Acceleration Control Attributes

These are the acceleration related attributes associated with a Motion Control Axis.

Acceleration Command

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - C	Get	T	REAL	0	-max accel	max accel	Accel Control Units/Sec^2

Command acceleration output from Fine Command Generator (if active) into acceleration loop when configured for acceleration control.

Acceleration Trim

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - C	Set	T	REAL	0	-max accel	max accel	Accel Control Units/Sec^2

Additional acceleration command added to the acceleration loop summing junction.

Acceleration Reference

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - C	Get	T	REAL	-	-	-	Accel Control Units/Sec^2

Command acceleration reference into acceleration loop summing junction.

Acceleration Feedback

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Required - E	Get	T	REAL	-	-	-	Accel Control Units/Sec^2

Actual acceleration of the axis based on the selected feedback device.

Load Observer Acceleration Estimate

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - C	Get	T	REAL	-	-	-	Accel Control Units/Sec^2

Output of the Load Observer that, when the Load Observer block is enabled, is applied to the acceleration reference summing junction. In the Load Observer configuration, this signal compensates for disturbances to the load relative to an ideal load model. When the Load Observer is configured to operate in Acceleration Feedback Only mode, this signal is

the estimated acceleration feedback signal used to close the acceleration loop. When the Load Observer is disabled, this signal is 0.

Load Observer Torque Estimate

Usage	Access	T	Data Type	Default	Min	Max	Semantics of Values
Optional - PV	Get	T	REAL	-	-	-	% Motor Rated

Product of the Load Observer Acceleration Estimate signal and the current System Inertia value, Kj. In the Load Observer configuration, this signal represents the estimated torque disturbances to the load relative to an ideal load model. When the Load Observer is configured to operate in Acceleration Feedback Only mode, this signal is an estimate of the applied motor torque. When the Load Observer is disabled, this signal is 0.

See also

Acceleration Control Configuration Attributes

Motion Control Configuration Attributes

Velocity Control Mode

How are we doing?