



Short-Circuit Current Ratings (SCCR) and branch circuit protection

The combinations in the tables have been tested per UL508C (Reference UL file E116875).

These ratings are in addition to ratings on the nameplate of the product.

The values for the overcurrent protection devices are the maximum allowable amp size. Smaller amp ratings may be used.

Integral solid state short circuit protection does not provide branch circuit protection. Branch circuit protection must be provided in accordance with the National Electrical Code and any additional local codes.

The devices are provided with software integral overload and over speed protection for the motor. Protection at 110% of the full load motor current. The motor thermal protection current (Ith) must be set to the rated current indicated on the motor nameplate. (For detail see the programming manual).

75°C (167 °F) copper conductor with the AWG wire size for all products, except ATV61HC16N4● to ATV61HC63N4●, ATV61HC11Y to ATV61HC80Y: 60°C (140°F) / 75°C (167 °F) copper conductor with the AWG wire size.

Suitable for use on a circuit capable of delivering not more than ___X___ rms symmetrical kiloAmperes, ___Y___ Volts maximum, when protected by ___Z1___ with a maximum rating of ___Z2___.

Altivar 61								Short Circuit Current Ratings ²													
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
								PowerPact ⁵ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E ⁶ Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Single-phase Input, without line reactor																					
200/240V Single-phase	0.5	0.37	3	ATV61H075M3	5	-	-	HJL36015	5	4017	-	-	-	5	1600	15 ⁷	5	1078	15 ⁷	5	1078
	1	0.75	4.8	ATV61HU15M3	5	-	-	HJL36025	5	4017	GV2P14	240	1	5	1600	25 ⁷	5	1078	25 ⁷	5	1078
	2	1.5	8	ATV61HU22M3	5	-	-	HJL36040	5	4017	GV3P18	240	3	5	4017	40 ⁷	5	1550	25 ⁷	5	1550
	3	2.2	11	ATV61HU30M3	5	-	-	HJL36040	5	4017	GV3P18	240	3	5	1920	40 ⁷	5	1550	40 ⁷	5	1550
	5	4	17.5	ATV61HU75M3	5	-	-	HJL36110	5	6528	GV3P50	240	7.5	5	4032	110 ⁷	5	2719	70 ⁷	5	2719
	7.5	6	27.5	ATV61HD15M3X	5	-	-	JJL36175	5	6528	GV3P65	240	10	5	5760	175 ⁷	5	4036	110 ⁷	5	4036
	10	8	33	ATV61HD18M3X	5	-	-	JJL36200	5	13215	-	-	-	-	-	200 ⁷	5	4900	125 ⁷	5	4900
	15	11	54	ATV61HD30M3X	5	-	-	JJL36250	5	13215	-	-	-	-	-	250 ⁷	5	9640	200 ⁷	5	9640
	20	15	66	ATV61HD37M3X	5	-	-	JJL36250	5	13215	-	-	-	-	-	250 ⁷	5	9640	225 ⁷	5	9640
25	18	75	ATV61HD45M3X	10	-	-	-	-	-	-	-	-	-	-	300 ⁷	10	9640	300 ⁷	10	9640	
Single-phase Input, with line reactor																					
200/240V Single-phase	-	3	13.7	ATV61HU40M3	5	1	RL02502	HJL36060	5	6528	GV3P25	240	3	5	1920	60 ⁷	5	1550	45 ⁷	5	1550
	5	4	17.5	ATV61HU55M3	5	0.8	RL03502	HJL36070	5	6528	GV3P40	240	5	5	2880	70 ⁷	5	1987	60 ⁷	5	1987
	7.5	6	27.5	ATV61HU75M3	22	0.5	RL05502	HJL36110	22	6528	GV3P50	240	7.5	22	4032	110 ⁷	22	2719	70 ⁷	22	2719
	10	8	33	ATV61HD15M3X	22	0.4	RL08002	JJL36175	22	6528	GV3P65	240	10	22	5760	175 ⁷	22	4036	110 ⁷	22	4036
	15	11	54	ATV61HD22M3X	22	0.3	RL10002	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	4900	150 ⁷	22	4900
	20	15	66	ATV61HD30M3X	22	0.2	RL13002	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	9640	200 ⁷	22	9640
	25	18	75	ATV61HD37M3X	22	0.15	RL16002	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	9640	225 ⁷	22	9640
30	22	88	ATV61HD45M3X	22	0.185	RL20003B14	-	-	8640	-	-	-	-	-	300 ⁷	22	9640	300 ⁷	22	9640	

Footnotes are on page 5.

Altivar 61								Short Circuit Current Ratings ²													
								with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	PowerPact ⁵ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E ⁶ Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Three-phase Input, without line reactor																					
200/240V Three-phase	1	0.75	4.8	ATV61H075M3	5	-	-	HJL36015	5	4017	GV2P10	240	1.5	5	1600	15 ⁷	5	4017	15 ⁷	5	1078
	2	1.5	8	ATV61HU15M3	5	-	-	HJL36025	5	4017	GV2P14	240	3	5	1600	25 ⁷	5	4017	25 ⁷	5	1078
	3	2.2	11	ATV61HU22M3	5	-	-	HJL36040	5	4017	GV3P18	240	5	5	1920	40 ⁷	5	4017	25 ⁷	5	1550
	-	3	13.7	ATV61HU30M3	5	-	-	HJL36040	5	4017	GV3P18	240	3/5	5	1920	40 ⁷	5	4017	40 ⁷	5	1550
	5	4	17.5	ATV61HU40M3	5	-	-	HJL36060	5	6528	GV3P25	240	7.5	5	1920	60 ⁷	5	6528	45 ⁷	5	1550
	7.5	6	27.5	ATV61HU55M3	22	-	-	HJL36070	22	6528	GV3P40	240	10	5	2880	70 ⁷	22	6528	60 ⁷	5	1987
	10	8	33	ATV61HU75M3	22	-	-	HJL36110	22	6528	GV3P50	240	10	5	4032	110 ⁷	22	6528	70 ⁷	5	2719
	15	11	54	ATV61HD11M3X	22	-	-	HJL36125	22	6528	GV3P50	240	10	5	5760	125 ⁷	22	6528	90 ⁷	5	4036
	20	15	66	ATV61HD15M3X	22	-	-	JJL36175	22	6528	GV3P65	240	15	5	5760	175 ⁷	22	6528	110 ⁷	5	4036
	25	18	75	ATV61HD18M3X	22	-	-	JJL36200	22	13215	-	-	-	-	-	200 ⁷	22	13215	125 ⁷	5	4900
	30	22	88	ATV61HD22M3X	22	-	-	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	13215	150 ⁷	5	4900
	40	30	120	ATV61HD30M3X	22	-	-	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	13215	200 ⁷	5	9640
50	37	144	ATV61HD37M3X	22	-	-	JJL36250	22	13215	-	-	-	-	-	250 ⁷	22	13215	225 ⁷	5	9640	
60	45	176	ATV61HD45M3X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	300 ⁷	10	9640	
380/480V Three-phase	1	0.75	2.3	ATV61H075N4	5	-	-	HLL36015	5	4017	GV2P08	480Y/277	2	5	1600	15 ^B	5	4017	6 ^B	5	1078
	2	1.50	4.1	ATV61HU15N4	5	-	-	HLL36015	5	4017	GV2P10	480Y/277	4	5	1600	15 ^B	5	4017	12 ^B	5	1078
	3	2.20	5.8	ATV61HU22N4	5	-	-	HLL36015	5	4017	GV2P14	480Y/277	5	5	1600	15 ⁷	5	4017	15 ⁷	5	1078
	-	3	7.8	ATV61HU30N4	5	-	-	HLL36015	5	4017	GV2P14	480Y/277	5	5	1920	15 ⁷	5	4017	17.5 ⁷	5	1550
	5	4	10.5	ATV61HU40N4	5	-	-	HLL36025	5	4017	GV3P13	480Y/277	7.5	5	1920	25 ⁷	5	4017	25 ⁷	5	1550
	7.5	5.5	14.3	ATV61HU55N4	22	-	-	HLL36035	22	6528	GV3P25	480Y/277	15	5	2880	35 ⁷	22	6528	40 ⁷	5	1987
	10	7.5	17.6	ATV61HU75N4	22	-	-	HLL36050	22	6528	GV3P25	480Y/277	15	5	2880	50 ⁷	22	6528	40 ⁷	5	1987
	15	11	27.7	ATV61HD11N4	22	-	-	HLL36060	22	6528	GV3P40	480Y/277	25	5	4032	60 ⁷	22	6528	60 ⁷	5	2719
	20	15	33	ATV61HD15N4	22	-	-	HLL36080	22	6528	GV3P50	480Y/277	30	5	5760	80 ⁷	22	6528	70 ⁷	5	4036
	25	18	41	ATV61HD18N4	22	-	-	HLL36100	22	6528	GV3P50	480Y/277	30	5	8640	100 ⁷	22	6528	70 ⁷	5	4036
	30	22	48	ATV61HD22N4	22	-	-	HLL36125	22	6528	GV3P50	480Y/277	30	5	8640	125 ⁷	22	6528	80 ⁷	5	4900
	40	30	66	ATV61HD30N4	22	-	-	HLL36150	22	6528	GV3P65	480Y/277	40	5	10368	150 ⁷	22	6528	90 ⁷	5	7230
	50	37	79	ATV61HD37N4	22	-	-	JLL36175	22	13215	-	-	-	-	-	175 ⁷	22	13215	110 ⁷	5	7230
	60	45	94	ATV61HD45N4	22	-	-	JLL36225	22	13215	-	-	-	-	-	225 ⁷	22	13215	150 ⁷	10	12044
	75	55	116	ATV61HD55N4	22	-	-	JLL36250	22	13215	-	-	-	-	-	250 ⁷	22	13215	175 ⁷	10	12044
	100	75	160	ATV61HD75N4	22	-	-	JLL36250	22	38250	-	-	-	-	-	250 ⁷	22	38250	225 ⁷	10	12044
100	75	160	ATV61HD75N4	22	-	-	KCL34250	22	38250	-	-	-	-	-	250 ⁷	22	38250	225 ⁷	10	12044	

Footnotes are on page 5.

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								with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	PowerPact ⁵ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E ⁶ Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Three-phase Input, without line reactor																					
575V Three-phase	3	2.2	3.9	ATV61HU22S6X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	6 ⁷	22	3898
	-	3	5.8	ATV61HU30S6X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	6 ⁷	22	3898
	5	4	6.1	ATV61HU40S6X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	10 ⁷	22	3898
	7.5	5.5	9	ATV61HU55S6X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	15 ⁷	22	3898
	10	7.5	11	ATV61HU75S6X	22	-	-	-	-	-	-	-	-	-	-	-	-	-	20 ⁷	22	3898
500/600V Three-phase	3	2.2	3.9	ATV61HU30Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	10 ⁷	22	8640
	-	3	5.8	ATV61HU40Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	10 ⁷	22	8640
	5	4	6.1	ATV61HU55Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	15 ⁷	22	8640
	7.5	5.5	9	ATV61HU75Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	20 ⁷	22	8640
	10	7.5	11	ATV61HD11Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	25 ⁷	22	8640
	15	11	17	ATV61HD15Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	35 ⁷	22	8640
	20	15	22	ATV61HD18Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	45 ⁷	22	8640
	25	18.5	27	ATV61HD22Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	60 ⁷	22	8640
	30	22	32	ATV61HD30Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	60 ⁷	22	8640
	40	30	41	ATV61HD37Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	90 ⁷	22	9792
	50	37	52	ATV61HD45Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	100 ⁷	22	9792
	60	45	62	ATV61HD55Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	125 ⁷	22	9792
	75	55	77	ATV61HD75Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	150 ⁷	22	9792
100	75	99	ATV61HD90Y	22	-	-	-	-	-	-	-	-	-	-	-	-	-	175 ⁷	22	9792	
Three-phase Input, with line reactor																					
200/240V Three-phase	1	0.75	4.8	ATV61HO75M3	5	3.00	RL00401	HJL36015	100	4017	GV2P10	240	1.5	65	1600	15 ⁷	100	4017	15 ⁷	5	1078
	2	1.5	8	ATV61HU15M3	5	1.50	RL00801	HJL36025	100	4017	GV2P14	240	3	65	1600	25 ⁷	100	4017	25 ⁷	5	1078
	3	2.2	11	ATV61HU22M3	5	1.25	RL01201	HJL36040	100	4017	GV3P18	240	5	65	1920	40 ⁷	100	4017	25 ⁷	5	1550
	-	3	13.7	ATV61HU30M3	5	0.80	RL01801	HJL36040	100	4017	GV3P18	240	5	65	1920	40 ⁷	100	4017	40 ⁷	5	1550
	5	4	17.5	ATV61HU40M3	5	0.80	RL01801	HJL36060	100	6528	GV3P25	240	7.5	65	1920	60 ⁷	100	6528	45 ⁷	5	1550
	7.5	6	27.5	ATV61HU55M3	22	0.50	RL02501	HJL36070	100	6528	GV3P40	240	10	65	2880	70 ⁷	100	6528	60 ⁷	5	1987
	10	8	33	ATV61HU75M3	22	0.40	RL03501	HJL36110	100	6528	GV3P50	240	10	65	4032	110 ⁷	100	6528	70 ⁷	5	2719
	15	11	54	ATV61HD11M3X	22	0.30	RL04501	HJL36125	100	6528	GV3P50	240	10	65	5760	125 ⁷	100	6528	90 ⁷	5	4036
	20	15	66	ATV61HD15M3X	22	0.25	RL05501	JJL36175	100	6528	GV3P65	240	15	65	5760	175 ⁷	100	6528	110 ⁷	5	4036
	25	18	75	ATV61HD18M3X	22	0.20	RL08001	JJL36200	100	13215	-	-	-	-	-	200 ⁷	100	13215	125 ⁷	5	4900
	30	22	88	ATV61HD22M3X	22	0.15	RL10001	JJL36250	100	13215	-	-	-	-	-	250 ⁷	100	13215	150 ⁷	5	4900
	40	30	120	ATV61HD30M3X	22	0.10	RL13001	JJL36250	100	13215	-	-	-	-	-	250 ⁷	100	13215	200 ⁷	5	9640
	50	37	144	ATV61HD37M3X	22	0.075	RL16001	JJL36250	100	13215	-	-	-	-	-	250 ⁷	100	13215	225 ⁷	5	9640
	60	45	176	ATV61HD45M3X	22	0.055	RL20001	LAL36400	22	8640	-	-	-	-	-	400 ⁷	22	8640	300 ⁷	10	9640

Footnotes are on page 5.

Altivar 61								Short Circuit Current Ratings ²													
								with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	PowerPact ⁵ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E ⁶ Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Three-phase Input, with line reactor																					
380/480V Three-phase	1	0.75	2.3	ATV61H075N4	5	12	RL00201	HLL36015	100	4017	GV2P08	480Y/277	2	65	1600	15 ^B	100	4017	6 ^B	100	1078
	2	1.50	4.1	ATV61HU15N4	5	6.5	RL00402	HLL36015	100	4017	GV2P10	480Y/277	4	65	1600	15 ^B	100	4017	12 ^B	100	1078
	3	2.20	5.8	ATV61HU22N4	5	6.5	RL00402	HLL36015	100	4017	GV2P14	480Y/277	5	65	1600	15 ⁷	100	4017	15 ⁷	100	1078
	-	3	7.8	ATV61HU30N4	5	3	RL00802	HLL36015	100	4017	GV2P14	480Y/277	5	65	1920	15 ⁷	100	4017	17.5 ⁷	100	1550
	5	4	10.5	ATV61HU40N4	5	3	RL00802	HLL36025	100	4017	GV3P13	480Y/277	7.5	65	1920	25 ⁷	100	4017	25 ⁷	100	1550
	7.5	5.5	14.3	ATV61HU55N4	22	2.5	RL01202	HLL36035	100	6528	GV3P25	480Y/277	15	65	2880	35 ⁷	100	6528	40 ⁷	100	1987
	10	7.5	17.6	ATV61HU75N4	22	1.5	RL01802	HLL36050	100	6528	GV3P25	480Y/277	15	65	2880	50 ⁷	100	6528	40 ⁷	100	1987
	15	11	27.7	ATV61HD11N4	22	1.2	RL02502	HLL36060	100	6528	GV3P40	480Y/277	25	65	4032	60 ⁷	100	6528	-	-	-
	20	15	33	ATV61HD15N4	22	0.8	RL03502	HLL36080	100	6528	GV3P50	480Y/277	30	65	5760	80 ⁷	100	6528	70 ⁷	100	4036
	25	18	41	ATV61HD18N4	22	0.8	RL03502	HLL36100	100	6528	GV3P50	480Y/277	30	65	8640	100 ⁷	100	6528	70 ⁷	100	4036
	30	22	48	ATV61HD22N4	22	0.7	RL04502	HLL36125	100	6528	GV3P50	480Y/277	30	65	8640	125 ⁷	100	6528	80 ⁷	100	4900
	40	30	66	ATV61HD30N4	22	0.5	RL05502	HLL36150	100	6528	GV3P65	480Y/277	40	65	10368	150 ⁷	100	6528	90 ⁷	100	7230
	50	37	79	ATV61HD37N4	22	0.4	RL08002	JLL36175	100	13215	-	-	-	-	-	175 ⁷	100	13215	110 ⁷	100	7230
	60	45	94	ATV61HD45N4	22	0.4	RL08002	JLL36225	100	13215	-	-	-	-	-	225 ⁷	100	13215	150 ⁷	100	12044
	75	55	116	ATV61HD55N4	22	0.3	RL10002	JLL36250	100	13215	-	-	-	-	-	250 ⁷	100	13215	175 ⁷	100	12044
100	75	160	ATV61HD75N4	22	0.2	RL13002	JLL36250	100	38250	-	-	-	-	-	250 ⁷	100	38250	225 ⁷	100	12044	
100	75	160	ATV61HD75N4	22	0.2	RL13002	KCL34250	100	38250	-	-	-	-	-	250 ⁷	100	38250	225 ⁷	100	12044	
575V Three-phase	3	2.2	3.9	ATV61HU22S6X	22	9.0	RL00403	HLL36015	50	3898	-	-	-	-	-	6 ⁷	100	3898	6 ⁷	22	3898
	-	3	5.8	ATV61HU30S6X	22	9.0	RL00403	HLL36015	50	3898	-	-	-	-	-	6 ⁷	100	3898	6 ⁷	22	3898
	5	4	6.1	ATV61HU40S6X	22	5.0	RL00803	HLL36015	50	3898	-	-	-	-	-	10 ⁷	100	3898	10 ⁷	22	3898
	7.5	5.5	9	ATV61HU55S6X	22	3	RL01203	HLL36020	50	3898	-	-	-	-	-	15 ⁷	100	3898	15 ⁷	22	3898
	10	7.5	11	ATV61HU75S6X	22	2.5	RL01203	HLL36025	50	3898	-	-	-	-	-	20 ⁷	100	3898	20 ⁷	22	3898
500/600V Three-phase	3	2.2	3.9	ATV61HU30Y	22	9.0	RL00403	-	-	-	-	-	-	-	-	10 ⁷	100	8640	10 ⁷	100	8640
	-	3	5.8	ATV61HU40Y	22	5.0	RL00803	-	-	-	-	-	-	-	-	10 ⁷	100	8640	10 ⁷	100	8640
	5	4	6.1	ATV61HU55Y	22	5.0	RL00803	-	-	-	-	-	-	-	-	15 ⁷	100	8640	15 ⁷	100	8640
	7.5	5.5	9	ATV61HU75Y	22	3	RL00802	-	-	-	-	-	-	-	-	20 ⁷	100	8640	20 ⁷	100	8640
	10	7.5	11	ATV61HD11Y	22	2.5	RL01202	-	-	-	-	-	-	-	-	25 ⁷	100	8640	25 ⁷	100	8640
	15	11	17	ATV61HD15Y	22	1.5	RL01802	-	-	-	-	-	-	-	-	35 ⁷	100	8640	35 ⁷	100	8640
	20	15	22	ATV61HD18Y	22	1.2	RL02502	-	-	-	-	-	-	-	-	45 ⁷	100	8640	45 ⁷	100	8640
	25	18.5	27	ATV61HD22Y	22	1.2	RL02502	-	-	-	-	-	-	-	-	60 ⁷	100	8640	60 ⁷	100	8640
	30	22	32	ATV61HD30Y	22	0.8	RL03502	-	-	-	-	-	-	-	-	60 ⁷	100	8640	60 ⁷	100	8640
	40	30	41	ATV61HD37Y	22	0.7	RL04502	-	-	-	-	-	-	-	-	90 ⁷	100	9792	90 ⁷	100	9792
	50	37	52	ATV61HD45Y	22	0.5	RL05502	-	-	-	-	-	-	-	-	100 ⁷	100	9792	100 ⁷	100	9792
	60	45	62	ATV61HD55Y	22	0.4	RL08002	-	-	-	-	-	-	-	-	125 ⁷	100	9792	125 ⁷	100	9792
	75	55	77	ATV61HD75Y	22	0.4	RL08002	-	-	-	-	-	-	-	-	150 ⁷	100	9792	150 ⁷	100	9792
100	75	99	ATV61HD90Y	22	0.3	RL10002	-	-	-	-	-	-	-	-	175 ⁷	100	9792	175 ⁷	100	9792	

Footnotes are on page 5.

1. This column shows the maximum prospective short circuit current value that cannot be exceeded without adding input impedance. Electrical distribution systems with a higher prospective short circuit current will cause higher input currents in the front end of the drive. It is possible for the tested SCCR rating of the drive to be lower than this input rating. The tested SCCR rating can be higher than this input rating when a line reactor is used.
2. An ATV61 output short circuit test was performed for 100 kA. In addition to providing a rating based on shorting the output of the drive, these short circuit ratings have been obtained by shorting components internal to the Altivar 61. These ratings allow proper coordination of short circuit protection. The integral solid state short circuit protection in the drive does not provide branch circuit protection. Branch circuit protection must be provided in accordance with the National Electrical Code and any local codes. The listed line reactor or minimum impedance is required to obtain ratings above the Input Rating.
3. Ratings apply to an Altivar 61 mounted in a non-ventilated Type 1, 3R, 4(X) or 12 rated enclosure. Use noted ratings when using a Type 1 conduit kit. Minimum enclosure volume allows for the specified SCCR. Your application specific thermal requirements may require a larger enclosure.
4. The fuse ratings in this column are for an Altivar 61 drive installed with a VW3A92 Type 1 conduit kit. These fuse ratings in this column can also apply to Altivar 61 drive installed in a Type 1, 3R, 4(X) or 12 rated enclosure that has a minimum volume listed in the table.
5. Circuit breakers with lower interrupt ratings can be used within the same circuit breaker frame rating. For 200 / 240 Vac, replace with HGL or JGL for 65kA interrupt rating. For 380 / 480 Vac, replace with HGL or JGL for 35kA or HJL or JLL for 65kA interrupt rating. For 500 / 600 Vac, replace with HJL for 25kA or HGL for 18kA, or HDL for 14kA interrupt rating.
6. 480 V ratings are for Wye connected electrical distribution systems only.
GV2P self protected manual combination starter must be used with GV2GH7 insulating barrier to meet UL 508 Type E rating
GV3P self protected manual combination starter must be used with GV3G66 + GVAM11 insulating barrier to meet UL 508 Type E rating
7. Use fast acting fuse or time delay Class J
8. Fuse type Class CC

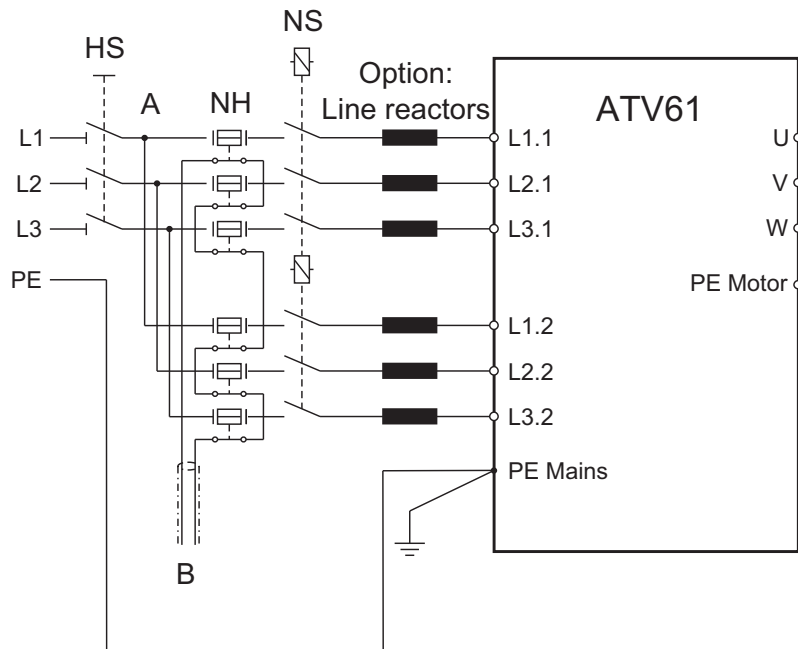
Altivar 61								Short Circuit Current Ratings ²													
								with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	PowerPact ⁹ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Three-phase Input, without line reactor																					
200/240V Three-phase	75	55	221	ATV61HD55M3X	35	-	-	-	-	-	-	-	-	-	-	350 ⁶	10	22749	350 ⁶	10	22749
	100	75	285	ATV61HD75M3X	35	-	-	-	-	-	-	-	-	-	-	350 ⁶	10	22749	350 ⁶	10	22749
	125	90	359	ATV61HD90M3X	35	-	-	-	-	-	-	-	-	-	-	450 ⁶	10	28416	450 ⁶	10	28416
380/480V Three-phase	125	90	179	ATV61HD90N4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	250 ⁶	10	22749
	150	110	215	ATV61HC11N4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	300 ⁶	10	22749
	200	132	259	ATV61HC13N4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	350 ⁶	10	28416
	250	160	314	ATV61HC16N4	50	-	-	-	-	-	-	-	-	-	-	-	-	-	400 ⁶	18	31117
	350	220	427	ATV61HC22N4	50	-	-	-	-	-	-	-	-	-	-	-	-	-	500 ⁶	18	40250
	400	250	481	ATV61HC25N4	50	-	-	-	-	-	-	-	-	-	-	-	-	-	600 ⁶	18	54450
	500	315	616	ATV61HC31N4	30	-	-	-	-	-	-	-	-	-	-	600 ⁶	30	53550	800 ⁷	30	54450
	600	400	759	ATV61HC40N4	30	-	-	-	-	-	-	-	-	-	-	900 ⁸	30	95579	-	-	-
	700	500	941	ATV61HC50N4	42	-	-	-	-	-	-	-	-	-	-	2 x 600 ^{6,10}	42	95579	-	-	-
900	630	1188	ATV61HC63N4	42	-	-	-	-	-	-	-	-	-	-	2 x 800 ^{7,10}	42	120265	-	-	-	

Footnotes are on page 8.

Altivar 61								Short Circuit Current Ratings ²													
								with Circuit Breaker ³			with GV●P ³					with Fuses ³			with Fuses and Type 1 kit ⁴		
Input Voltage 50/60 Hz Y	(HP)	(kW)	(A)	Reference:	Input Rating: (kA) ¹	Minimum Inductance (mH)	Line Reactor Reference	PowerPact ¹⁰ Z1, Z2	SCCR (kA) X	Minimum Enclosure Volume (in ³)	GV●P Type E Z1, Z2	GV●P Voltage Rating (V)	GV●P Maximum Power (HP)	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)	Fuse Ampere Rating (A) Z1, Z2	SCCR (kA) X	Minimum enclosure Volume (in ³)
Three-phase Input, with line reactor																					
200/240V Three-phase	75	55	221	ATV61HD55M3X● ⁹	35	0.045	RL25001	-	-	-	-	-	-	-	-	350 ⁶	10	22749	350 ⁶	10	22749
	100	75	285	ATV61HD75M3X● ⁹	35	0.04	RL32001	-	-	-	-	-	-	-	-	350 ⁶	10	22749	350 ⁶	10	22749
	125	90	359	ATV61HD90M3X● ⁹	35	0.03	RL40001	-	-	-	-	-	-	-	-	450 ⁶	10	28416	450 ⁶	10	28416
380/480V Three-phase	125	90	179	ATV61HD90N4● ⁹	35	0.15	RL16002	JLL36250	100	43200	-	-	-	-	-	300 ⁶	100	43200	250 ⁶	10	22749
	150	110	215	ATV61HC11N4● ⁹	35	0.11	RL20002	LLL36400	100	43200	-	-	-	-	-	400 ⁶	100	43200	300 ⁶	10	22749
	200	132	259	ATV61HC13N4● ⁹	35	0.09	RL25002	LLL36400	100	43200	-	-	-	-	-	400 ⁶	100	43200	350 ⁶	10	28416
	250	160	314	ATV61HC16N4● ⁹	50	0.075	RL32002	MHL36600 or LLL36600 or LLL36400	100	43200	-	-	-	-	-	600 ⁶	100	43200	400 ⁶	18	31117
	350	220	427	ATV61HC22N4● ⁹	50	0.05	RL50002	-	-	-	-	-	-	-	-	600 ⁵	100	53550	500 ⁶	18	40250
	400	250	481	ATV61HC25N4● ⁹	50	0.05	RL50002	-	-	-	-	-	-	-	-	600 ⁵	100	53550	600 ⁶	18	54450
	500	315	616	ATV61HC31N4● ⁹	50	0.04	RL60002	-	-	-	-	-	-	-	-	600 ⁶	100	53550	800 ⁷	30	54450
	600	400	759	ATV61HC40N4● ⁹	50	0.029	RL75002	-	-	-	-	-	-	-	-	900 ⁸	100	95579	-	-	-
	700	500	941	ATV61HC50N4● ⁹	50	0.025	2 x RL50002	-	-	-	-	-	-	-	-	2 x 600 ^{6,11}	100	95579	-	-	-
900	630	1188	ATV61HC63N4● ⁹	50	0.02	2 x RL60002	-	-	-	-	-	-	-	-	2 x 800 ^{7,11}	100	120265	-	-	-	
500/600V Three-phase	125	110	125	ATV61HC11Y	28	0.2	RL13002	-	-	-	-	-	-	-	-	160 ⁶	100	31117	160 ⁶	28	31117
	150	132	150	ATV61HC13Y	28	0.15	RL16002	-	-	-	-	-	-	-	-	200 ⁶	100	31117	200 ⁶	28	31117
	-	160	180	ATV61HC16Y	35	0.11	RL20002	-	-	-	-	-	-	-	-	250 ⁶	100	31117	250 ⁶	35	31117
	200	200	220	ATV61HC20Y	35	0.11	RL20002	-	-	-	-	-	-	-	-	300 ⁶	100	31117	300 ⁶	35	31117
	250	250	290	ATV61HC25Y	35	0.09	RL25002	-	-	-	-	-	-	-	-	400 ⁶	100	54450	400 ⁶	35	54450
	350	315	355	ATV61HC31Y	35	0.06	RL40002	-	-	-	-	-	-	-	-	500 ⁶	100	54450	500 ⁶	35	54450
	450	400	420	ATV61HC40Y	42	0.05	RL50002	-	-	-	-	-	-	-	-	600 ⁶	100	54450	-	-	-
	550	500	543	ATV61HC50Y	42	0.038	2 x RL32002B14	-	-	-	-	-	-	-	-	2 x 400 ^{6,11}	100	120265	-	-	-
	700	630	675	ATV61HC63Y	42	0.03	2 x RL40002B14	-	-	-	-	-	-	-	-	2 x 500 ^{6,11}	100	120265	-	-	-
800	800	840	ATV61HC80Y	42	0.03	2 x RL40002B14	-	-	-	-	-	-	-	-	2 x 600 ^{6,11}	100	120265	-	-	-	

Footnotes are on page 8.

1. This column shows the maximum prospective short circuit current value that cannot be exceeded without adding input impedance. Electrical distribution systems with a higher prospective short circuit current will cause higher input currents in the front end of the drive. It is possible for the tested SCCR rating of the drive to be lower than this Input rating. The tested SCCR rating can be higher than this input rating when a line reactor is used. Add the inductance referred in the table at the input of the drive if installing the drive on a system with higher prospective short circuit current. **A 3% (minimum) input line reactor or equivalent inductance is required for the 500..600 Vac Altivar 61s and provides the listed value with the listed fuse protection.**
2. An ATV61 output short circuit test was performed for 100 kA. In addition to providing a rating based on shorting the output of the drive, these short circuit ratings have been obtained by shorting components internal to the Altivar 61. These ratings allow proper coordination of short circuit protection. **Note:** The integral solid state short circuit protection in the drive does not provide branch circuit protection. Branch circuit protection must be provided in accordance with the National Electrical Code and any local codes. The listed line reactor or minimum impedance is required to obtain ratings above the Input Rating.
3. Ratings apply to an Altivar 61 mounted in a non-ventilated Type 1, 3R, 4(X) or 12 rated enclosure. Use noted ratings when using a Type 1 kit. Minimum enclosure volume allows for the specified SCCR. Your application specific thermal requirements may require a larger enclosure
4. The fuse ratings in this column are for an Altivar 61 drive installed with a VW3A92●●●● Type 1 conduit kit. Fuse type must be fast acting Class J fuses unless otherwise noted. These fuse ratings in this column can also apply to Altivar 61 drives installed in a Type 1, 3R, 4(X), or 12 rated enclosure that has a minimum volume listed in the table
5. Use Bussmann fuses Class J ref. LPJ600SP, 600V max.
6. Fuse Class J / fast acting, 600V max.
7. Fuse Class T / fast acting, 600V max
8. Semi-conductor fuses Ferraz Shawmut A070UD32KI900 or A070UD32TTI900.
9. Can be ordered without a DC Choke for connections to the DC BUS or when using a line choke by adding **D** at the end of the reference.
10. Circuit breakers with lower interrupt ratings can be used within the same circuit breaker frame rating. For 380 / 480 Vac, replace LLL with LDL for 18kA or LGL for 35kA or LJL for 65kA interrupt rating. For 380 / 480 Vac, replace JLL with JDL for 18kA or JGL for 35kA or JJL for 65kA interrupt rating.
11. The following diagram shows how to address drives with two rectifiers:



A: The ATV61 supply must be split up in front of the line reactors, if they are used.

B: The monitoring of the fuses is necessary to protect the inverter against unbalanced load. It must act on mains contactor or pulse inhibit (e.g. digital input "External fault", see Programming guide)

HS: Main switch (to be used if required according to the local regulations)

NH: Mains fuses considering table "Fuse Ampere Rating" (absolutely necessary)

NS: Mains contactor (to be used if required according to the local regulations)