

Legend for AUMA MATIC

Legend for actuator		
S1	TSC	Torque switch, closing, clockwise rotation
S2	TSO (DOEL)	Torque switch, opening, counterclockwise rotation
S3	LSC (WSR)	Limit switch, closing, clockwise rotation
S4	LSO (WOEL)	Limit switch, opening, counterclockwise rotation
S1/2 S2/2	DSR 1 DOEL 1	Torque switches, in tandem arrangement with DSR/DOEL (TSC/TSO)
S3/2 S4/2	WSR 1 WOEL 1	Limit switches, in tandem arrangement with WSR/WOEL (LSC/LSO)
S3/3 S4/3	WSR 2 WOEL 2	Limit switches, in triple arrangement with WSR/WOEL (LSC/LSO)
S3/4 S4/4	WSR 3 WOEL 3	Limit switches, in quadruple arrangement with WSR/WOEL (LSC/LSO)
S5	BL	Blinker transmitter
S6 S7	WDR WDL	Limit switches, DUO, for 2 intermediate positions, adjustable
S6/2 S7/2	WDR 1 WDL 1	Limit switches, DUO, for 2 intermediate positions in tandem arrangement with WDR/WDL (LSA/LSB)
B1/B2	EWG/RWG IWG	3-wire or 4-wire system/electronic position transmitter 3-wire or 4-wire system/inductive position transmitter
B3/B4	EWG/RWG IWG	2-wire system/electronic position transmitter 2-wire system/inductive position transmitter
F1	TH	Thermoswitch
F1/2	TH	Thermoswitches (signalisation)
R1	H	Heater in switch compartment
R2	f1	Potentiometer
R2/2	f2	Potentiometer in tandem arrangement with R 2
R2/3	f3	Potentiometer in triple arrangement with R 2
R3	PTC 1	PTC thermistor
R3/2	PTC 2	PTC thermistor (indication)
R4	H	Motor heater

Legend for AUMA MATIC	
A1.0	Interface board
K5 - 8	Output contact; running indication via output contacts (opening and closing) in combination with blinker (S5) and signal board for running indication (A91)
A1.1	Special interface board
A1.6	Timer board
R10	Direction OPEN, pause time
R11	Direction OPEN, running time
R12	Direction CLOSE, pause time
R13	Direction CLOSE, running time
A1.8	Profibus board, Modbus board
A2	Logic board
K9	Output contact/collect
A4	Overvoltage protection thyristors
A5	Thyristor board
A7	Positioner board
A8	Power supply board
F3, F4	Secondary fuses
A9	REMOTE change-over MANUAL - AUTOMATIC
A9.1	External release of local operation

We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.

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A11		PTC tripping board
A13		Fieldbus connection board
A13.1		Profibus DP and PTC tripping device
A13.2		Profibus DP and PTC tripping device and reset contact
A17		Galvanic isolator
A20/A21		Signal and control board
	S11/S11/2	Selector switch LOCAL - OFF - REMOTE
	S11/3	Selector switch LOCAL - OFF - REMOTE 3 rd level with spring return for test/reset/PTC tripping device
	S12.1	Push button OPEN
	S12.2	Push button STOP
	S12.3	Push button CLOSE
	S12.5	Push button EMERGENCY - STOP
	H1	Indication light CLOSE
	H2	Indication light OPEN
	H3	Indication light FAULT
	K3, K4	Control relay for reversing contactors:
	F1, F2	FF fuse for semiconductors
A22		Galvanic isolator and REMOTE change-over MANUAL - AUTOMATIC
A24		Board for storing the collective fault signal 3 s
A25		Signal and control board with EMERGENCY - STOP
A32		Overvoltage board for Profibus/Modbus
A33		External change-over LOCAL - REMOTE, without selector switch
A35		Heater monitoring
A66		REMOTE change-over for MANUAL - FIELDBUS
A67		Profibus with electronic blinker transmitter
A88		Heater system board
A91	K10, K11	Signal board for running indication Signal board for running indication (opening and closing) in combination with blinker transmitter (S5)
B5		Adjustment board for position transmitter
C _B		Permanent split capacitor (1 to 3 units)
F1', F2'		Primary fuses for power supply
F7		Thermal overload relay
K1, K2		Reversing contactors
Q1		Disconnect switch
Q2		Motor protection switch
R5		Heater in AUMA MATIC
U1 - U4		Semiconductors (thyristors)
V14		LED, (phase sequence), phase failure, motor protection tripped
V15		LED, torque switch operated in mid-travel
V21		Stepping mode active in direction CLOSE
V22		Stepping mode active in direction OPEN
V35		LED, command CLOSE available from control room
V36		LED, command OPEN available from control room
V37		LED, STOP command available from control room
V38		LED, command EMERGENCY available from control room
XK		Customer connection
XA		Actuator connection
XM		Connection for AUMA MATIC (wall bracket)

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Supplementary information	
Information A	<p>Running indication is possible for installed blinker transmitter (S5) (opening and closing)</p> <p>Running direction CLOSE: Sockets X_k 6 - X_k 7</p> <p>Running direction OPEN: Sockets X_k 6 - X_k 8</p> <p>Contacts remain closed in end position. For switching off/on the running indication (blinker transmitter), refer to operation instructions.</p>
Information B	<p>The valve manufacturer specifies the type of seating in the end positions. Setting is performed using programming switches S1-2 and S3-2 (refer to operation instructions). Tripping of a torque switch in mid-travel leads to switching off and generates a fault signal. For torque seating, the limit switches are used for signalling. They have to be set as to ensure that the respective switch trips shortly before reaching the end position. If the torque switch trips before the limit switch, the actuator is switched off and a fault signal generated.</p>
Information D	<p>The following fault signals are recorded and can be sent as potential-free collective fault signal to the control room.</p> <ul style="list-style-type: none"> • Mains failure • Phase failure • Motor protection tripped • Torque switch tripped in mid-travel (on/off switch refer to operation instructions).
Information E	<p>Input signals according to DIN 19240.</p> <p>Nominal operating current of inputs X_k 2; X_k 3 and X_k 4 amounts to 10 – 15 mA. Should the internal 24 VDC power supply be used for remote control, switching is only possible via potential-free contacts.</p>
Information F	<p>In case of wrong phase sequence, the running direction is adjusted by automatic phase inversion. During phase failure, the multi-turn actuator is at standstill. The failure is indicated at LED V14 of the interface board.</p>
Information G	<p>Potential-free contacts can be used for signals. The internal control voltage (X_k 11/+24 V or X_k 5/-24V) must not be used for external lights, relays etc.</p>