

This Technical Note is pertinent our AC Drive Families

## Voltage Threshold Levels

### Commander SK, Unidrive SP, Commander GP20

**Note:** 110v data only pertains to Commander SK family

### 3 Drive voltage levels

Condition	110V drives	200V drives	400V drives	575V drives	690V drives
OV trip level	415 Vdc	415 Vdc	830 Vdc	990 Vdc	1190 Vdc
Braking level	390 Vdc	390 Vdc	780 Vdc	930 Vdc	1120Vdc
Rated upper level (AC mains +10% x 1.4142)	373 Vdc	373 Vdc	747 Vdc	895 Vdc	1073 Vdc
Rated lower level (AC mains -10% x 1.4142)	255 Vdc	255 Vdc	484 Vdc	636 Vdc	636 Vdc
*UV reset level	215 Vdc	215 Vdc	425 Vdc	590 Vdc	590 Vdc
UV trip level	175 Vdc	175 Vdc	330 Vdc	435 Vdc	435 Vdc
Standard ramp voltage	375 Vdc	375 Vdc	Eur: 750 Vdc USA: 775 Vdc	895 Vdc	1075 Vdc

\* These are the absolute minimum DC voltages that the drive can be supplied with. If the drive is not supplied with at least this voltage, it will not reset out of a UV trip at power up.

Output frequency: 0 to 1500Hz

Output voltage: 3 phase, 0 to drive rating (240, 480, 575 or 690 Vac maximum set by Pr 08).

The Unidrive Classic has the following voltage thresholds

	<b>MV</b>	<b>LV</b>
Maximum dc link voltage (OU trip)	830V	415V
Minimum dc link voltage (UU trip)	320V	175V
Maximum motor voltage	480V	240V
Braking IGBT turn on	780V	390V
Restart voltage (switch mode ps)	450V	235V

**MV** = 380 Vac – 480 Vac Unidrive product

**LV** = 220 Vac – 240 Vac Unidrive product

