

[Boost level align.] 5 1 r

Boost level for IPMA alignment.

This parameter can be accessed if **[Access Level] L R C** is set to **[Expert] E P r**.

Setting	Description
0...200%	Setting range Factory setting: 100%

[Angle error Comp.] P E L

Angle position error compensation.

This parameter can be accessed if:

- **[Access Level] L R C** is set to **[Expert] E P r**, and
- **[HF inj. activation] H F 1** is set to **[yes] Y E 5**.

Setting	Description
0...500%	Setting range Factory setting: 0%

About Output Voltage Management and Overmodulation

[Overmodul. Activation] o V P A

Overmodulation activation.

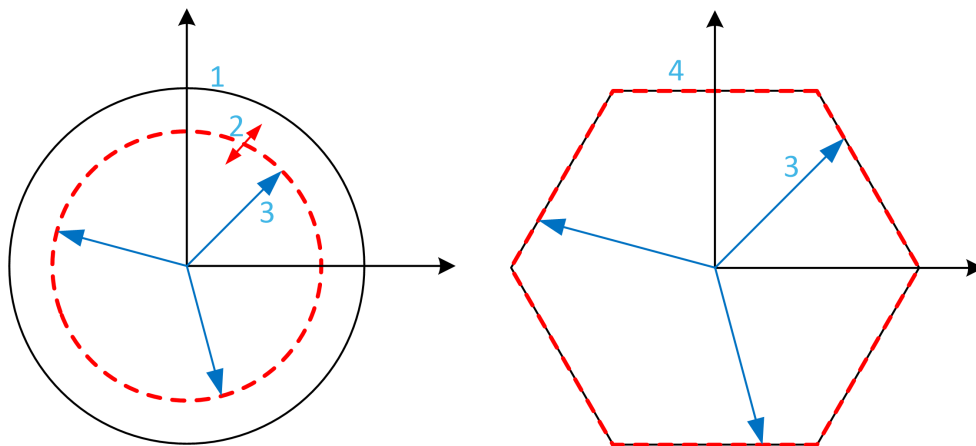
This parameter can be accessed if **[Access Level] L R C** is set to **[Expert] E P r**.

The purpose of the overmodulation is to:

- compensate the voltage loss in DC bus when the drive is loaded.
- increase the maximum possible voltage to reduce current consumption at high motor voltage and limit thermal effect on the motor.

In factory settings, the motor supplied by the intermediate of the drive has:

- a common output voltage mode not null depending on the DC bus supply.
- No overmodulation (**[Overmodul. Activation] o V P A** is set to **[No] n o**): sinusoidal phase to phase voltage.
- output voltage limited to the maximum possible value depending on DC bus supply which depends on the main power supply.



- 1 Maximum possible value of Output voltage limitation (default value)
- 2 VLim with numeric value under the maximum limitation
- 3 Output voltage
- 4 Output voltage limitation with full overmodulation (hexagon form)

Setting	Code / Value	Description
[Default]	<i>d E F F u L t</i>	Overmodulation is not configured By default, the Output voltage limitation describes a circle with at maximum radius depending of DC bus voltage. The radius can be reduced to a lower value by setting a numerical value to [Output voltage limitation] V L , n . Factory setting
[Full]	<i>F u L L</i>	Overmodulation is active and full. The output voltage limitation describes a regular hexagon depending of DC bus voltage. The phase to phase voltages are not sinusoidal.

[Output voltage limitation] V L , n

Output voltage limitation.

This parameter can be accessed if **[Access Level] L A C** is set to **[Expert] E P r**.

The purpose of this parameter is to modify the output voltage limitation to a lower value than the maximum default value.

The unit of the numerical value of this parameter is in phase to phase rms voltage.

This parameter cannot be set to a numerical value if **[Overmodul. Activation] o v n A** is set to **[FULL] F u L L**.

Setting	Code / Value	Description
[Default]	<i>d E F F u L t</i>	Default value of Output Voltage limitation. The Output Voltage limitation is at the maximum capability of the DC bus voltage depending on [Overmodul. Activation] o v n A setting. Factory setting
0...9999 V		Setting range of the output limitation voltage. Set a value lower than the corresponding [Default] d E F F u L t value to reduce the maximum output voltage limitation. If the numerical value is higher than the corresponding [Default] d E F F u L t value, this corresponding value is considered.

[Switching frequency] 5 W F - Menu

Access

[Complete settings] → [Motor parameters] → [Switching frequency]

[Switching frequency] 5 F r

Drive switching frequency.

Adjustment range: The maximum value is limited to 4 kHz if **[Motor surge limit.] 5 V L** parameter is configured.

If **[Sinus Filter Activation] o F r** is set to **[Yes] y E 5**, the minimum value is 2 kHz and the maximum value is limited to 6 kHz or 8 kHz according to drive rating.

NOTE: In the event of excessive temperature rise, the drive automatically reduces the switching frequency and reset it once the temperature returns to normal.

In case of high-speed motor, it is advised to increase the PWM frequency **[Switching frequency] 5 F r** at 8, 12 kHz or 16 kHz

Setting ()	Description
2...8 or 16 kHz according to drive rating	Setting range Factory setting: 4.0 kHz or 2.5 kHz according to the drive rating