



Model number

VBA-TUNER

Active bus terminal resistor with AS-Interface slave address

Features

- Cable extension to up to 300 m per segment possible
- Simple commissioning by means of rotary selector
- Optimized bus terminator parameters

Function

Due to the circuitry of each individual AS-Interface segment with a VBA-TUNER, consisting of an ohmic, capacitive and inductive unit, the signal quality can be improved and the AS-Interface voltage monitored.

During a Teach-In phase, the VBA-TUNER analyzes the number of AS-Interface telegram repeats, or unrecognized AS-Interface telegrams, and adjusts its impedance automatically to minimize their number. The optimum parameters for the relevant segment are therefore achieved. Due to this adaptation, the 100 m limit for the optimized segment can be increased to 300 m.

With the help of 3 LEDs, the quality of the AS-Interface communication can be permanently displayed. Errors are stored and can be acknowledged with the help of a button. The user sees at a glance whether the quality of the AS-Interface installation is in order. As AS-Interface node, the VBA-TUNER has profile S-7.A.5 available. This enables serial data transfer as well as digital data transfer for optimization of the AS-Interface segment. With this serial data, the analog values of the active measured voltage in the segment and the signal values of further nodes are transferred to the master.

Technical data

General specifications

AS-Interface specification	V3.0
----------------------------	------

Indicators/operating means

LED ERROR	AS-Interface error; LED red
LED WARNING	AS-Interface warning; LED yellow
LED GREEN	AS-Interface OK; LED green
LED POWER	AS-Interface voltage; LED green

Input

Supply	from AS-Interface
Input current	≤ 60 mA

Programming instructions

Profile	S-7.A.5
IO code	7
ID code	A
ID1 code	0
ID2 code	5

Data bits (function via AS-Interface)	input	output
D0	In 0, bin. Bit	serial Communication
D1	In 1, bin. Bit	serial Communication
D2	serial Communication	Out 2, bin. Bit
D3	serial Communication	-

Parameter bits (programmable via AS-i)	function
	defined change of parameters starts teach-in process

Ambient conditions

Ambient temperature	0 ... 55 °C (273 ... 328 K)
Storage temperature	-25 ... 75 °C (248 ... 348 K)

Mechanical specifications

Protection degree	IP65
Connection	cable piercing method or terminal compartment flat cable or standard round cable
Note	Purpose: improvement of signal quality and voltage monitoring operation on the most remote AS-Interface strand (up to 300 m).

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 61000-6-2:2005 EN 61000-6-4:2007
Standard conformity	
Electromagnetic compatibility	EN 61000-6-2:2005 EN 61000-6-4:2007