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AC Line Condition Attributes

These are the Motion Control Axis attributes pertaining to various conditions of the AC Line input primarily for a Regenerative Converter.

AC Line Voltage Sag Action

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	USINT	1	-	-	Enumeration: 0 = Continue (O) 1 = Ride Thru (R) 2-127 = Reserved 128-255 = Vendor Specific

The AC Line Voltage Sag Action attribute sets the reaction to a Voltage Sag condition when any one of the AC Line phase voltages drops below a hard-coded threshold in the device or the configured AC Line Voltage Sag Threshold. This provides a specific (configured) response to an incoming AC Line Voltage Sag condition while the device is running.

See Power Loss Action for semantics of these enumerated actions.

AC Line Voltage Sag Threshold

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	50	0	10 ³	% of Nominal

The AC Line Voltage Sag Threshold attribute sets the level for AC Line Voltage Sag as percent of nominal AC Line Voltage. Nominal voltage is defined by the AC Line Voltage Nominal attribute. Measured AC Line Voltage values less than this threshold indicate an AC Line Voltage Sag condition.

AC Line Voltage Sag Time

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	1	0		Seconds

When the AC Line Voltage Sag Action is set to Ride Thru, this attribute sets the timeout value before an AC Line Voltage Sag exception is generated by the device in response to a Voltage Sag condition. A value of 0 in this case results in an immediate exception.

Converter Input Phase Loss Action

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	USINT	1	-	-	Enumeration: 0 = Continue (O) 1 = Ride Thru (R) 2-127 = Reserved 128-255 = Vendor Specific

The Converter Input Phase Loss Action attribute sets the reaction to an AC input phase loss condition. This provides a specific (configured) response to an incoming phase loss while the converter is running.

See Power Loss Action for semantics of these enumerated actions.

Converter Input Phase Loss Time

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	1	0		Seconds

When the Converter Input Phase Loss Action is set to Ride Thru, this attribute sets the timeout value before a Converter AC Phase Loss Exception is generated by the device in response to the Converter Input Phase Loss condition. A value of 0 in this case results in an immediate exception.

AC Line Frequency Change Action

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	USINT	1	-	-	Enumeration: 0 = Continue (O) 1 = Ride Thru (R) 2-127 = Reserved 128-255 = Vendor Specific

The AC Line Frequency Change Action attribute sets the converter’s reaction when the rate of change of the AC line frequency exceeds a hard-coded threshold or the configured Frequency Change Threshold.

See Power Loss Action for details of these enumerated actions.

AC Line Frequency Change Threshold

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	100	0	10 ³	Hertz/Seconds

The AC Line Frequency Change Threshold attribute sets the level of AC line frequency change that results in the AC Line Frequency Change condition.

AC Line Frequency Change Time

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	1	0		Seconds

When the AC Line Frequency Change Action is set to Ride Thru, this attribute sets the timeout value before an AC Line Frequency Change exception is generated by the converter in response to an AC Line Frequency Change condition. A value of 0 in this case results in an immediate exception.

AC Line Sync Loss Action

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
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Optional - G	Set	USINT	1	-	-	Enumeration: 0 = Continue (O) 1 = Ride Thru (R) 2-127 = Reserved 128-255 = Vendor Specific

The AC Line Sync Loss Action attribute sets the reaction to a loss of AC line synchronization by the converter’s line synchronization function (for example, PLL). This provides a specific (configured) response to an incoming line synchronization loss condition while the converter is running.

See Power Loss Action for details of these enumerated actions.

AC Line Sync Loss Time

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set	REAL	1	0	∞	Seconds

When the AC Line Sync Loss Action is set to Ride Thru, this attribute sets the timeout value before an AC Line Sync exception is generated by the converter in response to an AC Line Sync Loss condition. A value of 0 in this case results in an immediate exception.

See also

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