ALMEMO® Output modules

ALMEMO® trigger output interface, ES 500-RTA6, for data acquisition system ALMEMO® 500 V7



Technical Data:

Trigger inputs	Optocoupler 4 to 30 V, Ri > 3 kohms
Relays	Semiconductor relays 50 V, 0.5 A, 1 ohm
Analog outputs	10 V or 20 mA (programmed)
	16 bit DAC. electrically isolated
0.010.0 V	0.5 mV/Digit. Load > 100 kohms
0.020.0 mA	1 μA/Digit. Load < 500 ohms
Accuracy	$\pm~0.1\%$ of meas. val. $\pm~0.1\%$ of final val.
Temperature drift	10 ppm/K
Output rate:	in total up to 100 actions/s for a system
	with 1 RTA6 plug-in module
Power supply	via ALMEMO® measuring system
Current consumption	Standard: approx. 10 to 20 mA
	2 analog outputs: approx. 15 mA + 1.8·IOut
Module	19" 8-DU (2 slots)

- Universal trigger output interface for ALMEMO[®] 500 V7 data acquisition systems
- Control from the CPU slot via internal SPI bus.
- Up to 4 RTA6 plug-in units are supported per ALMEMO® 500.
- Up to 10 peripheral elements (relays, trigger inputs, analog outputs) each with individually configurable function
- Relay functions, total alarm, assignment to particular limit values, or addressing via interface
- Inverse relay addressing for alarm in the event of power failure
- Relay states shown via LEDs
- Watchdog function in the event of a failure of ALMEMO® device or computer addressing
- Comprehensive trigger features with the aid of command macros, addressing via electrical signals
- Either 2 or 4 analog outputs (10 V or 20 mA programmable) can be assigned to any measuring channels, scalable sub-areas, or alternatively addressing via interface.
- On request: 10 analog outputs per plug-in module (without trigger inputs, without relays)
- Connection of peripherals via ALMEMO® clamp connectors, cable with anti-kink protective sleeve and strain relief
- Power supply via ALMEMO® system.



Note:

The ALMEMO® Trigger Output Interface RTA6 can be used in ALMEMO® 500 data acquisition systems manufactured as of 4th quarter 2021, (cannot be retrofitted for older devices).

Basic version 2 trigger inputs and 4 normally open relays

Options 2 additional relays (normally open) OA500SH2

Per normally open pair 2 additional normally closed relays (with normally open relays 2 changeover relays) OA500OH2

2 analog outputs (common ground), electrically isolated 10 V or 20 mA (programmable) OA500R02

Possible combinations

2x OA500SH2 (+4 relays)

or 1x OA500SH2 (+2 relays) + 1x OA500R02 (+2 analog outputs) or 2 x OA500R02 (+4 analog outputs)

Variants Order no.

ALMEMO® relay trigger module for data acquisition system ALMEMO® 500 V7 with 2 trigger inputs, 4 normally open relays, and 3 ALMEMO® clamp connectors

ES500RTA6