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Exception User Limit Configuration Attributes

These are the exception user limit configuration related attributes associated with a Motion Control Axis.

Motor Phase Loss Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - D	Set/SSV	REAL	5	0	100	% Motor Rated

Sets the minimum motor phase current for the Motor Phase Loss exception. The current in each motor phase must exceed this value during the motor phase loss test or a Motor Phase Loss exception occurs. Decreasing this attribute's value lowers sensitivity to phase loss conditions. A value of 0 will effectively disable the motor phase loss test.

Motor Overspeed User Limit

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

Sets the Overspeed User Limit relative to the Rotary Motor Rated Speed or Linear Motor Rated Speed that is allowable before throwing a Motor Overspeed UL exception.

Motor Thermal Overload User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - D	Set/SSV	REAL	110	0	∞	% Motor Rated

Sets User Limit for the Motor Thermal Overload UL exception.

Inverter Thermal Overload User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - D	Set/SSV	REAL	110	0	∞	% Inverter Rated

Sets User Limit for the Inverter Thermal Overload UL exception.

Converter Overtemperature User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	0	0	∞	°C

Sets User Limit for the Converter Overtemperature UL exception.

Converter Thermal Overload User Limit

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

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Sets User Limit for the Converter Thermal Overload UL exception.

Converter Ground Current User Limit

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

Sets User Limit for the Converter Ground Current UL exception.

Converter Pre-Charge Overload User Limit

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

Sets User Limit for the Converter Pre-Charge Overload UL exception.

Feedback Noise User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - E	Set/SSV	UDINT	1	1	2 ³¹	Noise Counts

Sets User Limit for the Feedback Noise Overload UL exception. Example of Noise Counts would be simultaneous transitions of the A and B channel of a quadrature encoder feedback device.

Feedback Signal Loss User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - E	Set/SSV	REAL	100	0	∞	% FL Voltage Drop

Sets User Limit for the Feedback Signal Loss UL exception. Feedback interface hardware typically monitor average voltage levels on incoming signals. Feedback Signal Loss conditions occur when the average voltage levels drop below a percentage of voltage drop allowed by the Feedback Signal Loss Factory Limit.

Feedback Data Loss User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - E	Set/SSV	UDINT	4	1	2 ³¹	Consecutive Lost Data Packets

Sets User Limit for the Feedback Data Loss UL exception. For digital feedback devices, feedback interface hardware monitors the integrity of data transferred over the serial connection to the feedback device. Feedback Data Loss conditions occur when two or more consecutive data packets are lost or corrupted.

AC Line Overvoltage User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	110	0	∞	% Rated

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Optional - G	Set/SSV	REAL	110	0	∞	% Rated
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Sets the high voltage limit as a percent of Converter Rated Input Voltage for the AC line source.

AC Line Undervoltage User Limit

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

Sets the low voltage limit as a percent of Converter Rated Input Voltage for the AC line source.

AC Line Overvoltage User Limit - Alternate

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	110	0	∞	% Rated

Sets the high voltage limit as a percent of Converter Rated Input Voltage for the alternate AC line source.

AC Line Undervoltage User Limit - Alternate

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

Sets the low voltage limit as a percent of Converter Rated Input Voltage for the alternate AC line source.

AC Line High Freq User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	0.4	0	∞	Hertz

Sets the high frequency limit as the difference from the nominal AC line frequency.

AC Line Low Freq User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	0.7	-∞	0	Hertz

Sets the low frequency limit as the difference from the nominal AC line frequency.

AC Line High Freq User Limit - Alternate

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	0.4	0	∞	Hertz

Sets the high frequency limit as the difference from the nominal alternate AC line source frequency.

AC Line Low Freq User Limit - Alternate

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AC Line Low Freq User Limit Attributes

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	0.7		0	Hertz

Sets the low frequency limit as the difference from the nominal alternate AC line source frequency.

Converter Heatsink Overtemperature User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	125	0		°C

Sets a User Limit for the regenerative converter power structure heatsink temperature. Exceeding this value generates a Converter Overtemperature UL exception.

AC Line Overload User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	110	0		% Converter Rated

Sets a User Limit for thermal overload of Line 1, 2, and 3 components as a percent of their rated thermal capacity. Exceeding this value generates a Converter Thermal Overload UL exception.

AC Line Resonance User Limit

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional - G	Set/SSV	REAL	12	0	100	% Converter Rated

Sets the User Limit for the AC Line Resonance UL exception based on a percentage of the Converter Output Rated Current. The AC Line Resonance UL exception occurs when the current flowing through the AC line filter in the resonant frequency band, exceeds the user limit for a vendor specified period.

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