

Altivar Process

This document gives the Ride Through time of Altivar 630/650/930/950 variable speed drives during a main supply interruption (micro-cut).

The time values are given at the nominal torque.

200-240V range	USF (Factory setting)		USF (Minimum value)	
Commercial references	Minimum supply voltage 200V	Maximum supply voltage 240V	Minimum supply voltage 200V	Maximum supply voltage 240V
ATV630U07M3 / ATV930U07M3	29 ms	59 ms	51 ms	85 ms
ATV630U15M3 / ATV930U15M3	15 ms	30 ms	25 ms	42 ms
ATV630U22M3 / ATV930U22M3	10 ms	20 ms	17 ms	29 ms
ATV630U30M3 / ATV930U30M3	11 ms	21 ms	18 ms	31 ms
ATV630U40M3 / ATV930U40M3	8 ms	16 ms	14 ms	23 ms
ATV630U55M3 / ATV930U55M3	14 ms	28 ms	24 ms	40 ms
ATV630U75M3 / ATV930U75M3	13 ms	26 ms	22 ms	37 ms
ATV630D11M3 / ATV930D11M3	9 ms	18 ms	15 ms	25 ms
ATV630D15M3 / ATV930D15M3	6 ms	13 ms	11 ms	18 ms
ATV630D18M3 / ATV930D18M3	6 ms	13 ms	11 ms	18 ms
ATV630D22M3 / ATV930D22M3.	6 ms	13 ms	11 ms	18 ms
ATV630D30M3 / ATV930D30M3.	9 ms	18 ms	15 ms	25 ms
ATV630D37M3 / ATV930D37M3.	7 ms	14 ms	12 ms	20 ms
ATV630D45M3 / ATV930D45M3C	7 ms	14 ms	12 ms	20 ms
ATV630D55M3 / ATV930D55M3C	4 ms	8 ms	7 ms	12 ms
ATV630D75M3 / ATV930D75M3C	3 ms	6 ms	5 ms	8 ms

380-480V range	USF (Factory setting)		USF (Minimum value)	
Commercial references	Minimum supply voltage 380V	Maximum supply voltage 480V	Minimum supply voltage 380V	Maximum supply voltage 480V
ATV630U07N4 / ATV650U07N4. ATV930U07N4 / ATV950U07N4.	30	68	45	87
ATV630U15N4 / ATV650U15N4. ATV930U15N4 / ATV950U15N4.	15	34	23	44
ATV630U22N4 / ATV650U22N4. ATV930U22N4 / ATV950U22N4.	10	23	15	30
ATV630U30N4 / ATV650U30N4. ATV930U30N4 / ATV950U30N4.	13	30	20	38
ATV630U40N4 / ATV650U40N4. ATV930U40N4 / ATV950U40N4.	10	22	15	29
ATV630U55N4 / ATV650U55N4. ATV930U55N4 / ATV950U55N4.	9	20	13	25
ATV630U75N4 / ATV650U75N4. ATV930U75N4 / ATV950U75N4.	13	29	19	37
ATV630D11N4 / ATV650D11N4. ATV930D11N4 / ATV950D11N4.	9	20	13	25
ATV630D15N4 / ATV650D15N4. ATV930D15N4 / ATV950D15N4.	10	22	14	28
ATV630D18N4 / ATV650D18N4. ATV930D18N4 / ATV950D18N4.	8	18	12	23
ATV630D22N4 / ATV650D22N4. ATV930D22N4 / ATV950D22N4.	7	15	10	19
ATV630D30N4 / ATV650D30N4. ATV930D30N4 / ATV950D30N4.	8	18	12	23
ATV630D37N4 / ATV650D37N4. ATV930D37N4 / ATV950D37N4.	6	15	10	19
ATV630D45N4 / ATV650D45N4. ATV930D45N4 / ATV950D45N4.	6	14	10	19
ATV630D55N4 / ATV650D55N4. ATV930D55N4. / ATV950D55N4.	10	22	15	28
ATV630D75N4 / ATV650D75N4. ATV930D75N4. / ATV950D75N4.	7	16	11	21
ATV630D90N4 / ATV650D90N4. ATV930D90N4. / ATV950D90N4.	7	16	11	21
ATV630C11N4 / ATV930C11N4C	8	18	12	24
ATV630C13N4 / ATV930C13N4C	7	15	10	20
ATV630C16N4 / ATV930C16N4C	6	13	9	16

Globally, the behaviour of the Altivar Process in case of main supply micro-cut at full load is the following :

- 0-20ms : it works normally
- 20ms < T < 250ms : error code USF (Supply Mains Undervoltage)
- T > 250ms : error code USF (Supply Mains Undervoltage) + detected error relay will be Opened

Take care that these times are indicative, they can fluctuate regarding the main supply voltage, the load and the drive range.