

Presentation

Sinus filters allow Altivar 71 drives to operate with long motor cables (300 m to 1000 m) and ensure significant motor noise reduction.

For ATV71H075M3...HD45M3X, ATV71●075N4...●D75N4, ATV71HC11Y...HC63Y and ATV71P●●●N4Z drives, they also allow the use of unshielded cables while still complying with the standards relating to radiated EMC emissions (EN 55011 class A Gr1 and IEC/EN 61800-3 category C2).

For ATV71HD55M3X, HD75M3X, ATV71HD90N4...HC50N4 and ATV71QD90N4...QC50N4 drives, the sinus filter only operates with a voltage/frequency drive ratio.

Note: Please refer to the Programming Manual when setting up the sinus filter.

Applications

- For ATV71H075M3...HD45M3X, ATV71●H075N4... ●D75N4, ATV71HC11Y...HC63Y and ATV71P●●●N4Z, applications requiring:
 - Long cable runs
 - Mechanical restrictions preventing the use of shielded cables
 - An intermediate transformer between the drive and the motor
 - A reduction in motor noise
 - Motors connected in parallel
- For ATV71HD55M3X, HD75M3X, ATV71HD90N4...HC50N4 and ATV71QD90N4...QC50N4 drives, applications requiring:
 - An intermediate transformer between the drive and the motor
 - A reduction in electromagnetic motor noise

References					
For drives	Nominal current	Losses at 100 Hz	Reference	Weight	
				kg	
Three-phase supply voltage: 200...240 V 50/60 Hz					
ATV71H075M3, HU15M3 (1)	11	50	VW3A5201	8.000	
ATV71HU22M3, HU30M3	16	70	VW3A5202	11.000	
ATV71HU40M3... HU75M3	33	120	VW3A5203	22.000	
ATV71HD11M3X, HD15M3X	66	180	VW3A5204	45.000	
ATV71HD18M3X, HD22M3X	95	250	VW3A5205	60.000	
ATV71HD30M3X... HD45M3X	180	400	VW3A5206	120.000	
ATV71HD55M3X, HD75M3X	300	1360	VW3A5208	165.000	
Three-phase supply voltage: 380...480 V 50/60 Hz					
ATV71H075N4...HU40N4 (1) ATV71W075N4...WU40N4 ATV71P075N4Z...PU40N4Z	11	50	VW3A5201	8.000	
ATV71HU55N4 ATV71WU55N4 ATV71PU55N4Z	16	70	VW3A5202	11.000	
ATV71HU75N4...HD15N4 ATV71WU75N4...WD15N4 ATV71PU75N4Z, PD11N4Z	33	120	VW3A5203	22.000	
ATV71HD18N4... HD30N4 ATV71WD18N4...WD30N4	66	180	VW3A5204	45.000	
ATV71HD37N4, HD45N4 ATV71WD37N4, WD45N4	95	250	VW3A5205	60.000	
ATV71HD55N4, HD75N4 ATV71WD55N4, WD75N4	180	400	VW3A5206	120.000	
ATV71HD90N4, HC11N4 ATV71QD90N4, QC11N4	200	945	VW3A5207	130.000	
ATV71HC13N4, HC16N4 ATV71QC13N4, QC16N4	300	1360	VW3A5208	165.000	
ATV71HC20N4 ATV71QC20N4	400	1900	VW3A5209	190.000	
ATV71HC25N4 ATV71QC25N4	Motor P 220 kW	400	1900	VW3A5209	190.000
	Motor P 250 kW	600	2370	VW3A5210	260.000
ATV71HC28N4, HC31N4 ATV71QC31N4	600	2370	VW3A5210	260.000	
ATV71HC40N4 ATV71QC40N4	Motor P 355 kW	600	2370	VW3A5210	260.000
	Motor P 400 kW	1200	5150	VW3A5211	600.000
ATV71HC50N4 ATV71QC50N4	1200	5150	VW3A5211	600.000	
ATV71HC11Y...HC16Y	240	1500	VW3A5212	210.000	
ATV71HC20Y...HC31Y	460	2800	VW3A5213	300.000	
ATV71HC40Y...HC63Y	900	4810	VW3A5214	400.000	

(1) For ATV71H075M3, ATV71HU15M3 and ATV71HU15N4 drives, it is advisable to use a lower power motor with a sinus filter.