

Sommario

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Ladder Library

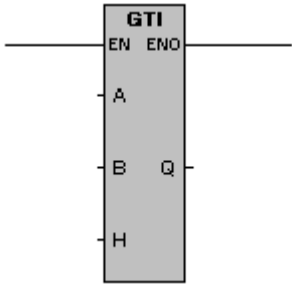
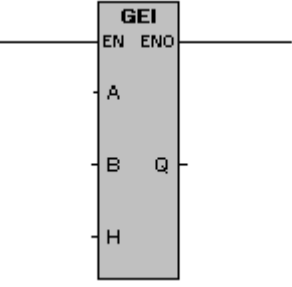
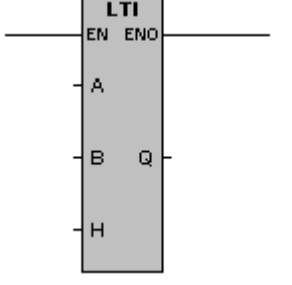
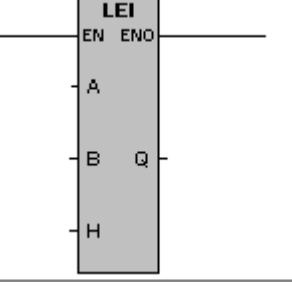
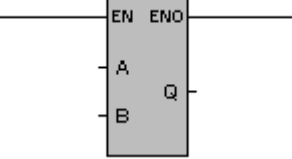
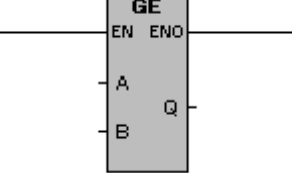
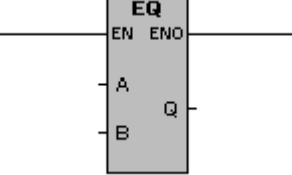
1. Contact Functions




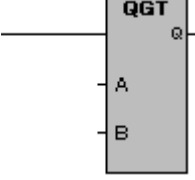
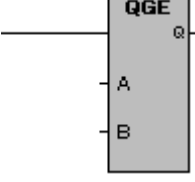
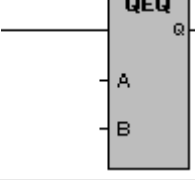
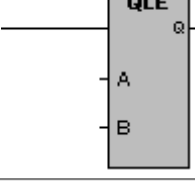
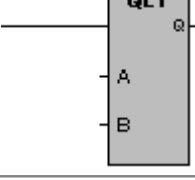
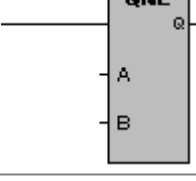
Symbol	Description
reference — —	Normally Open Contact
reference — / —	Normally Closed Contact
reference — P —	Positive Transition-Sensing Contact
reference — N —	Negative Transition-Sensing Contact
reference — PT —	Positive Transition-Sensing Toggle Contact
reference — NT —	Negative Transition-Sensing Toggle Contact

2. Coil Functions

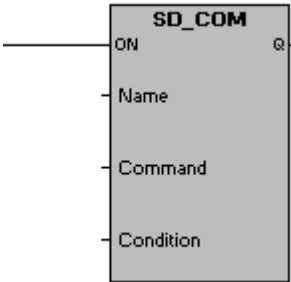
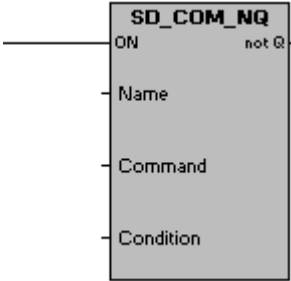
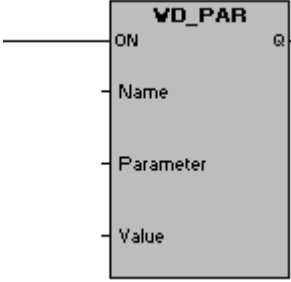
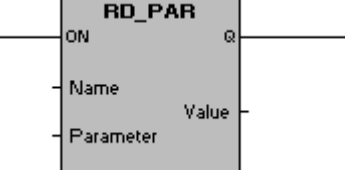
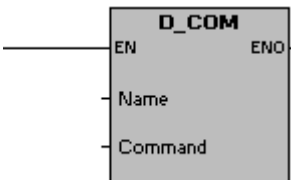
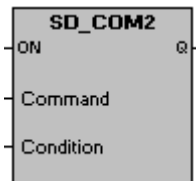
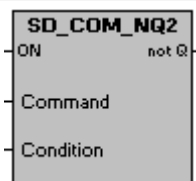
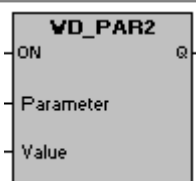
Symbol	Description
reference —()—	Normally Open Coil
reference —(/)—	Normally Closed Coil
reference —(P)—	Positive Transition-Sensing Coil
reference —(N)—	Negative Transition-Sensing Coil
reference —(N)—	Positive Transition-Sensing Toggle Coil
reference —(NT)—	Negative Transition-Sensing Toggle Coil
reference —(S)—	SET (Latch) Coil
reference —(R)—	RESET (Unlatch) Coil



3. Comparison Functions

Simbol	Description
	GTI (Greater Than with Hysteresis)
	GEI (Greater or Equal with Hysteresis)
	LTI (Less Than with Hysteresis)
	LEI (Less or Equal with Hysteresis)
	GT (Greater Than)
	GE (Greater or Equal)
	EQ (Equal)

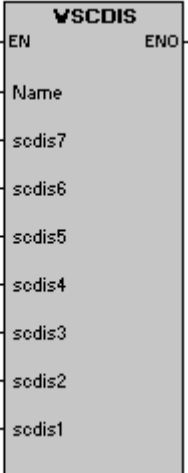
Symbol	Description
	LE (Less or Equal)
	LT (Less Than)
	NE (Not Equal)
	QGT (Greater Than)
	QGE (Greater or Equal)
	QEQ (Equal)
	QLE (Less or Equal)
	QLT (Less Than)
	QNE (Not Equal)

4. Device Functions

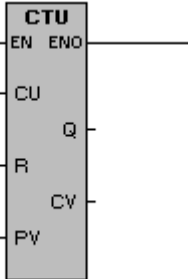
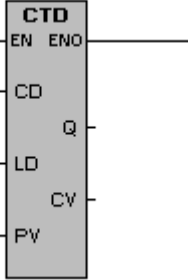
Symbol	Description
	<p>SD_COM (Send Device Command)</p> <p>OBSOLETE</p>
	<p>SD_COM_NQ (Send Device Command with Negated Q)</p> <p>OBSOLETE</p>
	<p>WD_PAR (Write Device Parameter)</p> <p>OBSOLETE</p>
	<p>RD_PAR (Read Device Parameter)</p> <p>OBSOLETE</p>
	<p>D_COM (Device Command)</p> <p>OBSOLETE</p>
	<p>SD_COM2 (send a device command)</p>
	<p>SD_COM_NQ2 (send a device command with not Q)</p>
	<p>WD_PAR2 (write a device parameter)</p>


Simbol	Description
 <p>The symbol for RD_PAR2 is a rectangular box. At the top, it is labeled 'RD_PAR2'. On the left side, there is an input terminal 'ON'. On the right side, there is an output terminal 'Q'. Inside the box, there are two terminals labeled 'Parameter' and 'Value'.</p>	RD_PAR2 (read a device parameter)
 <p>The symbol for D_COM2 is a rectangular box. At the top, it is labeled 'D_COM2'. On the left side, there is an input terminal 'EN'. On the right side, there is an output terminal 'ENO'. Inside the box, there is a terminal labeled 'Command'.</p>	D_COM2 (device command)

5. Device HMI Functions

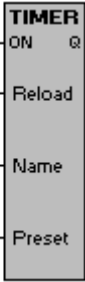
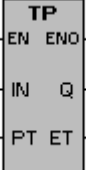
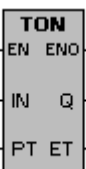
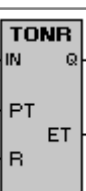
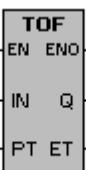
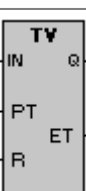
Simbol	Description
 <p>The symbol for WSCDIS is a rectangular box. At the top, it is labeled 'WSCDIS'. On the left side, there is an input terminal 'EN'. On the right side, there is an output terminal 'ENO'. Inside the box, there are eight terminals labeled 'Name', 'sodis7', 'sodis6', 'sodis5', 'sodis4', 'sodis3', 'sodis2', and 'sodis1' from top to bottom.</p>	WSCDIS (Write Screen Char Display)

6. Counter Functions

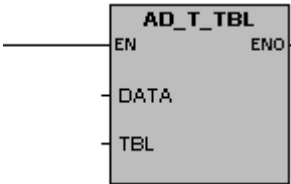
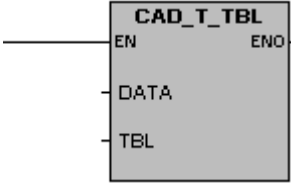
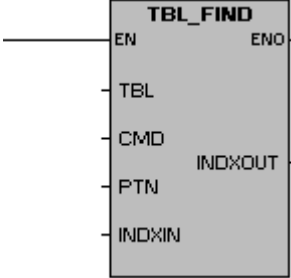
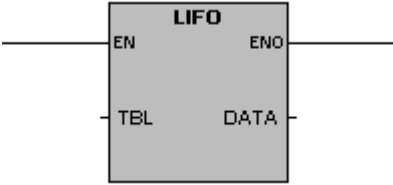
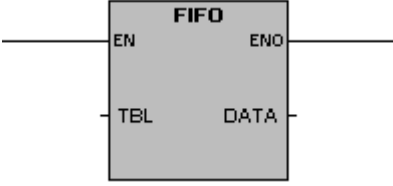
Simbol	Description
 <p>The symbol for CTU is a rectangular box. At the top, it is labeled 'CTU'. On the left side, there is an input terminal 'EN'. On the right side, there is an output terminal 'ENO'. Inside the box, there are four terminals labeled 'CU', 'Q', 'R', and 'CV' from top to bottom. There is also a terminal labeled 'PV' on the left side.</p>	CTU (Up Counter))
 <p>The symbol for CTD is a rectangular box. At the top, it is labeled 'CTD'. On the left side, there is an input terminal 'EN'. On the right side, there is an output terminal 'ENO'. Inside the box, there are four terminals labeled 'CD', 'Q', 'LD', and 'CV' from top to bottom. There is also a terminal labeled 'PV' on the left side.</p>	CTD (Down Counter)

Simbol	Description
	CTUD (Up / Down Counter)

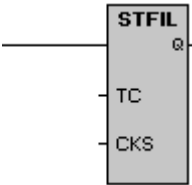
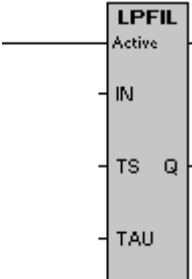
7. Timer Functions

Simbol	Description
	TIMER (On Delay)
	TP (Pulse)
	TON (On Delay)
	TONR (On- Delay Timer Retentive)
	TOF (Off Delay)
	TV (Pulse Protract)

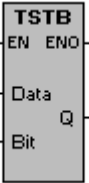
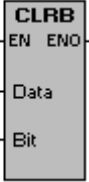


8. Table Functions

Symbol	Description
	AD_T_TBL (Add to Table)
	CAD_T_TBL (Circular Add to Table)
	TBL_FIND (Table Find)
	LIFO (Last In First Out)
	FIFO (First In First Out)

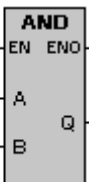
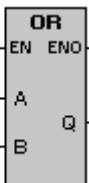
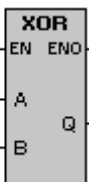

9. Filter Functions

Symbol	Description
	STFIL (State Filter)
	LPFIL (First Order Low Pass Filter)

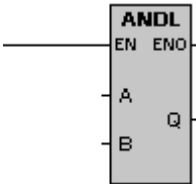
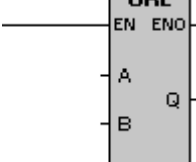
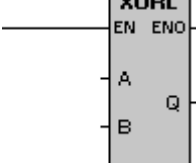
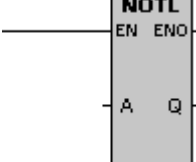
10. Bitwise Functions

Simbol	Description
	Bit Test
	Bit Clear
	Bit Set
	Bit Test

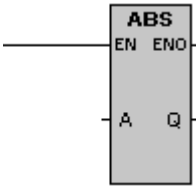
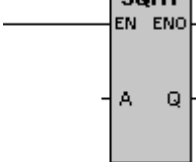
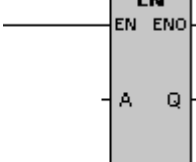
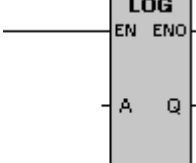
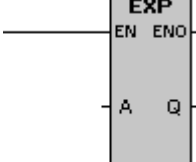
11. Booleanan Functions - Bitwise

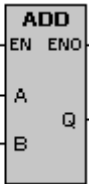
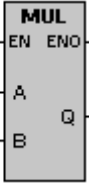
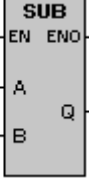
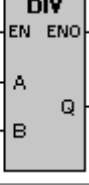
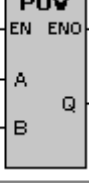
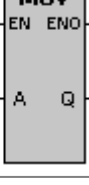
Simbol	Description
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	Or of 2 Input Bit Variables
	Xor of 2 Input Bit Variables
	Not of 1 Input Bit Variable

12. Booleanan Functions - Logical

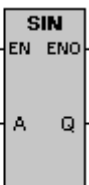
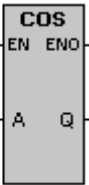
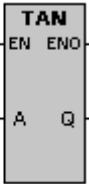
Symbol	Description
	And of 2 Input Variables
	Or of 2 Input Variables
	Xor of 2 Input Variables
	Not of 1 Input Variable

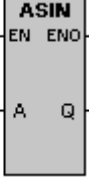
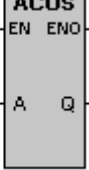
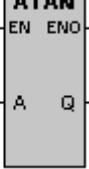
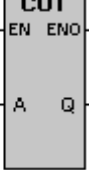
13. Math Functions

Symbol	Description
	ABS (Absolute Value)
	SQRT (Square Root)
	LN (Natural Logarithm)
	LOG (Logarithm Base 10)
	EXP (Natural Exponential)



Symbol	Description
	ADD (2 Variables Addition)
	MUL (2 Variables Multiplication)
	SUB (2 Variables Subtraction)
	DIV (2 Variables Division)
	POW (to the Power of Y)
	MOV (Move Data)

14. Trigonometric Functions

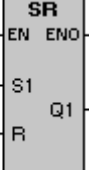
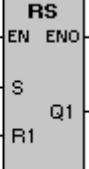
Symbol	Description
	SIN (Sine in Radians)
	COS (Cosine in Radians)
	TAN (Tangent in Radians)

Symbol	Description
	ASIN (Arc Sine)
	ACOS (Arc Cosine)
	ATAN (Arc Tangent)
	COT (Cotangent in Radians)

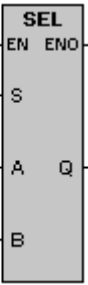
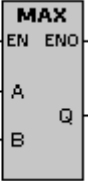
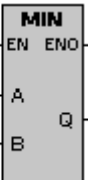
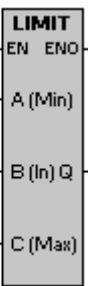
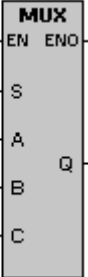
15. Edge Functions

Symbol	Description
	R_TRIG (Rising Edge Detector)
	F_TRIG (Falling Edge Detector)

16. Bistable Functions

Symbol	Description
	SR (Bistable Function Set Dominant)
	RS (Bistable Function Reset Dominant)

17. Selection Functions

Symbol	Description
	SEL (Binary Selection)
	MAX (Maximum Function)
	MIN (Minimum Function)
	LIMIT (Limiter)
	MUX (Multiplexer)

18. LADDER element symbols

Legend

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