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General Rotary Motor Attributes

These are the motor configuration attributes that apply specifically to rotary motor types.

Rotary Motor Poles

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Required	Set/GSV	UINT	PM: 8 IM: 4 DB	2	max int	

The Rotary Motor Poles attribute is an integer that specifies the number of poles per revolution for rotary motors. This value is always an even number, as poles always exist in pairs.

Rotary Motor Inertia

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional	Set/SSV#	REAL	0 DB	0		Inertia Units

Indicates the attribute cannot be set while the tracking command (Tracking Command bit in CIP Axis Status is true).

The Rotary Motor Inertia attribute is a floating point value that specifies the unloaded inertia of a rotary motor.

Rotary Motor Rated Speed

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Required	Set/GSV	REAL	0 DB	0		RPM

The Rotary Motor Rated Speed attribute is a floating point value that specifies the nameplate rated speed of a rotary motor. For PM motors, this is generally specified at rated voltage based on either rated current, rated torque, or rated power. For induction motors this value is the speed of the motor driven at rated frequency under rated torque load. This value is synonymous with the term base speed.

Rotary Motor Max Speed

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional	Set/GSV	REAL	0 DB	0		RPM

The Rotary Motor Max Speed attribute is a floating point value that specifies the absolute maximum operating speed of a rotary motor in units of RPM. This speed may be determined by the limitations of the motor, limitations of the drive power structure, or by limitations of the mechanical system, whichever is less. Specifically, this value can represent the maximum safe operating speed, maximum continuous no-load speed,

represent the maximum safe operating speed, maximum continuous no-load speed,

maximum encoder speed, maximum continuous motor bearing speed, or maximum motor speed based on the drive power structure voltage limit. This value can be used by the drive to determine the Rotary Motor Overspeed Factory Limit.

Rotary Motor Damping Coefficient

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional	Set/GSV	REAL	0 DB	0		N-m/Radians/sec

The Rotary Motor Damping Coefficient attribute is a floating point value that specifies the damping, or viscous friction, associated with a rotary motor.

Rotary Motor Fan Cooling Speed

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional	Set/GSV	REAL	0	0		RPM

The Rotary Motor Fan Cooling Speed attribute selects the output speed of the motor below which the Motor Rated Continuous Current is derated due to the reduced effectiveness of an integral fan cooling system.

Rotary Motor Fan Cooling Derating

Usage	Access	Data Type	Default	Min	Max	Semantics of Values
Optional	Set/GSV	REAL	0	0		% Motor Rated

The Rotary Motor Fan Cooling Derating attribute selects the % derating of the motor when the motor is operating at a speed below the specified Motor Fan Cooling Speed. A value of 70% would indicate that the motor can only run at 70% rated continuous current when operating below the Motor Fan Cooling Speed.

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