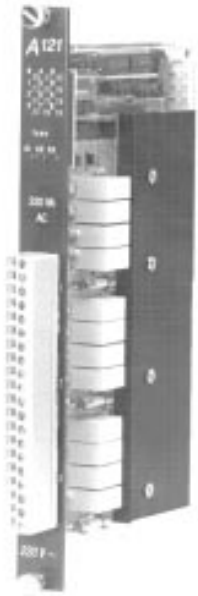




A6

DIGITAL OUTPUT MODULES, A121 / O125 - 12 TRIAC OUTPUTS

PLC SYSTEMS
MULTICONTROL COMPONENTS



A121 / O125

- 12 Digital Triac Outputs in Three Groups
- Switching Voltage 220 VAC / 120 VAC
- Switching Current Max. 2 A per Output
- Galvanic Isolation between the Groups and to the PLC
- No External Protection Circuit Required

SLOTS

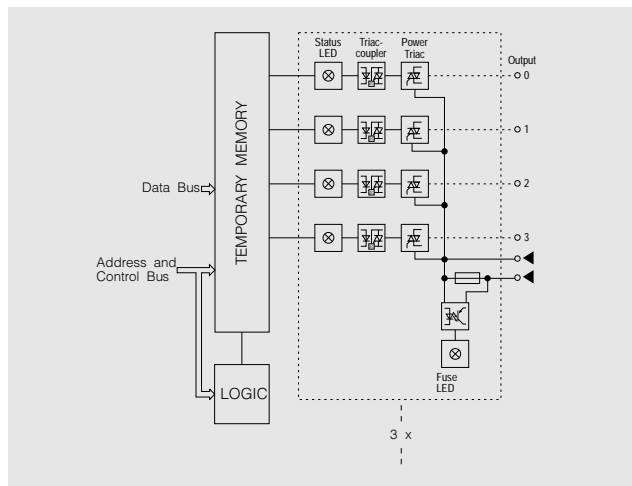
The A121 and O125 output modules can be operated in all slots of the MULTI, MIDI and M264 racks.

Rack	Slot	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
MULTI Base Rack		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MULTI Expansion Rack		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	● ¹⁾
MIDI		○	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M264		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

ORDER DATA

Digital Output Module, 12 Triac Outputs, Three Galvanically Isolated Groups, LED Status Displays	
ECA121-0	Switching Voltage 220 VAC
ECO125-0	Switching Voltage 120 VAC

DIAGRAM



TECHNICAL DATA

	A121	O125	
Number of Outputs	Total	12	
	In Groups of	4	
Type	Triac		
Galvanic Isolation	Output - PLC	YES	
	Group - Group	YES	
	Output - Output	NO	
Switching Voltage	Nominal	220 VAC	120 VAC
	Minimal	90 VAC	90 VAC
	Maximal	250 VAC	144 VAC
Switching Voltage Frequency	47 to 63 Hz		
Switching Current	See Section "Switching Current"		
Maximum Switching Current per Group	3 A ²⁾		
Leakage Current	Max. 7 mA (w/load, 50 Hz, 220 VAC) ³⁾	Max. 5 mA (w/load, 60 Hz, 120 VAC) ³⁾	
	Maximum Power-on Current (Non-repeating)		
For 100 msec	12 A	7 A	
For 10 msec	25 A	12 A	
Minimum Holding Current	At 0 °C	2 mA	
	At 60 °C	2 mA	
Voltage Drop	1 V at 2.4 A 0.85 V at 0.7 A	1 V at 2.4 A 0.85 V at 0.5 A	
	Switching Delay	Max. 20 msec at 50 Hz	Max. 19 msec at 60 Hz
Switching Procedure	Switched ON with change in voltage potential Switched OFF with change in current direction		
Transient Voltage	1500 V for Max. 2 msec (at 220 Ω)		
Electric Isolation	Output - PLC	2500 V (Optocoupler, Distance between lines - 6 mm)	
	Group - Group	1500 V (Distance between lines - 3 mm)	
	Output - Housing	1500 V (Distance between lines - 3.5 mm)	
Grade	4		
Protection Circuit	No External Protective Circuitry Required		
Power Consumption At +8 V	1.8 W		
Documentation	Hardware Manual MULTICONTROL		
	German	MAHWMULTI-0	
	English	MAHWMULTI-E	
	French	MAHWMULTI-F	
	Italian	MAHWMULTI-I	
	Spanish	MAHWMULTI-S	

CONNECTIONS

0	Output 0	8	Output 8
1	Output 1	9	Output 9
2	Output 2	A	Output A
3	Output 3	B	Output B
▶	220 VAC / 120 VAC (L)	▶	220 VAC / 120 VAC (L)
▶	220 VAC / 120 VAC (L)	▶	220 VAC / 120 VAC (L)
4	Output 4		
5	Output 5		
6	Output 6		
7	Output 7		
▶	220 VAC / 120 VAC (L)		
▶	220 VAC / 120 VAC (L)		

¹⁾ When using power supply modules with extended diagnostic functions, slot F in the third expansion rack may not be used.

²⁾ Unless restricted by the max. power loss of the triac (see section "Switching Current")

³⁾ Check engaging current and hold current when controlling relays!