	—
ATV 58HD54N4	37	50	ATV 71HD45Y	VW3 A9 312	—
ATV 58HD64N4	45	60	ATV 71HD55Y	VW3 A9 312	—
ATV 58HD79N4	55	75	ATV 71HD75Y	VW3 A9 312	—



Substitution kit VW3 A9 312

Substitution kit for Altivar 58 or Altivar 58F drives (continued)

Standard torque application (120% Tn)

Old drive	Motor Power		Replaced by	Reference	Weight kg
	kW	HP			
200...240 V three-phase supply voltage					
ATV 58HD16M2X	15	20	ATV 71HD15M3X	VW3 A9 309	—
ATV 58HD23M2X	18,5	25	ATV 71HD18M3X	VW3 A9 310	—
ATV 58HD28M2X	22	30	ATV 71HD22M3X	VW3 A9 312	—
ATV 58HD33M2X	30	40	ATV 71HD30M3X	VW3 A9 312	—
ATV 58HD46M2X	37	50	ATV 71HD37M3X	VW3 A9 312	—

380...480 V three-phase supply voltage

ATV 58HD28N4	22	30	ATV 71HD22N4	VW3 A9 310	—
ATV 58HD33N4	30	40	ATV 71HD30N4	VW3 A9 310	—
ATV 58HD46N4	37	50	ATV 71HD37N4	VW3 A9 310	—
ATV 58HD54N4	45	60	ATV 71HD45N4	VW3 A9 312	—
ATV 58HD64N4	55	75	ATV 71HD55N4	VW3 A9 312	—
ATV 58HD79N4	75	100	ATV 71HD75N4	VW3 A9 312	—

500 V three-phase supply voltage

ATV 58HD28N4	22	30	ATV 71HD30Y	VW3 A9 310	—
ATV 58HD33N4	30	40	ATV 71HD37Y	VW3 A9 312	—
ATV 58HD46N4	37	50	ATV 71HD45Y	VW3 A9 312	—
ATV 58HD54N4	45	60	ATV 71HD55Y	VW3 A9 312	—
ATV 58HD64N4	55	75	ATV 71HD75Y	VW3 A9 312	—
ATV 58HD79N4	75	100	ATV 71HD90Y	VW3 A9 312	—



Remote graphic display terminal

Remote graphic display terminal (this display terminal can be supplied with the drive or ordered separately)

This display terminal is attached to the front of the drive. It includes the integrated terminal for drives ordered without a graphic display terminal (see page 22).
It can be:

- Used remotely in conjunction with the appropriate accessories (see below)
- Connected to several drives using multidrop link components (see page 33)

It is used to:

- Control, adjust and configure the drive
- Display the current values (motor, input/output values, etc.)
- Save and download configurations; 4 configuration files can be saved.

The maximum operating temperature of the terminal is 60°C and it has IP 54 protection.

Description

- 1 Graphic display unit:
 - 8 lines, 240 x 160 pixels
 - large digit display that can be read from 5 m away
 - bar chart display
- 2 Assignable function keys F1, F2, F3, F4:
 - dialogue functions: direct access, help screens, navigation
 - application functions: Local/Remote, preset speed
- 3 STOP/RESET key: local control of motor stopping/fault clearing
- 4 RUN key: Local control of motor operation
- 5 Navigation button:
 - Press: Saves the current value (ENT)
 - Turn ±: Increases or decreases the value, or goes to the next or previous line
- 6 FWD/REV key: Reverses the direction of rotation of the motor
- 7 ESC key: Aborts a value, a parameter or a menu to return to the previous selection

Note: Keys 3, 4 and 6 can be used to control the drive directly.

Reference

Description	Item no.	Reference	Weight kg
Remote graphic display terminal	1	VW3 A1 101	0.180

Remote graphic display terminal accessories

The following accessories are available:

- A remote mounting kit 2 for mounting on an enclosure door with IP 54 degree of protection, including:
 - All the mechanical fittings
 - Fixing accessories
- A transparent door 3 which attaches to the remote mounting mechanism to achieve IP 65 degree of protection
- A preassembled cordset 4 with two RJ45 connectors for connecting the graphic display terminal to the Altivar 71 drive (1, 3, 5 or 10 metres long)
- A female/female RJ45 adaptor 5 for connecting the graphic display terminal VW3 A1 101 to the remote-mounting cordset VW3 A1 104 R●●●



Remote graphic display terminal accessories

References

Description	Item no.	Length m	Degree of protection	Reference	Weight kg
Remote mounting kit Order with remote-mounting cordset VW3 A1 104 R●●●	2	–	IP 54	VW3 A1 102	0.150
Door for remote mounting kit	3	–	IP 65	VW3 A1 103	0.040
Preassembled remote-mounting cordsets with 2 x RJ45 connectors	4	1	–	VW3 A1 104 R10	0.050
	4	3	–	VW3 A1 104 R30	0.150
	4	5	–	VW3 A1 104 R50	0.250
	4	10	–	VW3 A1 104 R100	0.500
Female/female RJ45 adaptor	5	–	–	VW3 A1 105	0.010



Configuration with SoMove Mobile software for mobile phones via Bluetooth®



SoMove setup software with Modbus-Bluetooth® adaptor for PC

SoMove Mobile software for mobile phones (1)

SoMove Mobile software converts any compatible mobile phone (1) into a remote graphic display terminal, offering an identical Human-Machine Interface.

Particularly suitable for on-site or remote maintenance operations, SoMove Mobile software can be used to print out and save configurations, import them from a PC and export them to a PC or a drive equipped with the Modbus-Bluetooth® adaptor (TCSW AAC13FB) via the Bluetooth® wireless link.

SoMove Mobile software and drive configuration files can be downloaded from our website www.schneider-electric.com.

Reference	For drives	Reference	Weight kg
SoMove Mobile software for mobile phones (1)	ATV 71●●●●●●	-	-

SoMove setup software

Presentation

SoMove setup software for PC is used to configure, adjust and debug using the Oscilloscope function, as well as for maintenance, like all Schneider Electric drives and starters.

The software can use a direct USB/RJ45 cable link or communicate via a Bluetooth® wireless link with the drive equipped with the Modbus-Bluetooth® adaptor (TCSW AAC13FB).

It is compatible with Altivar 71 drives from software version 1.6 upwards.

For presentation, description and references, see page 36.

(1) SoMove Mobile software requires a mobile phone with minimum features; please consult our website www.schneider-electric.com.



Configuration with the Multi-Loader tool connected to the Altivar 71 drive

Simple Loader configuration tool

The Simple Loader tool enables one powered-up drive's configuration to be duplicated on another powered-up drive. It is connected to the drive's RJ45 communication port.

Reference

Description	For drives	Reference	Weight kg
Simple Loader configuration tool The tool is supplied with a preassembled cordset with 2 RJ45 connectors.	ATV 71●●●●●●	VW3 A8 120	—

Multi-Loader configuration tool

The Multi-Loader tool enables a number of configurations from a PC or drive to be copied and duplicated on another drive; the Altivar 71 drives do not need to be powered up.

Reference

Description	For drives	Reference	Weight kg
Multi-Loader configuration tool Includes: - 1 preassembled cordset with 2 RJ45 connectors - 1 preassembled cordset with a USB type A connector and a USB Mini-B type connector - 1 x SD memory card - 1 x female/female RJ45 adaptor - 4 AA/LR6 1.5 V batteries - 1 anti-shock protection - 1 carrying handle	ATV 71●●●●●●	VW3 A8 121	—



SoMove start page

Presentation

SoMove is user-friendly setup software for PC designed for configuring the following Schneider Electric motor control devices:

- ATV 12, ATV 312, ATV 31, ATV 32, ATV 61 and ATV 71 drives
- ATS 22 starters
- TeSys U starter-controllers
- TeSys T motor management system
- Lexium 32 servo drives

SoMove software incorporates various functions for the device setup phases, such as:

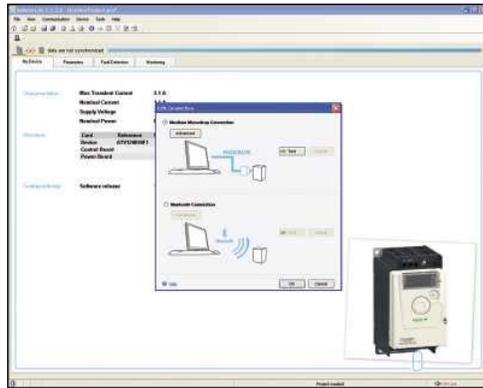
- Configuration preparation
- Start-up
- Maintenance

To facilitate setup and maintenance, SoMove software can use a direct USB/RJ45 cable link or a Bluetooth® wireless link.

SoMove software is also compatible with the Multi-Loader configuration tool and SoMove Mobile software for mobile phones.

These tools can save a significant amount of time when loading, duplicating or editing configurations on a device.

SoMove software and all the DTMs (Device Type Managers) associated with the devices can be downloaded from our website www.schneider-electric.com.



Example of connecting SoMove software to an ATV 12 drive

Functions

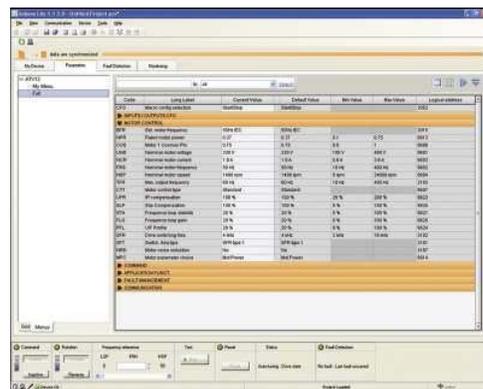
Configuration preparation in disconnected mode

SoMove software has a genuine disconnected mode which provides access to all the device parameters. This mode can be used to generate the device configuration. The configuration can be saved, printed and exported to office automation software.

SoMove software also checks the consistency of the parameters, validating the configurations created in disconnected mode.

A large number of functions are available in disconnected mode, in particular:

- The device configuration software wizard
- The configuration comparison function
- Saving, copying, printing and creating configuration files for export to Multi-Loader, SoMove Mobile or Microsoft Excel® tools, and sending configurations by e-mail



SoMove control panel

Setup

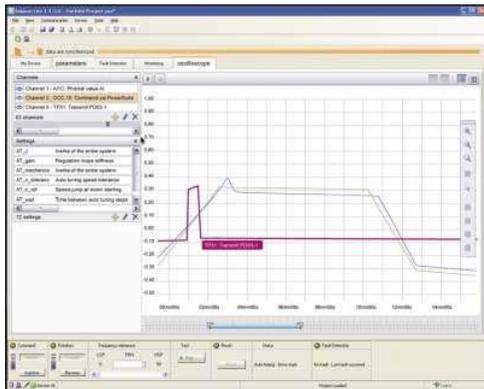
When the PC is connected to the device, SoMove software can be used for:

- Transferring the generated configuration onto the device
- Adjustment and monitoring, which includes such functions as:
 - The oscilloscope
 - Display of communication parameters
- Easy control via the control panel user interface
- Saving the final configuration

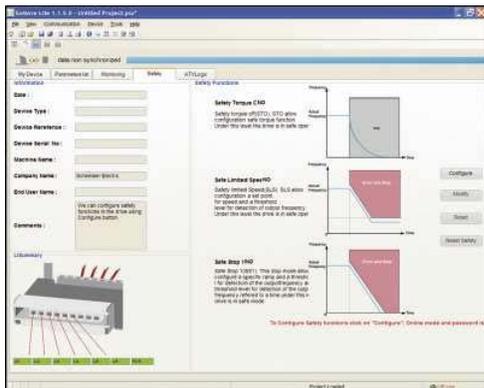
Maintenance

In order to simplify maintenance operations, SoMove software can be used to:

- Compare the configuration of a device currently being used with a configuration saved on the PC
- Transfer a configuration to a device
- Compare oscilloscope curves
- Save oscilloscope curves and faults



SoMove oscilloscope function



SoMove Safety function

Functions (continued)

User interface

SoMove software provides fast, direct access to all information on the device via five tabs:

- **My Device:** Displays all the device information (type, reference, software versions, option cards, etc.)
- **Parameters:** Displays all the device adjustment parameters, shown in a table or in the form of diagrams
- **Faults:** Displays a list of the faults that may be encountered with the device, the fault log and any current faults or alarms
- **Monitoring:** Provides a realtime display of the device status, its I/O and all the monitoring parameters. It is possible to create your own control panel by selecting your parameters and how they are to be represented.
- **Oscilloscope:** Provides a high-speed oscilloscope (for recording traces in the device) or low-speed oscilloscope (for recording traces in the software for devices that do not have an integrated oscilloscope)

SoMove's user interface automatically adapts to the specific configured device by offering additional tabs:

- **Safety:** For configuring the Safety functions on ATV 32 variable speed drives and Lexium 32 servo drives. It can also be used to:
 - Display the I/O
 - Compile and print a report
- **ATVLogic:** For accessing the ATV 32 drive's programmable function blocks. It can also be used to:
 - Develop a program and transfer it to the drive
 - Display and debug the program already on the drive
- **Auto-tuning:** For accessing the servo control settings for the three different operating modes of the Lexium 32 servo drive's auto-tuning function:
 - Automatic mode for quick setup, designed for simple applications
 - Semi-automatic mode for quick setup, with the option of optimizing the servo drive/servo motor combination (access to the mechanical and dynamic behaviour parameters)
 - Expert mode for optimizing the adjustment parameters, designed for complex applications

Connections

Modbus serial link

The PC running SoMove software can be connected directly via the RJ45 connector on the device and the USB port on the PC using the USB/RJ45 cable.

See the product references on page 38.

Bluetooth® wireless link

SoMove software can communicate via Bluetooth® wireless link with any Bluetooth® enabled device.

If the device is not Bluetooth® enabled, use the Modbus-Bluetooth® adaptor. This adaptor is connected to the terminal port or the Modbus network port on the device. It has a 20 m range (class 2).

If the PC does not have Bluetooth® technology, use the USB-Bluetooth® adaptor.

See the product references on page 38.



SoMove setup software

PF100886C

TCSWAAC13FB:
Bluetooth® adaptor

References

Description	Reference	Weight kg
SoMove Lite setup software Includes: ■ SoMove setup software for PC in English, French, German, Italian, Spanish and Chinese ■ DTMs (Device Type Managers) and technical documentation for variable speed drives, starters and servo motors	(1)	–
USB/RJ45 cable Used to connect a PC to the device. This cable is 2.5 m long and has a USB connector (PC end) and an RJ45 connector (device end).	TCSM CNAM 3M002P	–
Modbus/Uni-Telway-Bluetooth® adaptor Used to enable any non-Bluetooth® device to communicate via Bluetooth® wireless link (2). Includes: ■ 1 Bluetooth® adaptor (range 20 m, class 2) with an RJ45 connector ■ For SoMove: 1 x 0.1 m cordset with 2 x RJ45 connectors ■ For TwidoSuite: 1 x 0.1 m cordset with 1 RJ45 connector and 1 mini DIN connector	TCSW AAC13FB	0.032
USB-Bluetooth® adaptor for PC Used to enable any non-Bluetooth® PC to communicate via Bluetooth® wireless link (3). It connects to a USB port on the PC. Range 10 m, class 2	VW3 A8 115	0.290

(1) Available on our website www.schneider-electric.com.

(2) Required for the following devices:

- ATV 12, ATV 312, ATV 31, ATV 61 and ATV 71 drives
- ATS 22 starters
- TeSys U starter-controllers
- TeSys T motor management system
- Lexium 32 servo drives

(3) Check the manufacturer's specification.