Converter Current Reference Configuration Attributes

These are the current reference configuration attributes associated with a Regenerative Converter.

System Capacitance

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - G Voltage Control only	Set/SSV		REAL	0 FD	0	∞	% Rated (Volts/Second)

The System Capacitance attribute is the scaling gain value that converts voltage rate commanded by the bus voltage control loop into equivalent active current, expressed as a percent of the converter's current rating. Properly set, this value represents the total system capacitance of the DC bus.

Active Current Command

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV		REAL	0	-∞	∞	% Rated

The Active Current Command attribute sets the reference current used to actively regulate the Active Current of the converter when in the Running state and configured for AC Line Current Control mode. A positive value implies motoring current. A negative value implies regenerative current.

Reactive Current Command

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV		REAL	0	-∞	∞	% Rated

The Reactive Current Command attribute sets the reference current used to actively regulate the Reactive Current of the converter when in the Running state and configured for AC Line Current Control mode. A positive value implies reactive current (lagging relative to voltage) is consumed by the converter. A negative value implies reactive current (leading relative to voltage) is produced by the converter.

Active Current Trim

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	T	REAL	0	-∞	∞	% Rated

The Active Current Trim attribute is the additional current command added to the active current reference summing junction.

Active Current Low Pass Filter Bandwidth

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values

Optional - G	Set/SSV		REAL	0 FD	0	10^4	Filter Frequency Units

The Active Current Low Pass Filter Bandwidth attribute is the break frequency for the low pass filter applied to active current reference signal. A value of 0 for this attribute disables this feature.

Active Current Notch Filter Frequency

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV		REAL	0	0	10^4	Filter Frequency Units

The Active Current Notch Filter Frequency attribute is the center frequency of the notch filter applied to the active current reference signal. A value of 0 for this attribute disables this feature.

Active Current Rate Limit

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV		REAL	100	0	∞	% Rated/Second

The Active Current Rate Limit attribute sets the magnitude limit on the rate of change of the converter's active current reference signal. This attribute applies only when configured for AC Line Current Control mode.

Reactive Current Rate Limit

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV		REAL	100	0	∞	% Rated/Second

The Reactive Current Rate Limit sets the magnitude limit on the rate of change of the converter's reactive current reference signal. This attribute applies only when configured for AC Line Current Control mode.

See also

Converter Control Mode Attributes

Converter Types

How are we doing?