# VAS-2A8L-KE4-8SE

S22 S21 S12 S11 S42 S41 S32 S31 S62 S61 S52 S51



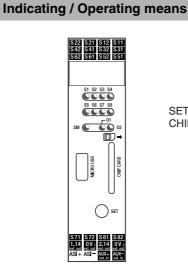
# 99 5 5 113



# **Electrical connection**

Dimensions

#### S11 S12 Input 1 S21 ASI -S22 ASI S31 S32 AUX -Input 2 S41 AUX S42 1.14 Safety S51 2.14 switch output 1 + 2 /si S52 0V Input 3 S61 ext. out S62 S71 S72 Input 4 S81 S82 Mini- $\Box$ USB



= Service button CHIP CARD = Chip card

## **Model number**

#### VAS-2A8L-KE4-8SE

Safety Monitor, 8 decentralized output circuits

#### Features

- Compact safety controller up to SIL • 3/PLe
- 4 integrated, safe inputs
- 2 integrated, safe outputs (OSSDs) •
- 8 logical, safe output groups ٠ (switchable)
- Increased functionality through inte-• grated expansion port
- Parameterizable muting, timer and lo-• gic functions using SIMON+ software

Refer to "General Notes Relating to Pepperl+Fuchs Product Information" USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com

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SET



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# AS-Interface Safety Monitor

# VAS-2A8L-KE4-8SE

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Technical data		
General specifications		1/0.0
AS-Interface specification UL File Number		V3.0 E223772
	otoro	223/72
Functional safety related param Safety Integrity Level (SIL)	eters	SIL 3
Performance level (PL)		PLe
Mission Time $(T_M)$		20 a
PFH <sub>d</sub>		5.08 E-9
Indicators/operating means		
LED SM		Status of safety monitor, multicolored LED
		green: Safety monitor OK
LED S1 S8		Status of inputs S1 S8, yellow LED
LED 01, 02		yellow: Contact open Status of outlputs, multicolored LED
LED 01, 02		yellow: Output on
Electrical specifications		
Auxiliary voltage (input)	U <sub>EXT</sub>	20 30 V <sub>DC</sub> PELV
Insulation voltage	Ui	500 V AS-Interface/U <sub>AUX</sub> :
Rated operating voltage	U <sub>e</sub>	18,0 31.6 V from AS-Interface
Rated operating current	l <sub>e</sub>	≤ 200 mA from AS-Interface;
		$\leq$ 4 A from AUX
Interface 1		
Interface type		Chip card slot
Interface 2		
Interface type		Micro USB
Input		
Number/Type		8 / 4 safe inputs cat. 4
		or 8 standard inputs
Supply		24 V U <sub>AUX</sub>
Current loading capacity		10 mA per signal output
J J		1.4 A OSSD supply output
Input current		Static switching current 4 mA at 24 V, dynamic 30 mA at 24
		(T=100 μs)
Output		
Number/Type		Output circuits 1 and 2 max. contact rating:
		700 m A <sub>DC-13</sub> at 24 V
Supply		24 V U <sub>AUX</sub>
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 62026-2:2013 EN 61000-6-2:2005/AC:2005
		EN 61000-6-4:2007/A1:2011
Machinery Directive		
Directive 2006/42/EC		EN 13849-1:2008/AC:2009 EN 62061:2005
Standard conformity		
Electromagnetic compatibility		EN 50295:1999 EN 61000-6-2:2005/AC:2005 EN 61000-6-4:2007/A1:2011
Degree of protection		EN 60529:2000
Electrical safety		IEC 61508:2010 and EN 62061:2005 (up to SIL3) EN 1384
· · · · · · · · ,		1:2008/AC:2009 EN 61326-3-1:2008
AS-Interface		EN 62026-2:2013
Programming instructions		
Profile		S-0.B.E
IO code		0
ID code		В
ID1 code		F
Ambient conditions		
Ambient temperature		0 55 °C (32 131 °F)
Storage temperature		-25 85 °C (-13 185 °F)
Mechanical specifications		
Mechanical specifications Degree of protection		IP20
Mechanical specifications		removable terminals rated connection capacity: rigid/flexible (with and without wire-end ferrules): 0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup> for multiple-wire connection with two wires of equal cross-stion:
Mechanical specifications Degree of protection		removable terminals rated connection capacity: rigid/flexible (with and without wire-end ferrules): 0.25 mm <sup>2</sup> 2.5 mm <sup>2</sup> for multiple-wire connection with two wires of equal cross-s
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### Function

The AS-Interface safety monitor compact VAS-2A8L-KE4-8SE- is a control cabinet module with up to 8/4 local safe inputs and up to 8 independent outputs.

The safe inputs can optionally be configured as standard inputs and signalling outputs. Two of the safe inputs are also suitable as inputs for OSSDs, the others only for potential-free contacts. Each safe input can also be configured as two standard inputs. 8 independent AS-Interface release circuits support multiple safe AS-Interface outputs on a single address. In addition, the test pulse outputs can be switched as diagnostic outputs (not control-safe). The safe circuit for the connected consumers is created using two safety relays.

The housing, which is only 22.5 mm wide, requires little space in the switch cabinet. The module is mounted by clicking it onto the 35 mm mouting rail, compliant with EN 50022.

The AS-Interface and external power supply are each connected by means of a 2-station terminal block. Connection of the inputs and outputs is by means of multiple 4-station terminal blocks. This permits the simple removal of the supply during commissioning or servicing. The supply to the connected slaves is fed either internally via the module from the AS-interface or via an external supply. The current status of the inputs and outputs is indicated via yellow LEDs. Communication faults are indicated via red LEDs. The display of the operating voltage and the address 0 is provided by a green LED.

A Micro-USB interface is used for configuration with the AS-i-Control Tools via ASIMON. The configuration can be transferred to a replacement device using a chip card.

#### Accessories

VAZ-SW-SIMON+ Software for configuration of K30 Master Monitors/K31 and KE4 Safety Monitors

#### VAZ-SIMON-USB

USB Type A to Micro-USB connector

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