# VAA-4A-KF-E2

# AS-Interface actuator module





## **Model Number**

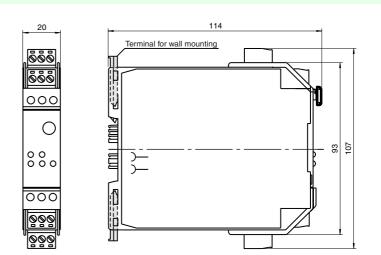
### VAA-4A-KF-E2

Cabinet module 4 electronic outputs

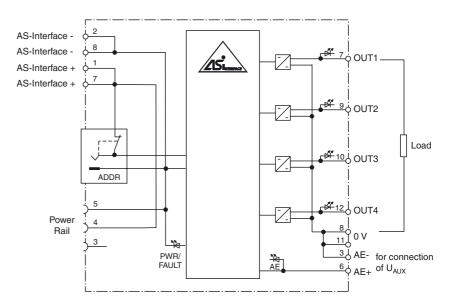
#### **Features**

- Housing with removable, coded terminals
- AS-Interface connection via Power Rail
- Communication monitoring, turn-off
- Outputs loadable up to 8 A (per module)
- · Addressing jack
- Power supply of outputs from the external auxiliary voltage
- Function display for bus, external auxiliary voltage and outputs

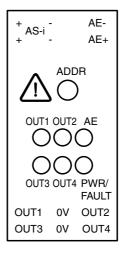
Dimensions



## **Electrical connection**



### Indicating / Operating means



Release date: 2005-11-25 12:36 Date of issue: 2006-01-12 087522\_ENG.xml

Subject to reasonable modifications due to technical advances

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# **AS-Interface actuator module**

Slever typeStandard slaveAS-Interface specification> V2.0Pequired master specification> V2.0UL Ela NumberV2.0Tublector/Soperating meanserStandard source specificationTublector/Soperating meanserStandard source specificationLED PURVFAULTwital-LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0LED OUTswitching state (output): 4 LED yellowLED AUswitching state (output): 4 LED yellowProtection classIIIRated operational outgaeUeSuppitySo maCurrent2 A per output. 8 A per moduleVoltage(Uav - 0.5 V)ProfolicoSe.8.FID codeFID codeSe.8.FID code-Di CodeSe.8.FID code-PorterOUT3Di Code-PorterOUT3Di Code-Porter-Di Code-Porter-Di Code-Di Code-Di Code-Di Code-Di Code-Di Code-Di Code- </th <th>Technical data</th> <th></th> <th></th> <th></th>	Technical data			
AS-Interface specification   V2.0     Required master specification   ≥ V2.0     UL, File Number   E87056     Indicators/operating means   dual-LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0     LED OUT   switching state (output); 4 LED yellow     LED AE   ext. auxiliary voltage (output); 4 LED yellow     LED AE   ext. auxiliary voltage (output); 4 LED yellow     Auxiliary voltage (output)   0,00000000000000000000000000000000000	General specifications			
Required master specification   ≥ V2.0     UL File Number   E87:056     Indicators/operating means   dual-LED green/red green: AS-Interface voltage, normal operation reci communication error or address 0     LED DUT   switching state (output); 4 LED yellow     LED AE   ext. auxiliary voltage (output)   U_AUX;     Electrical specifications   III     Rated operational voltage U_GU   25 31.6 V from AS-Interface     Rated operational voltage U_GU   25 31.6 V from AS-Interface     Rated operational voltage U_GU   2 A per output, 8 A per module     Voltage   2 A per output, 8 A per module     Voltage   2 (UAUX - 0.5 V)     Programming instructions   F     Doto   SA.F     ID code   F     Doto   -     D0   -     D1   -   OUT1     D1   -   OUT4     D2   -   OUT4     D2   -   OUT4     D2   -   OUT4     D2   -   OUT4     D3   -   OUT4     D4   -   OUT4 <td< td=""><td>Slave type</td><td></td><td>Standard slave</td><td></td></td<>	Slave type		Standard slave	
UL File Number   E87056     Indicators/operating means   dual-LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0     LED OUT   switching state (output); 4 LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0     LED AE   ext. auxiliary voltage Uqupu; LED green     Auxiliary voltage (output); 4 Uquy; 2030 V DC PELV   Protection class     Protection class   II     Rated operational voltage   Ug   2531.6 V from AS-Interface     Rated operational voltage   Ug   2531.6 V from AS-Interface     Rated operational voltage   Ug   25	AS-Interface specification		V2.0	
Indicators/operating means   dual-LED green/red green values     LED PWR/FAULT   dual-LED green/red green values     green: X8-Interface voltage, normal operation red: communication error or address 0     LED OUT   switching state (output); 4 LED yellow     LED AE   ext. auxiliary voltage (output)     Protection class   III     Rated operational current   Ig   26.531.6 V from AS-Interface     Rated operational current   Ig   26.531.6 V from AS-Interface     Voltput   2030 vD CP ELV   Vertex     Number/Type   4 electronic outputs, PNP     Supply   from external auxiliary voltage UAUX     Current   2 A per output, 8 A per module     Voltage   >(UAUX * 0.5 V)     Profile   S-8.F     ID code   8     ID code   8     ID code   9     ID code   0UT1     D1   -   OUT2     D2   -   OUT3     D2   -   OUT4     Profile   setting value de-energised     PO = 1 (basic setting), monitoring = ON, i.e. if communication falis, the outputs maintaintheir condition   -  <	Required master specification		≥ V2.0	
LED PWR/FAULT   dual-LED green/red green:: AS-Interface voltage, normal operation green:: AS-Interface voltage, normal operation green:: AS-Interface voltage, normal operation and the set operational control red: communication error or address 0     LED AE   extensitional voltage (output): 4 LED yellow     LED AE   extensitional voltage (output): 4 LED green     Auxiliary voltage (output)   UAUX   20 30 V DC PELV     Protection class   II   Rated operational voltage Ug   25 31.6 V from AS-Interface     Rated operational voltage Ug   26.5 31.6 V from AS-Interface   20     Number/Type   4 electronic outputs, PNP     Supply   from external auxiliary voltage UAUX     Current   2 Aper output, 8 A per module     Voltage   2 (AUX) - 0, 5 V)     Programming instructions   F     Profile   S-8.F     ID code   8     Do   -     Do   -     Data bits (function via AS-Interface)   input   output     Data bits (function via AS-Interface)   input   output     Do   -   OUT3     D3   -   OUT3     P   (aux - Communicatin moninoring PO = 1 (basic setting), moninoring = ON,	UL File Number		E87056	
LED PWR/FAULT   dual-LED green/red green:: AS-Interface voltage, normal operation green:: AS-Interface voltage, normal operation green:: AS-Interface voltage, normal operation and the set operational control red: communication error or address 0     LED AE   extensitional voltage (output): 4 LED yellow     LED AE   extensitional voltage (output): 4 LED green     Auxiliary voltage (output)   UAUX   20 30 V DC PELV     Protection class   II   Rated operational voltage Ug   25 31.6 V from AS-Interface     Rated operational voltage Ug   26.5 31.6 V from AS-Interface   20     Number/Type   4 electronic outputs, PNP     Supply   from external auxiliary voltage UAUX     Current   2 Aper output, 8 A per module     Voltage   2 (AUX) - 0, 5 V)     Programming instructions   F     Profile   S-8.F     ID code   8     Do   -     Do   -     Data bits (function via AS-Interface)   input   output     Data bits (function via AS-Interface)   input   output     Do   -   OUT3     D3   -   OUT3     P   (aux - Communicatin moninoring PO = 1 (basic setting), moninoring = ON,	Indicators/operating means			
LED AE   ext. auxiliary voltage U <sub>AUX</sub> ; LED green     Flectrical specifications   030 V DC PELV     Auxiliary voltage (output)   U <sub>AUX</sub> Protection class   III     Rated operational voltage   U <sub>e</sub> Rated operational current   Ie     Supply   4 electronic outputs, PNP     Supply   4 electronic outputs, PNP     Supply   5 A per output , 8 A per module     Voltage   2 A per output , 8 A per module     Voltage   8     Programming instructions   F     Profile   S-8.F     ID code   8     ID code   7     Dot   -     Dot   -     Dotab bits (function via AS-Interface)   formunication monitoring     Porgarameter bits (function via AS-Interface)   OUT1     D1   -   OUT2     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-I)   formunication monitoring     P0   -   OuT4     P2   -   OUT4     P2   -   OuT4 </td <td>LED PWR/FAULT</td> <td></td> <td>green: AS-Interface voltage,</td> <td></td>	LED PWR/FAULT		green: AS-Interface voltage,	
Electrical specifications 20 30 V DC PELV   Auxiliary voltage (output) UAUX   Protection class III   Rated operational voltage Ue   Standard operational voltage Ue   Rated operational voltage Ue   Standard operational voltage Ue   Standard operational current Ie   Standard conformity Forme external auxiliary voltage UAUX   Current 2 A per output, 8 A per module   Voltage 2 (UAUX - 0,5 V)   Profile S-8.F   ID code 8   ID code F   Data bits (function via AS-Interface) input   OUT1 OUT2   D2 -   D2 -   D3 -   Parameter bits (programmable via AS-Interface) Communication monitoring   P0 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised   P2	LED OUT		switching state (output); 4 LE	ED yellow
Electrical specifications	LED AE		ext. auxiliary voltage UALIX; L	ED green
Auxiliary voltage (output)     VAUX     2030 V DC PELV       Protection class     III       Rated operational voltage     Ue     26.531.6 V from AS-Interface       Rated operational current     Ie     30 mA       Output     4 electronic outputs, PNP     From external auxiliary voltage UAUX       Supply     2 A per output, 8 A per module     UAUX       Voltage     2 (UAUX - 0.5 V)       Programming instructions     5 - 00011       ID code     8       ID code     F       Data bits (function via AS-Interface)     input     output       D1     -     0UT3       D2     -     0UT3       D3     -     0UT4       PP<1 (basic setting), monitoring PO i, i.e. if communication fails, the outputs are de-energised	Electrical specifications			
Protection class   III     Rated operational voltage   Ue   26.5 31.6 V from AS-Interface     Rated operational current   Ie   <30 mA	•	UALIX	20 30 V DC PELV	
Rated operational voltage     Ue     26.5 31.6 V from AS-Interface       Rated operational current     Ie     ≤ 30 mA       Output         Number/Type     4 electronic outputs, PNP       Supply     from external auxiliary voltage UAUX       Current     2 A per output, 8 A per module        Voltage     2 A per output, 8 A per module        Profile     S-8.F        IO code     8         Data bits (function via AS-Interface)     input     output       Data     S-8.F     OUT1       D1     output     -     OUT1       D2     -     OUT3     OUT3       D3     -     OUT3     OUT3       D3     -     OUT3     OUT3       D4     used     -     OUT3       D3     output setting (programmable via AS-i)     function     -       P0     non used     -     OUT3       P2     not used     -     -       P2     not used     <		- AUX		
Rated operational current     Ie     ≤ 30 mA       Output         Number/Type     4 electronic outputs, PNP       Supply     from external auxiliary voltage U <sub>AUX</sub> Current     2 A per output, 8 A per module       Voltage     > (U <sub>AUX</sub> - 0,5 V)       Programming instructions     -       Profile     S-8.F       IO code     8       ID code     F       Data bits (function via AS-Interface)     input     output       D0     -     OUT1       D1     -     OUT3       D3     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-i)     function       P0     1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the output = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0 =		U.		face
Output   4 electronic outputs, PNP     Supply   from external auxiliary voltage U <sub>AUX</sub> Current   2 A per output , 8 A per module     Voltage   2 (U <sub>AUX</sub> - 0,5 V)     Programming instructions   -     Profile   S-8.F     IO code   8     ID code   8     ID code   F     Data bits (function via AS-Interface)   input output     D0   -   OUT1     D1   -   OUT2     D2   -   OUT3     D3   -   OUT3     D3   -   OUT4     P1   not used   P0 = 0, monitoring     P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition   File communication fails, the outputs are de-energised     P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition   File communication fails, the outputs are de-energised     P1   not used   P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used   P1     P2   not used   P2     P3   not used   P2     Protection	· ·	U		
Number/Type     4 electronic outputs, PNP       Supply     from external auxiliary voltage U <sub>AUX</sub> Current     2 A per output , 8 A per module       Voltage     2 (U <sub>AUX</sub> - 0,5 V)       Programming instructions     Profile       Sea.F     (Uocode       IO code     8       ID code     F       Data bits (function via AS-Interface)     input     output       D0     -     OUT1       D1     -     OUT2       D2     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-i)     function       P0     0, monitoring     P0       P0     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-i)     function       P0     -     not used       P0     -     not used       P2     -     outputs are de-energised       P0     -     moit used       P2     -     not used       P2     -     - <		e		
Supply   from external auxiliary voltage U <sub>AUX</sub> Current   2 A per output, 8 A per module     Voltage   2 (U <sub>AUX</sub> - 0,5 V)     Programming instructions      Profile   S-8.F     IO code   8     ID code   7     Data bits (function via AS-Interface)   input   output     D0   -   OUT1     D1   -   OUT3     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-interface)   function     P0   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-interface)   function     P0   0 pointioring   PO, i.e. if communication fails, the outputs are de-energised     P0   0 monitoring   POF, if communication fails, the outputs are de-energised     P1   not used   -     P2   not used   -     P2   not used   -     P3   not used   -     Methent conditions   removable coded terminals, Power Rail     Mass   130 g	•		4 electronic outputs PNP	
Current   2 A per output , 8 A per module     Voltage   2 (U <sub>AUX</sub> - 0,5 V)     Programming instructions   5.8.F     Profile   S-8.F     IO code   8     ID code   F     Data bits (function via AS-Interface)   input   output     D0   -   OUT1     D1   -   OUT2     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-i)   function   Formitoring     P0   communication monitoring   P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised     P1   not used   P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used   P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P2   not used   P0 = 0, monitoring = OFF, if communication fails, the output set are to the prover set are set			• • • •	
Voltage     ≥ (U <sub>AUX</sub> - 0,5 V)       Programming instructions       Profile     S-8.F       IO code     8       ID code     F       Data bits (function via AS-Interface)     input     output       D0     -     OUT1       D1     -     OUT2       D2     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-I)     function       P0     Communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs anitatin their condition       P1     not used P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs			//6//	
Programming instructions     Profile   S-8.F     IO code   8     ID code   F     Data bits (function via AS-Interface)   input   output     D0   -   OUT1     D1   -   OUT2     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-I)   function     P0   (basic setting), monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring g OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring monitor fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring g OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring g OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, if communication fails, the outputs are de-energised P0 = 0, for OC (248 343 K)     Storage temperature   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Monting   D0     Mass   130 g     Mounting   DI				
Profile     S-8.F       IO code     8       ID code     F       Data bits (function via AS-Interface)     input     output       D0     -     OUT1       D1     -     OUT2       D2     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-i)     function     Function       P0     -     OUT4       P0     communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, if communication fails, the outputs arialis, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs P1 not used       P2     not used     -       P3     out sed     -       P1     .25 70 °C (248 343 K)     -       Storage temperature     .25 70 °C (248 358 K) <td< td=""><td>Ŭ</td><td></td><td></td><td></td></td<>	Ŭ			
IO code   8     ID code   F     Data bits (function via AS-Interface)   input   output     D0   -   OUT1     D1   -   OUT2     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-i)   function   OUT4     Parameter bits (programmable via AS-i)   function monitoring     P0   1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised     P1   not used     P2   not used     P3   not used     P4   -25 70 °C (248 343 K)     Storage temperature   -25 70 °C (248 343 K)     Storage temperature   -25 70 °C (248 343 K)     Torage temperature   -25 70 °C (248 358 K)     Mechanical specifications   -25 70 °C (248 358 K)     Mechanical specifications   -25 70 °C (248 358 K)     Mass   130 g     Mass   130 g     Mounting   DIN rail     Compliance with standards and direc   Standard conformity	• •		C 0 E	
ID codeFData bits (function via AS-Interface)inputoutputD0-OUT1D1-OUT2D2-OUT3D3-OUT4Parameter bits (programmable via AS-ifunctionP0communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OF, i.e. if communication fails, the outputs maintain their conditionP1not usedP2not usedP3ot usedstorage temperature torage temperature25 70 °C (248 343 K)Storage temperature25 85 °C (248 358 K)Protection degreeIP20Connectionremovable coded terminals, Power RailMass130 gMass130 gMountingDIN railStandard conformityStandard conformity				
Data bits (function via AS-Interface)     input     output       D0     -     OUT1       D1     -     OUT2       D2     -     OUT3       D3     -     OUT4       Parameter bits (programmable via AS-i)     function     OUT4       Parameter bits (programmable via AS-i)     function     OUT4       Po     -     OUT4       Po     0     OUT4       Parameter bits (programmable via AS-i)     function     OUT4       Parameter bits (programmable via AS-in)     function     OUT4       Po     1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised PO = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     Tot used       P1     not used     Not used     Tot used       P2     not used     Storage temperature     -25 70 °C (248 343 K)     Storage temperature       Storage temperature     -25 85 °C (248 358 K)     Storage temperature     Storage temperature       Connection degree     IP20     Storage temperature     IP30 g       Mass     IP30 g     IP3				
D0-OUT1D1-OUT2D2-OUT3D3-OUT4Parameter bits (programmable via AS-ifunctionP0communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their conditionP1not usedP2not usedP3ono usedAmbient conditions-25 70 °C (248 343 K)Storage temperature-25 85 °C (248 358 K)Mechanical specifications-Protection degreeIP20Connectionremovable coded terminals, Power RailMass130 gMountingDIN railCompliance with standards and direc: tivesStandard conformity-			•	output
D1   -   OUT2     D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-i)     Parameter bits (programmable via AS-i)   function     Po   communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used     P2   not used     P3   not used     Ambient temperature   -2570 °C (248343 K)     Storage temperature   -2585 °C (248358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Standard conformity   DIN rail		e)	input	
D2   -   OUT3     D3   -   OUT4     Parameter bits (programmable via AS-i)   function   OUT4     P0   communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used     P2   not used     P3   not used     Ambient temperature   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Compliance with standards and direc- standard conformity   JIN rail			-	
D3   - OUT4     Parameter bits (programmable via AS-i)   function     P0   communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used     P2   not used     P3   not used     Ambient temperature   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Standard conformity   DIN rail				
Parameter bits (programmable via AS-i)   function     P0   communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used     P2   not used     P3   not used     Ambient conditions   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Mechanical specifications   -25 85 °C (248 358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Compliance with standards and direc- tives   standard conformity			_	
P0   communication monitoring P0 = 1 (basic setting), monitoring = ON, i.e. if communication fails, the outputs are de-energised P0 = 0, monitoring = OFF, if communication fails, the outputs maintain their condition     P1   not used     P2   not used     P3   not used     Ambient conditions   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Storage temperature   -25 85 °C (248 358 K)     Mechanical specifications   -25 85 °C (248 358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Compliance with standards and direc- tives   standard conformity		ه ۵۹_i)	function	0014
P2not usedP3not usedAmbient conditions-Ambient temperature-25 70 °C (248 343 K)Storage temperature-25 85 °C (248 358 K)Mechanical specifications-Protection degreeIP20Connectionremovable coded terminals, Power RailMass130 gMountingDIN railCompliance with standards and directives-Standard conformity-			lanouoli	
P3not usedAmbient conditions-2570 °C (248 343 K)Ambient temperature-2570 °C (248 343 K)Storage temperature-2585 °C (248 358 K)Mechanical specifications			P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if $0$	rgised
Ambient conditions   -25 70 °C (248 343 K)     Ambient temperature   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Mechanical specifications   -25 85 °C (248 358 K)     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Compliance with standards and directives     Standard conformity	P0		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if maintain their condition	rgised
Ambient temperature   -25 70 °C (248 343 K)     Storage temperature   -25 85 °C (248 358 K)     Mechanical specifications   IP20     Protection degree   IP20     Connection   removable coded terminals, Power Rail     Mass   130 g     Mounting   DIN rail     Compliance with standards and directives     Standard conformity	P0 P1 P2		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if of maintain their condition not used	rgised
Storage temperature -25 85 °C (248 358 K)   Mechanical specifications IP20   Protection degree IP20   Connection removable coded terminals, Power Rail   Mass 130 g   Mounting DIN rail   Compliance with standards and directives Standard conformity	P0 P1 P2		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if of maintain their condition not used not used	rgised
Mechanical specifications     IP20       Protection degree     IP20       Connection     removable coded terminals, Power Rail       Mass     130 g       Mounting     DIN rail       Compliance with standards and direc- tives       Standard conformity     Standard conformity	P0 P1 P2 P3		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if of maintain their condition not used not used	rgised
Protection degree IP20   Connection removable coded terminals, Power Rail   Mass 130 g   Mounting DIN rail   Compliance with standards and direc- tives   Standard conformity Standard conformity	P0 P1 P2 P3 Ambient conditions		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if of maintain their condition not used not used not used	rgised
Connection removable coded terminals, Power Rail   Mass 130 g   Mounting DIN rail   Compliance with standards and directives Standard conformity	P0 P1 P2 P3 Ambient conditions Ambient temperature		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if or maintain their condition not used not used not used -25 70 °C (248 343 K)	rgised
Connection removable coded terminals, Power Rail   Mass 130 g   Mounting DIN rail   Compliance with standards and directives Standard conformity	P0 P1 P2 P3 Ambient conditions Ambient temperature Storage temperature		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if or maintain their condition not used not used not used -25 70 °C (248 343 K)	rgised
Mass 130 g   Mounting DIN rail   Compliance with standards and directives Standard conformity	P0 P1 P2 P3 Ambient conditions Ambient temperature Storage temperature Storage temperature Mechanical specifications		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if or maintain their condition not used not used -25 70 °C (248 343 K) -25 85 °C (248 358 K)	rgised
Mounting DIN rail   Compliance with standards and directives Compliance with standards and directives   Standard conformity Standard conformity	P0 P1 P2 P3 Ambient conditions Ambient temperature Storage temperature Storage temperature Mechanical specifications Protection degree		P0 = 1 (basic setting), monitor fails, the outputs are de-ener P0 = 0, monitoring = OFF, if or maintain their condition not used not used -25 70 °C (248 343 K) -25 85 °C (248 358 K) IP20	rgised communication fails, the outputs
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## Function

The VAA-4A-KF-E2 AS-Interface coupling module is a cabinet module with 4 electronic outputs. Its design, only 20 mm wide, occupies only little space in a cabinet installation. The VAA-4E-KF-E2 is installed by snapping it onto a 35 mm DIN rail according to EN 50022, with the integrated Power Rail.

When an AS-Interface master/gateway is used in the cabinet housing, the AS-Interface signal is automatically transmitted via the Power Rail. The connection of the module to the AS-Interface cable is accomplished by simply snapping it onto the DIN rail.

The plug-in coded terminals of the inputs and outputs allow "online" maintenance, i. e. while the system is under power. The terminals are coded to prevent incorrect connections.

If a master/gateway other than the one in the cabinet housing is used, the connection to the AS-Interface cable is established via the same terminals. Once the AS-Interface cable has been connected to the terminals, the AS-Interface signal is automatically transferred to the Power Rail.

Power to the module is supplied by the AS-Interface cable and the outputs are powered externally (see connection diagram). A programming jack is available for address configuration.

#### Note:

The outputs are de-energised via an integrated watchdog, whenever communication on the AS-Interface cable is interrupted for more than 80 ms. The watchdog can be disabled by the P0 parameter bit.

#### Accessories

#### VBP-HH1

AS-Interface handheld

### VAZ-PK-1,5M-V1-G

Connection cable module/hand-held programming device

### UPR-05

Universal Power Rail

# UPR-E

End cap

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