



Short Circuit Current Ratings (SCCR) and branch circuit protection

The combinations in the table below have been tested per UL508C & UL61800-5-1. (Reference UL file E116875)

ATV320 are provided with integral overload and over-speed protection for the motor after activation of the function [Mot THR memo] $\pi \& \pi$.

(For more information refer to the [ATV320 programming manual NVE41295](#)).

Protection at 100% of the full load motor current. The motor thermal protection current [Mot. therm. current] , $\& H$ must be set to the rated current indicated on the motor nameplate.

Altivar 320 AC Drive Short Circuit Ratings								Containment Short Circuit Current Ratings ²							
Input Voltage 60 Hz	Power Rating		Catalog Number	Input AIC Rating ¹	Minimum Inductance	Line Reactor Catalog Number	Output Interrupt Rating	With Circuit Breaker		With GV●P				With Fuses	
	(kW)	(HP)						PowerPact ³ Catalog Number	SCCR	GV2P/3P Type E ⁴	GV●P Voltage Rating	GV●P Power ⁷	SCCR	Fuses 600 V Class J ⁶	SCCR
				(kA)	(mH)		(kA)		(kA)	(V)	(HP)	(kA)	(A)	(kA)	
208/230 V 1 phase	0.18	1/4	ATV320U02M2●	1	2.5	RL00402	100	HoL36015	65	GV2P08	240	1	65	7	100
	0.37	1/2	ATV320U04M2●	1	2.5	RL00802	100	HoL36015	65	GV2P10	240	1.5	65	15	100
	0.55	3/4	ATV320U06M2●	1	2.5	RL00802	100	HoL36015	65	GV2P14	240	3	65	25	100
	0.75	1	ATV320U07M2●	1	2.5	RL01202	100	HoL36015	65	GV3P13 ⁵	240	4	65	25	100
	1.10	1-1/2	ATV320U11M2●	1	0.8	RL01201	100	HoL36020	65	GV3P18 ⁵	240	5	65	25	100
	1.50	2	ATV320U15M2●	1	0.8	RL01201	100	HoL36030	65	GV3P25 ⁵	240	7.5	65	40	100
	2.20	3	ATV320U22M2●	1	0.8	RL01801	100	HoL36035	65	GV3P25 ⁵	240	7.5	65	45	100
480 V 3 phase	0.37	1/2	ATV320U04N4●	5	12	RL00201	100	HoL36015	65	GV2P07	480Y/277	1	65	6	100
	0.55	3/4	ATV320U06N4●	5	12	RL00201	100	HoL36015	65	GV2P07	480Y/277	1	65	6	100
	0.75	1	ATV320U07N4●	5	12	RL00201	100	HoL36015	65	GV2P08	480Y/277	2	65	6	100
	1.1	1-1/2	ATV320U11N4●	5	6.5	RL00402	100	HoL36015	65	GV2P08	480Y/277	2	65	12	100
	1.5	2	ATV320U15N4●	5	6.5	RL00402	100	HoL36015	65	GV2P10	480Y/277	3	65	12	100
	2.2	3	ATV320U22N4●	5	5	RL00803	100	HoL36015	65	GV2P14	480Y/277	5	65	15	100
	3	4	ATV320U30N4●	5	3	RL00802	100	HoL36015	65	GV2P14	480Y/277	5	65	17.5	100
	4	5	ATV320U40N4●	5	3	RL00802	100	HoL36015	65	GV3P13 ⁵	480Y/277	7.5	65	25	100
	5.5	7-1/2	ATV320U55N4B	22	2.5	RL01202	100	HoL36020	65	GV3P18	480Y/277	10	65	40	100
	7.5	10	ATV320U75N4B	22	1.5	RL01802	100	HoL36030	65	GV3P25	480Y/277	15	65	40	100
	11	15	ATV320D11N4B	22	1.2	RL02502	100	HoL36040	65	GV3P32	480Y/277	20	65	60	100
	15	20	ATV320D15N4B	22	0.8	RL03502	100	HoL36050	65	GV3P40	480Y/277	25	65	70	100

1. This column shows the maximum input available interrupt current (AIC) rating the Altivar 320 drive can be installed on without adding impedance to the drive. Electrical distribution systems with a higher AIC capability will cause higher input currents in the front end of the drive. Install at least the minimum inductance shown when using an Altivar 320 drive on a system with a higher AIC value shown in this column. Without any additional impedance the column with the Input AIC ratings are the Short Circuit Current Ratings (SCCR) with the listed circuit breakers, GV●P products, and fuses.

2. The Altivar 320 drive has a 100 kA interrupt rating on the output of the drive. In addition to providing a rating based on shorting the output of the drive, these short circuit current ratings have been obtained by shorting components internal to the Altivar 320. These ratings allow proper coordination of short circuit protection. The amp rating of the short circuit protection devices in the table are maximum values. Smaller amp sizes may be used.

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. Ratings apply to an Altivar 320 drive mounted in a non-ventilated Type 1, 3R, 4(X) or 12 rated enclosure. Minimum enclosure volume is 3.375 times the drive volume. The listed line reactor minimum inductance is required to get these higher ratings.

3. Circuit Breaker part number designations: ● = short circuit current rating.

For 208 / 230 V range, use: ● = D for 25 kA, G for 65 kA, J for 65 kA, L for 65kA. For 480 V range, use: ● = D for 18 kA, G for 35 kA, J for 65 kA, L for 65 kA.

4. 480 V ratings are for Wye connected electrical distribution systems. 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.

5. GV2P products detailed below can be used in place of the GV3P products for obtaining the ratings listed in the Input AIC ratings column. GV2P16 for GV3P13, GV2P20 for GV3P18, GV2P22 for GV3P25.

6. Fuse type can be fast acting or time delay Class J, or Class CC.

7. UL508C Par. 57.1 & UL61800-5-1 Par. 6.3.7DV.2.1.1 require publishing the standard Type E combination motor controller power rating since this is a basic identification marking of the Type E devices. However, when applied as an input overcurrent protective device for a drive, the rated current of the Type E combination motor controller, not the rated power, is the key parameter for dimensioning (reference UL61800-5-1 Par. 5.2.3.6.2DV.4.1.11 & 5.2.3.6.2DV.4.1.12).

Schneider Electric GV●P Type E combination motor controllers are adjustable, their current range is shown on the adjustment dial and their selection is based on the input current and not power rating of the drive.