AS-Interface cabling system

IP 20 and IP 67

Catalogue
August

04

a brand of Schneider Electric

Telemecanique

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AS-Interface cabling system

Advantys, interfaces for generic products
IP 20 and IP 67

Description	Analogue modular interfaces	Discrete modular interfaces
		
Degree of protection	IP 20	
Functions	Connection of 1 to 2 analogue sensors	Connection of 1 to 8 discrete sensors/actuators
Connection of sensors/actuators	By removable screw clamp connectors (optional spring terminal connectors)	
Supply for the inputs and sensors	Via the AS-Interface line	Via the AS-Interface line or via ⎓ 24 V external power supply
Supply for the outputs	–	Via ⎓ 24 V external power supply
Connection to the AS-Interface and auxiliary supply	By removable screw clamp connectors (optional IDC connectors)	
AS-Interface version	V2.1	
Extended addressing	No	Yes
I/O configurations	2 inputs: 0/4…20 mA or 2 inputs 0…10 V	2 inputs/1 output, 4 inputs, 4 inputs/4 outputs, 4 inputs/3 outputs
Output type	–	Relay or triac 2 A, Transistor 0.5 A
Type	**ASI 20MA●●**	**ASI 20MT●●**
Pages	5	11

Telefast compact discrete interfaces	Discrete interfaces, direct connection	Discrete interfaces, remote connection
		
IP 20	IP 67	
Connection of 1 to 8 discrete sensors/actuators	Connection of 1 to 8 discrete sensors/actuators	
By removable screw connectors	By M12 connector	
Via the AS-Interface line or via ⎓ 24 V external power supply	Via the AS-Interface line	
Via ⎓ 24 V external power supply		
By removable screw connectors	Directly to the ribbon cable by IDC connectors	By M12 connector
V1	V2.1 and V1 compatible	V2.1
No	Yes	
4 inputs, 4 inputs/4 outputs, 4 outputs	4 inputs, 2 inputs/2 outputs, 4 inputs/4 outputs, 3 outputs, 4 outputs, 4 inputs/3 outputs	
Relay 2A, Transistor 0.5 A	Transistor 2 A	
ABE 8●●	**ASI 67FFP●●●**	**ASI 67FMP●●●**
“Please consult your Regional Sales Offices”	19 and 20	21

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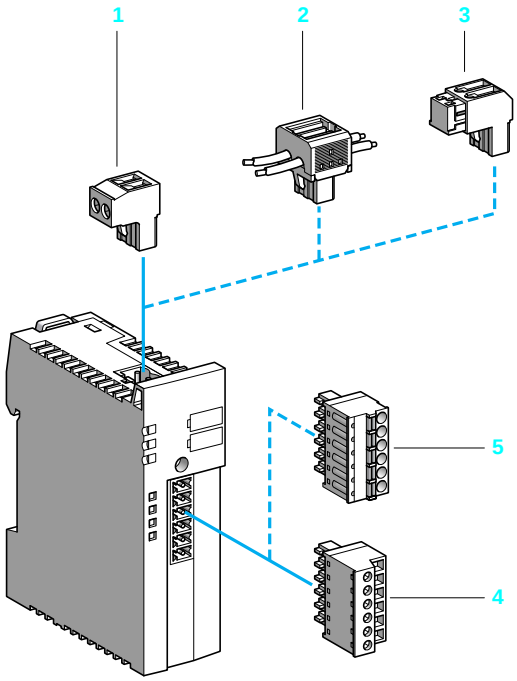
AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for analogue inputs



Presentation

ASI 20MA modular interfaces enable analogue output sensors (proximity, pressure, temperature sensors...) to be connected to the AS-Interface cabling system.
Due to their particularly compact size, they are suitable for fitting in small-size enclosures as well as in larger, floor-standing enclosures.
Inputs are of the current type (0-10 mA or 4-20 mA, depending on connection) or voltage type (0-10 V), and supply to the sensors is from the AS-Interface line.
All connectors are of the removable type and are supplied with screw terminal block as standard. Quick connect terminal blocks are available as an accessory. A "Jack" connector on the front panel allows allows addressing of the product independently, or when installed.

Composition

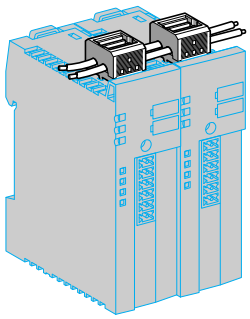
AS-Interface connection:

1 ASI 20MACC4 screw terminal block, fitted as standard.
2 ASI 20MACC1 insulation displacement connector for chaining, to be ordered separately.
3 APE1 PAD21 self-stripping connector, to be ordered separately.

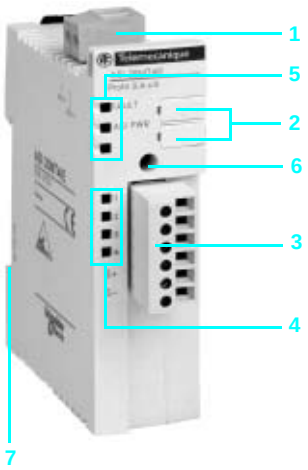
Sensor connection:

4 ASI 20MACC2 screw terminal block, fitted as standard.
5 ASI 20MACC3 spring terminal connector, to be ordered separately.

Chaining



The AS-Interface line can be chained using an ASI 20MACC1 insulation displacement connector, to be ordered separately.



109481-28-M

Description

1 Removable screw terminal block for connection of the AS-Interface line. This terminal block can be replaced by an APE 1PAD21 self-stripping block for connecting a single interface, or by an ASI 20MACC1 quick connect block for chaining several ASI 20MA interfaces.
2 Removable labels for marking the interface and the address, fitted as standard.
3 Removable screw terminal block for connection of the inputs and of the power supply for the sensors. This terminal block can be replaced by an ASI 20MACC3 quick connect terminal block.
4 Not used.
5 Diagnostic LED.
6 “Jack” connector for connection of an ASI TERACC2 cable for addressing and diagnostic terminal type ASI TERV2 or XZ MC11.
7 Fitting for clipping onto 35 mm symmetrical DIN rail.

AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for analogue inputs

Environment

Product certifications			UL, CSA (pending)
Operating temperature		**°C**	- 20…+ 60
Storage temperature		**°C**	- 40…+ 85
Degree of protection	Conforming to IEC/EN 60529		IP 20
Shock resistance	Conforming to IEC/EN 60068-2-27		15 gn (for 11 ms)
Vibration resistance		**Hz**	2…13.2 amplitude ± 1 mm, 13.2…100: 1 gn
Resistance to electrostatic discharge	Conforming to IEC/EN 61000-4-2		Level 3
Resistance to radiated fields	Conforming to IEC/EN 61000-4-3	**V/m**	10
Resistance to transients	Conforming to IEC/EN 61000-4-4	**kV**	2
Overvoltage category	Conforming to IEC/EN 60664-1		II
Degree of pollution	Conforming to IEC/EN 60664-1		2

AS-Interface characteristics

AS-Interface version			V2.1
AS-Interface Profile (I/O code, ID code, ID1, ID2) *(1)*			S7.3.F.D
Maximum number of addresses			31
AS-Interface supply		⎓ **V**	26.5…31.6
Consumption on the AS-Interface line	No-load	**mA**	60
	Maximum	**mA**	250
Diagnostic signalling	AS-Interface power ON		Green LED
	Fault *(2)*		Red LED and fault bit
Parameter bit	P0		Not used
	P1		0: input 1 On, input 2 Off, 1: input 1 On, input 2 On
	P2		1: fault bit On
	P3		Not used
Mounting			On 35 mm ⊓ rail (horizontal only)
Housing material			Polycarbonate (UL94VO)
Connection	AS-Interface		Removable terminal block ASI 20MACC4: 0.2 to 2.5 mm²; ASI 20MACC1: 0.5 to 0.75 mm²; APE 1PAD2: 0.5 to 0.75 mm²
	Sensors		Removable terminal block ASI 20MACC2: max 1.5 mm²; ASI 20MACC3: 0.14 to 1.5 mm²

Analogue input characteristics (sensor side)

Interface type			**ASI 20MA2VU**	**ASI 20MA2VI**
Inputs	Voltage	⎓ **V**	0…10	–
	Current	⎓ **mA**	–	0…20 or 4…20
Sensor input type			Analogue	
Supply to sensors		**V**	Via the AS-Interface line only	
Input impedance		Ω	20 000	250
Range of values		**decimal**	0…10 000	0…20 000 or 4000…20 000
Resolution		**bits**	12	
Refresh time		**ms**	< 50	

(1) Bit ID1 can be modified by the user, in particular using the addressing terminal.
(2) Fault LED:
off = if parameter bit 2 On, no fault,
on steady = AS-Interface exchange fault,
flashing = voltage > 10.5 V (VU), current < 1 mA or > 21 mA (VI).

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AS-Interface cabling system

Interfaces for generic products

IP 20, AS-Interface V2.1

Modular, for analogue inputs

ASI 20MA2V●

References

Modular interfaces supplied with removable screw terminal blocks

Inputs *(1)*		Reference	Weight
Number	**Type**		**kg**
2	⎓ 0…10 V	**ASI 20MA2VU**	0.090
	⎓ 0…20 mA ⎓ 4…20 mA	**ASI 20MA2VI**	0.090

Spare parts

Description	For use with	Terminal block type	Sold in lots of	Unit reference	Weight kg
Connectors	AS-Interface	Screw	5 yellow + 5 black	**ASI 20MACC4**	0.010
		Insulation Displacement Connector	5 yellow + 5 black	**ASI 20MACC1**	0.010
		Self-stripping connector	16 grey	**APE 1PAD21**	0.003
	Inputs *(2)*	Screw	10	**ASI 20MACC2**	0.020
		Spring	10	**ASI 20MACC3**	0.020
Labels	–	–	22	**ASI 20MACC5**	–

(1) The inputs and sensor electronics are supplied from the AS-Interface line.

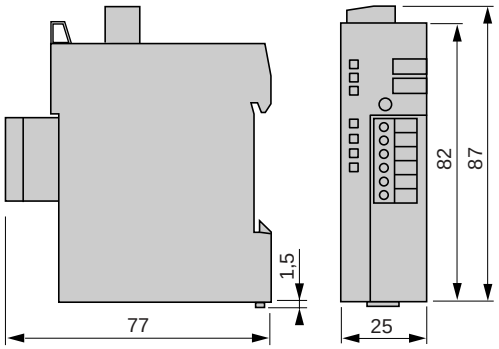
(2) Connectors supplied with locating facility not activated; locating facility to be activated by cutting off a lug.

AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for analogue inputs

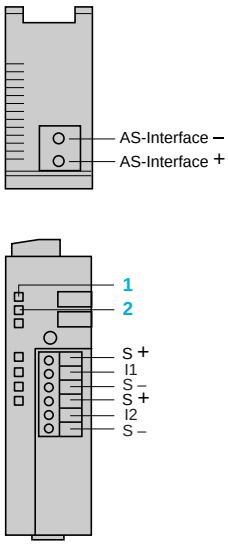
Dimensions

ASI 20MA2V●



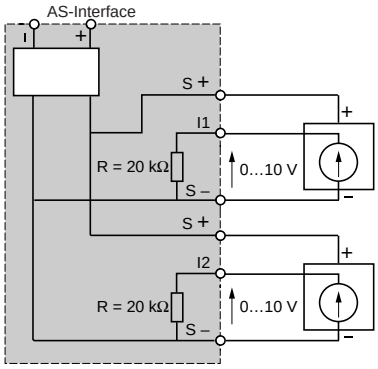
Connections

ASI 20MA2V●



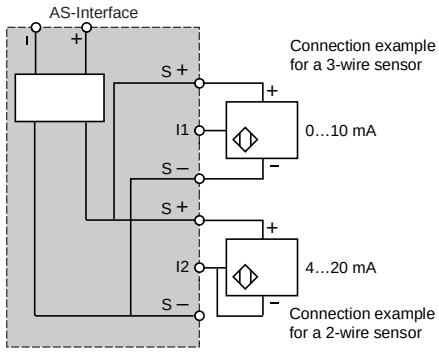
1 red "FAULT" LED
2 green "ASI PWR" LED

ASI 20MA2VU



⚠ The sensors do not have to be supplied from an external source.

ASI 20MA2VI



⚠ The sensors do not have to be supplied from an external source.

LED signalling

LED	ASI PWR	FAULT
Normal operation	☀	□
AS-Interface exchange fault	☀	☀
ASI 20MA2VU input overload: U > 10.5 V ASI 20MA2VI input overload or underload: I < 1 mA or I > 21 mA	☀	☀ (1)

(1) Flashing.

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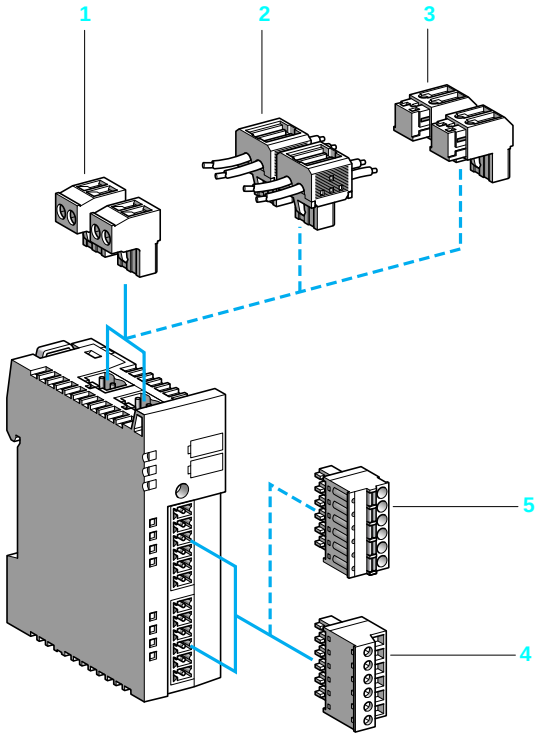
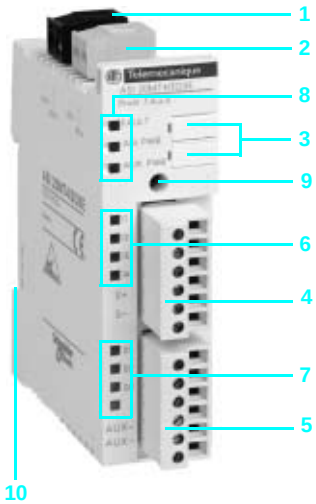
AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for discrete inputs/outputs





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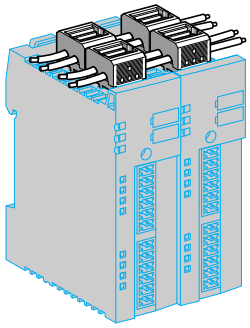
Presentation

ASI 20MT modular interfaces enable traditional discrete sensors and actuators (sensors, motor starters, pushbuttons, pilot lights...) to be connected to the AS-Interface cabling system.
Due to their particularly compact size, they are suitable for fitting in small-size enclosures (pushbutton and pilot light interfacing) as well as in larger, floor-standing enclosures.
Conforming to the AS-Interface V2.1 specification, they offer diagnostic functions and are available, depending on the model, with standard addressing (up to 31 Slaves per Master) or with extended A/B addressing (up to 62 Slaves per Master).
The inputs are compatible with 2 and 3-wire sensors, supply to the the sensors being provided, depending on the model, via the AS-Interface line or by an external ⎓ 24 V source (isolated inputs).
The outputs, supplied by an external source, are of the relay or 2 A triac or 0.5 A transistor type.
All connectors are of the removable type and are supplied with screw terminal block as standard. Quick connect terminal blocks are available as an accessory. A "Jack" connector on the front panel allows allows addressing of the product independently, or when installed.

Composition

AS-Interface and auxiliary supply connection:
1 ASI 20MACC4 screw terminal blocks, fitted as standard.
2 ASI 20MACC1 insulation displacement connectors for chaining, to be ordered separately.
3 APE 1PAD21 self-stripping connectors, to be ordered separately.
Sensor/actuator connection:
4 ASI 20MACC2 screw terminal blocks, fitted as standard.
5 ASI 20MACC3 spring terminal connectors, to be ordered separately.

Chaining



The AS-Interface line and the auxiliary supply can be chained using ASI 20MACC1 insulation displacement connectors, to be ordered separately.

Description

1 Removable screw terminal block for connection of a ⎓ 24 V PELV (Protective Extra Low Voltage) auxiliary power supply, for supply to the transistor outputs and the isolated inputs. This terminal block can be replaced by an APE 1PAD21 self-stripping block or an ASI 20MACC1 quick connect block for chaining several ASI 20MT interfaces.
2 Removable screw terminal block for connection of the AS-Interface line. This terminal block can be replaced by an APE 1PAD21 self-stripping block or an ASI 20MACC1 quick connect block for chaining several ASI 20MT interfaces.
3 Removable labels for marking the interface and the address, fitted as standard.
4 Removable screw terminal block for connection of the inputs and of the power supply for the sensors. This terminal block can be replaced by an ASI M20ACC3 quick connect terminal block. This terminal block is fitted with a locating facility to prevent inversion of the 2 terminal blocks on the front panel.
5 ASI 20MACC2 removable screw terminal block for connection of the outputs and of the power supply for the relay and triac outputs. This terminal block can be replaced by an ASI 20MACC3 quick connect terminal block.
6 Input status LED.
7 Output status LED.
8 Diagnostic LED.
9 “Jack” connector for connection of an ASI TERACC2 cable for addressing and diagnostic terminal type ASI TERV2 or XZ MC11.
10 Device for clipping onto 35 mm symmetrical DIN rail.

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AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for discrete inputs/outputs

Environment

Product certifications			UL, CSA (pending)
Operating temperature		**°C**	- 20…+ 60
Storage temperature		**°C**	- 40…+ 85
Degree of protection	Conforming to IEC/EN 60529		IP 20
Shock resistance	Conforming to IEC/EN 60068-2-27		15 gn (for 11 ms)
Vibration resistance		**Hz**	2…13.2 amplitude ± 1 mm, 13.2…100: 1 gn
Resistance to electrostatic discharge	Conforming to IEC/EN 61000-4-2		Level 3
Resistance to radiated fields	Conforming to IEC/EN 61000-4-3	**V/m**	10
Resistance to transients	Conforming to IEC/EN 61000-4-4	**kV**	2
Dielectric test voltage between AS-Interface line and the outputs	Conforming to IEC/EN 60364-4-41	**V**	500 (transistor outputs), 3750 (relay and triac outputs)
Overvoltage category	Conforming to IEC/EN 60664-1		II
Degree of pollution	Conforming to IEC/EN 60664-1		2

AS-Interface characteristics

AS-Interface version				V2.1
AS-Interface supply			⎓ **V**	26.5…31.6
Diagnostic signalling	AS-Interface power ON			Green LED
	Auxiliary supply ON			Green LED
	Input/output status			Yellow LED
	Fault *(2)*			Red LED
N° of data bits/n° of inputs or outputs		D0		Input 1 or output 1
		D1		Input 2 or output 2
		D2		Input 3 or output 3
		D3		Input 4 or output 4
Value of input or output status data bit		D0 to D3		0 = input or output OFF 1 = input or output ON
Output fallback if watchdog tripped				Output state 0
Parameter bit				Not used
Mounting				On 35 mm ⊓⎽⊓ rail (horizontal only)
Housing material				Polycarbonate (UL94VO)
Connection	AS-Interface			Removable terminal block ASI 20MACC4: 0.2 to 2.5 mm^2; ASI 20MACC1: 0.5 to 0.75 mm^2; APE 1PAD21: 0.5 to 0.75 mm^2
	Sensors			Removable terminal block ASI 20MACC2: max 1.5 mm^2; ASI 20MACC3: 0.14 to 1.5 mm^2

(1) Bit ID1 can be modified by the user, in particular using the addressing terminal.
(2) Fault LED:
off = no fault,
on steady = no data exchange on AS-Interface,
flashing = peripheral fault.

AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for discrete inputs/outputs

AS-Interface characteristics specific to I/O with standard addressing

Interface type		ASI	20MT4I4OR	20MT4I4OS	20MT4I4OSA
Maximum number of addresses for one master			31		
Number of inputs			4	4	4 isolated *(1)*
Number of outputs			4 x 2 A relay	4 x 0.5 A transistor	
Supply to the sensors (inputs)			Via the AS-Interface line max: 200 mA		Via external PELV *(2)* power supply (AUX) max: 200 mA
Supply to the actuators (outputs)			External ∿ 250 V max, ⎓ 150 V max	Via external PELV *(2)* power supply (AUX)	
Profile (I/O code, ID code, ID1, ID2) *(3)*			S7.0.F.E		
AS-Interface certification n°			52101	52301	52401
Consumption on the AS-Interface line	No-load	**mA**	15	15	15
	Maximum *(4)*	**mA**	110	50	20

AS-Interface characteristics specific to I/O with extended A/B addressing

Interface type		ASI	20MT4IE	20MT2I1OTE	20MT4I3ORE	20MT4I3OSE	20MT4I3OSAE
Maximum number of addresses for one master			62				
Number of inputs			4	2	4	4	4 isolated *(1)*
Number of outputs			–	1 x 2 A triac	3 x 2 A relay	3 x 0.5 A transistor	
Supply to the sensors (inputs)			Via the AS-Interface line max: 170 mA		Via the AS-Interface line max: 170 mA	Via the AS-Interface line max: 150 mA	Via external PELV *(2)* power supply (AUX) max: 200 mA
Supply to the actuators (outputs)				External ∿ 24…250 V	External max: ∿ 250 V	Via external PELV *(2)* power supply (AUX)	
Profile (I/O code, ID code, ID1, ID2) *(3)*			S0.A.7.0	S3.A.7.0	S7.A.7.0		
AS-Interface certification n°			52501	53801	52201	52302	52401
Consumption on the AS-Interface line	No-load	**mA**	15	15	15	15	15
	Maximum *(4)*	**mA**	50	40	90	50	20

Input characteristics (sensor side)

Interface type		ASI	20MT4IE	20MT4I4OR 20MT4I3ORE	20MT4I4OSA 20MT4I3OSAE	20MT4I4OS 20MT4I3OSE	20MT2I1OTE
Sensor type			PNP 2 or 3-wire				
State 1 guaranteed			U > 11 V and I > 6 mA				
State 0 guaranteed			U < 5 V and I < 2 mA				
Conformity of inputs	Conforming to IEC 61131-2		Type 2				

Output characteristics (sensor side)

Interface type			ASI	20MT4IE	20MT4I4OR 20MT4I3ORE	20MT4I4OSA 20MT4I3OSAE	20MT4I4OS 20MT4I3OSE	20MT2I1OTE
Rated operational voltage (Ue)	Conforming to IEC 60947-5-1	∿	**V**	–	250	–	–	250
		⎓	**V**	–	150	19.2...30 PELV *(2)*	19.2...30 PELV *(2)*	–
Maximum drop-out voltage at Ith			**V**	–	–	0.3	0.3	3
Thermal current per channel (Ith/channel)			**A**	–	2	0.5	0.5	2
Thermal current per common			**A**	–	4	2	2	2
Rated operational current (Ie) Conforming to IEC 60947-5-1 6 cycles/minute 24…250 V∿ 24…150 V⎓	AC 12		**A**	–	2	–	–	2
	DC 12		**A**	–	0.5	0.5	0.5	–
	AC 15		**A**	–	0.5	–	–	–
	DC 13		**A**	–	0.25	0.5	0.5	–
	AC 14		**A**	–	0.5	–	–	–
Minimum current			**mA**	–	10	0.5	0.5	8
Maximum leakage current			**mA**	–		0.5 at ⎓ 30 V		–
Built-in overcurrent protection			**A**	–	No	Yes, electronic		No
Mechanical life in millions of operating cycles				–	20	–	–	–
Response time *(5)*	Switching time from OFF to ON		**ms**	1	10	1	1	10
	Switching time from ON to OFF		**ms**	1	10	1	1	10

(1) AS-Interface line isolated inputs. These inputs have a potential common with the outputs.
(2) Protective Extra Low Voltage ⎓ 19.2…30 V; the regulations relating to these installations are defined in publication NF C 12-201 and in standard IEC 60364-4-41.
(3) Bit ID1 can be modified by the user, in particular using the addressing terminal.
(4) Consumption with all Inputs/Outputs On and sensor not energised.
(5) Add the AS-Interface cycle time.

AS-Interface cabling system

Interfaces for generic products

IP 20, AS-Interface V2.1

Modular, for discrete inputs/outputs

References

ASI 20MT4I4OR

ASI 20MT4IE

ASI 20MT4I3OSE

Modular interfaces supplied with removable screw terminal blocks

Type of addressing	Number of inputs *(1)*	Number, type of outputs	Reference	Weight kg
Standard	4	4 x ≂ 250 V/2 A relay	**ASI 20MT4I4OR**	0.090
		4 x ⎓ 24 V/0.5 A transistor	**ASI 20MT4I4OS**	0.090
	4 isolated	4 x ⎓ 24 V/0.5 A transistor	**ASI 20MT4I4OSA**	0.090
Extended A/B	4	–	**ASI 20MT4IE**	0.090
	2	1 x ∿ 250 V/2 A triac	**ASI 20MT2I1OTE**	0.090
	4	3 x ≂ 250 V/2 A relay	**ASI 20MT4I3ORE**	0.090
		3 x ⎓ 24 V/0.5 A transistor	**ASI 20MT4I3OSE**	0.090
	4 isolated	3 x ⎓ 24 V/0.5 A transistor	**ASI 20MT4I3OSAE**	0.090

Spare parts

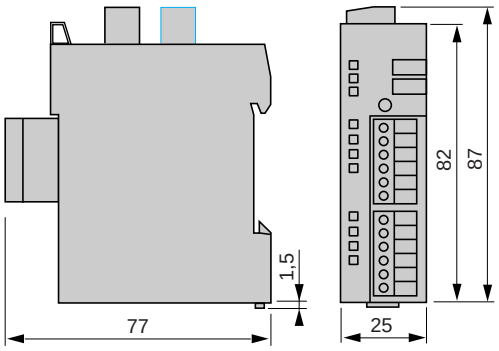
Description	For use with	Terminal block type	Sold in lots of	Unit reference	Weight kg
Connectors	AS-Interface and auxiliary	Screw	5 yellow + 5 black	**ASI 20MACC4**	0.010
		Insulation Displacement Connector	5 yellow + 5 black	**ASI 20MACC1**	0.010
		Self-stripping connector	16 grey	**APE 1PAD21**	0.240
	Inputs/outputs (2)	Screw	10	**ASI 20MACC2**	0.020
		Spring	10	**ASI 20MACC3**	0.020
Legends	–	–	22	**ASI 20MACC5**	–

(1) Unless marked "isolated", the inputs and sensor electronics are supplied from the AS-Interface line.

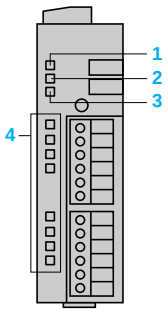
(2) Connectors supplied with locating facility not activated; locating facility to be activated by cutting off a lug.

Dimensions

ASI 20MT●●●



LED signalling



1 *red "FAULT" LED*
2 *green "ASI PWR" LED*
3 *green "AUX PWR" LED*
4 *yellow LEDs: inputs/outputs*

LED	ASI PWR	AUX PWR	FAULT
Normal operation	☼	☼	□
Output short-circuited	☼	☼	☼ *(1)*
No auxiliary supply	☼	□	☼ *(1)*
AS-Interface exchange fault	☼	☼	☼

LED	Inputs/outputs
ON	☼
OFF	□

(1) Flashing.

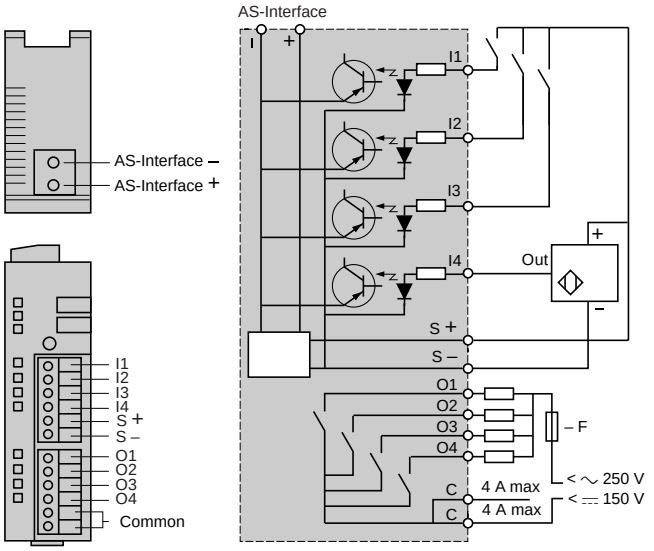
AS-Interface cabling system

Interfaces for generic products

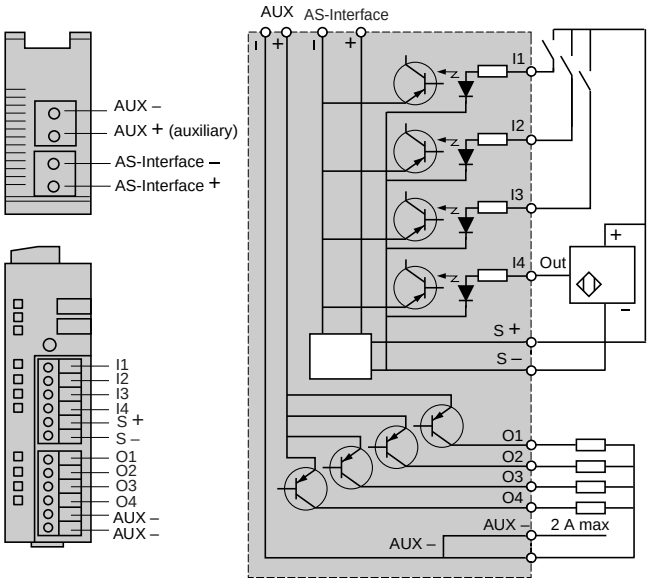
IP 20, AS-Interface V2.1

Modular, for discrete inputs/outputs

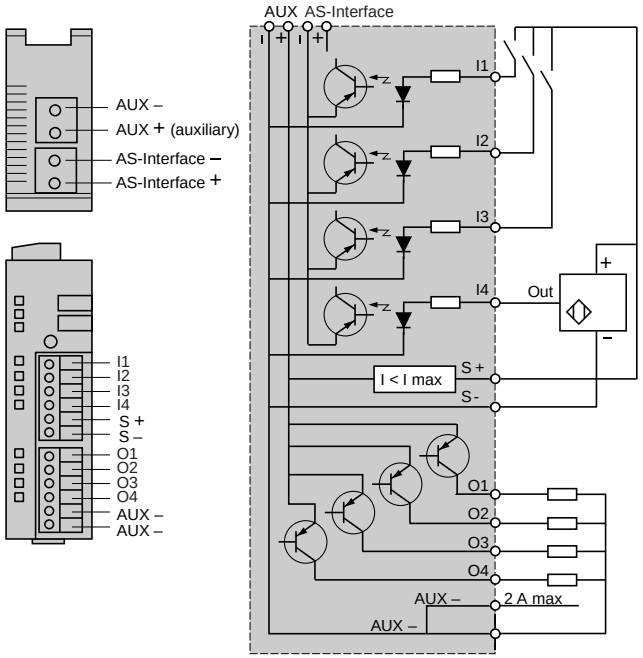
ASI 20MT4I4OR



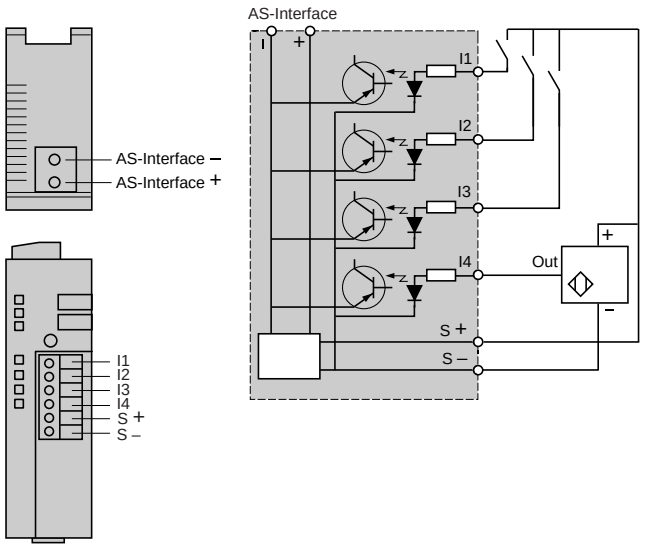
ASI 20MT4I4OS



ASI 20MT4I4OSA



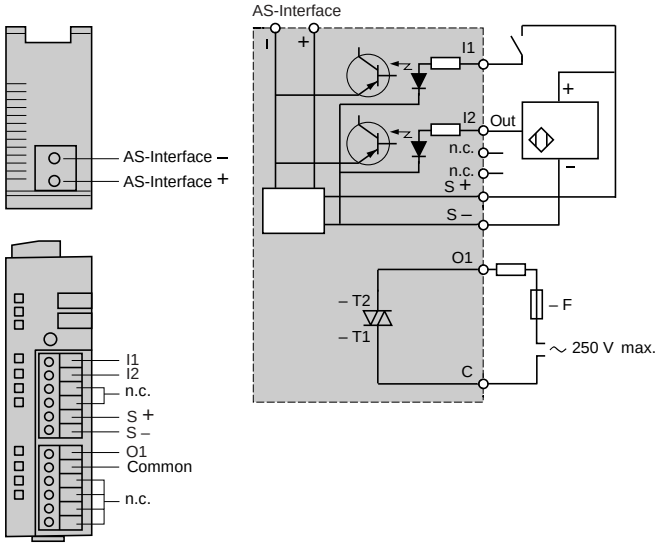
ASI 20MT4IE



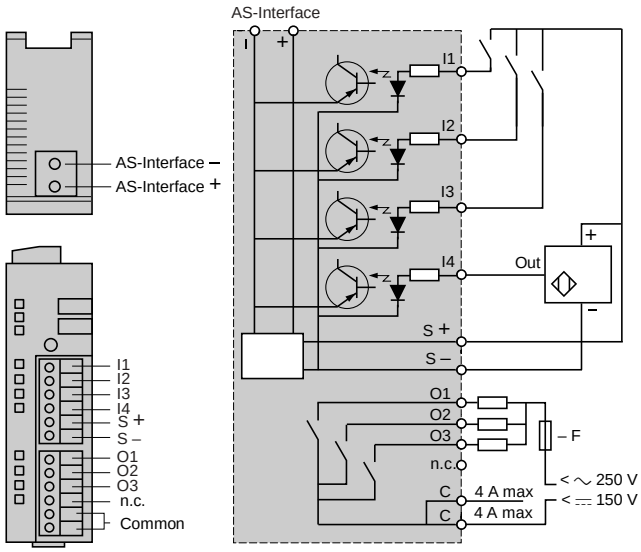
AS-Interface cabling system

Interfaces for generic products
IP 20, AS-Interface V2.1
Modular, for discrete inputs/outputs

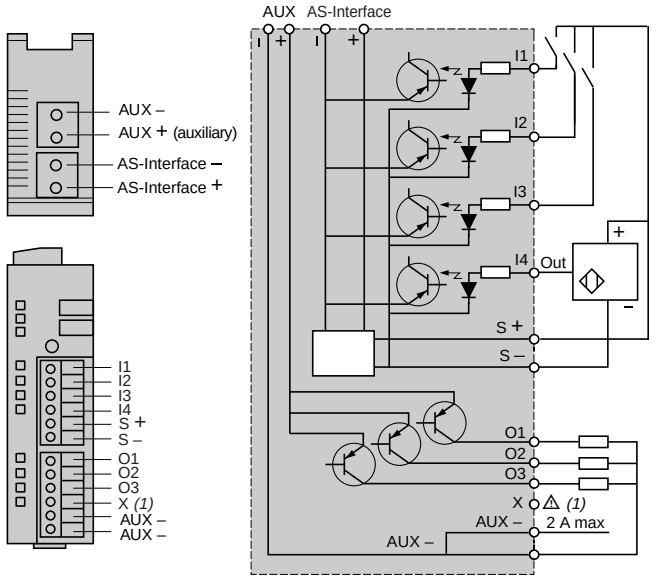
ASI 20MT2I1OTE



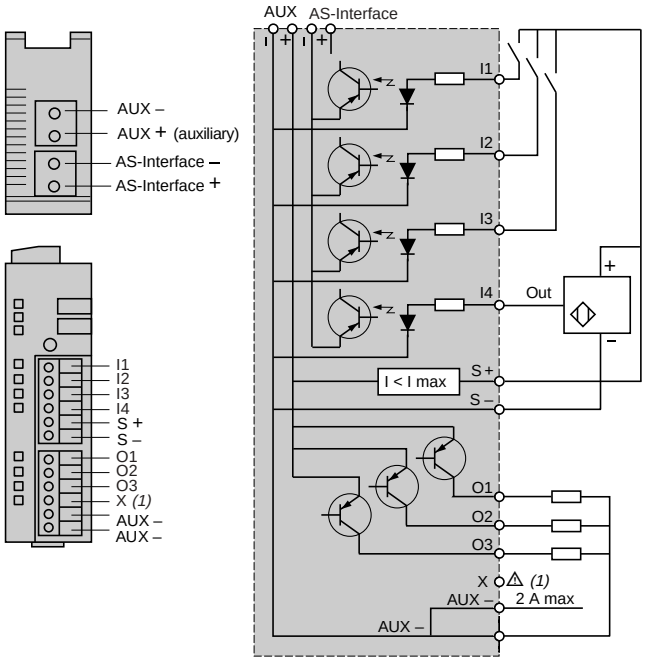
ASI 20MT4I3ORE



ASI 20MT4I3OSE



ASI 20MT4I3OSAE



(1) Do not connect anything to this terminal.

(1) Do not connect anything to this terminal.

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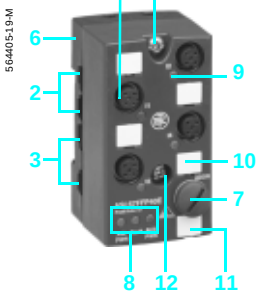
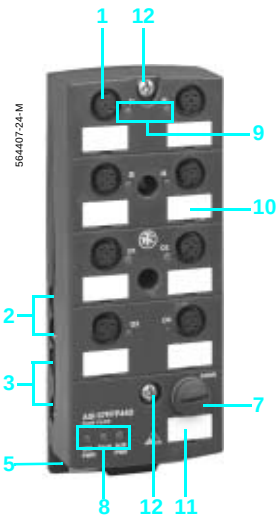
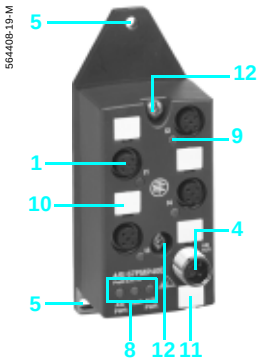
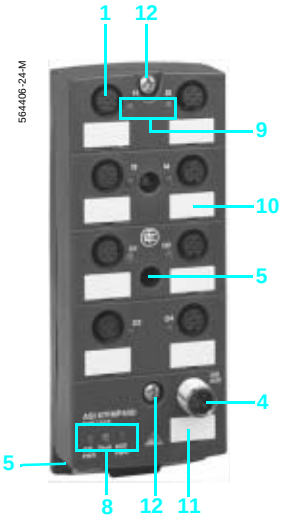
AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1









Presentation

ASI 67F interfaces enable traditional sensors and actuators - in particular proximity sensors, photo-electric sensors and limit switches - to be connected to the AS-Interface cabling system.

Because of their IP 67 degree of protection, they can be mounted directly on the machine, as near as possible to the sensors and actuators.

Two types of housing are available:
- A compact, 45 mm wide housing for 4-channel interfaces.
- A flat, 60 mm wide housing for 8-channel interfaces.

The sensors and actuators are connected to the interface by M12 connectors. The AS-Interface line and any external power supply are connected in one of the following ways, depending on the model:
- Directly to the ribbon cables via an Insulation Displacement Connector (IDC) (2 possible mounting positions).
- By means of an M12 connector.

Conforming to the AS-Interface V2.1 specification, they offer diagnostic functions and are available, depending on the model, with standard addressing (up to 31 Slaves per master) or with extended addressing (up to 62 Slaves per master).

Specific "V1 compatible" versions allow replacement of previous XZS interfaces and use in association with V1 masters.

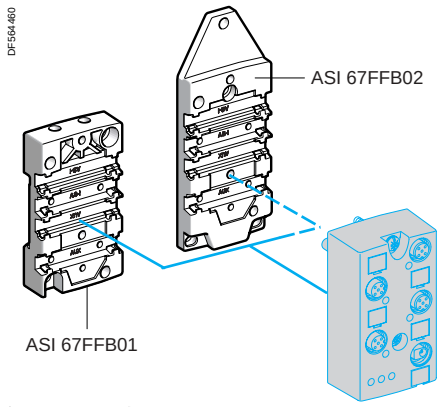
The inputs are compatible with 2 and 3-wire sensors and with the majority of models in the Osiris, Osiprox and Osiswitch sensor ranges, with or without alarm output.
Supply to the sensors (200 mA max) is via the AS-Interface line.
The outputs, supplied by an external source, are of the 2 A transistor type.

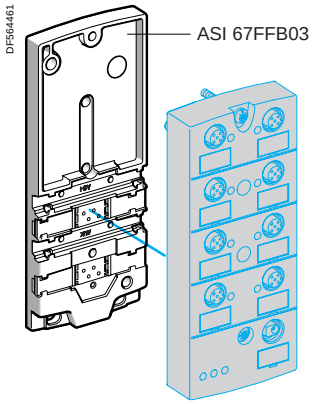
Description

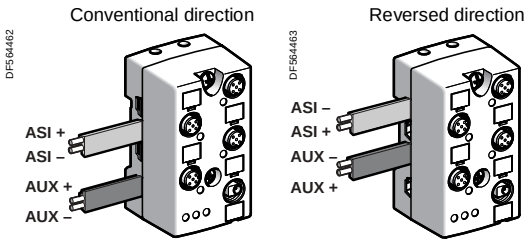
ASI 67F interfaces comprise:
1. M12 connectors for connecting the sensors and actuators.
2. Connector for yellow ribbon cable (AS-Interface line).
3. Connector for black ribbon cable (auxiliary supply) - depending on model.
4. M12 connectors for connecting the AS-Interface line and the auxiliary power supply, also allowing connection for addressing via an ASI TERACC1F connection cable.
5. Holes for fixing screws.
6. Fitting for clipping onto 35 mm symmetrical rail.
7. Jack connector for connection of an ASI TERACC2 cable for terminal ASI TERV2 or XZ MC11.
8. Diagnostic LED.
9. I/O status LED.
10. Channel marker labels.
11. Interface marker label.
12. Interface to connection base fixing screws.

Setting-up : pages 15 and 16
Characteristics : pages 17 and 18
References : pages 19 to 21
Dimensions : page 22
Schemes, connections : pages 23 to 26

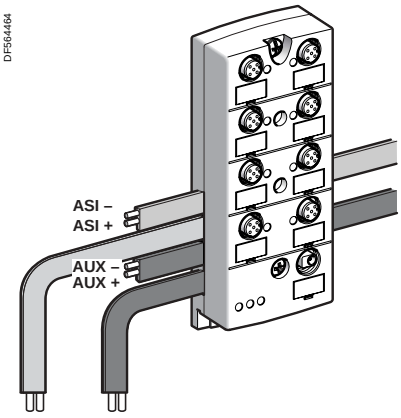
AS-Interface cabling system
Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1







Example of connection to 4-channel module



Example of tap-offs on 8-channel module

Setting-up of direct connection modules
(Insulation Displacement Connector)

This method of connecting the AS-Interface lines and the auxiliary power supply enables fast and simple installation, without any connection accessories, while limiting the length of the AS-Interface cable.

Direct connection modules consist of an interface and a connection base.

45 mm wide compact type interfaces (4-channel) can be used with 2 connection base models:
- An ASI 67FFB01 compact connection base, whose fixing centres are identical to those of the V1 type XZSD interface ranges. This connection base can also be mounted on a 35 mm symmetrical rail.
- An ASI67FFB02 connection base, whose fixing centres are identical to those of ASI B4VM12 connection bases and conform to the CNOMO standard.

60 mm wide flat type interfaces (8-channel) must be used with an ASI 67FFB03 connection base. The fixing centres are identical to those of the V1, XZS CA type interface ranges and of ASI B8VM12 connection bases. These fixing centres conform to the CNOMO standard.

For all models (4 and 8-channel), connections to the yellow (AS-Interface) and black (auxiliary supply) ribbon cables are made via the IDC connectors on the interface. The ribbon cables can be fitted either way round and 2 yellow cables and 2 black cables can be connected simultaneously to one interface, to constitute a tap-off (max. current in the tap-off: 2 A, degree of protection IP 54).

Any unused M12 connectors **must** be fitted with a sealing plug to guarantee the IP 67 degree of protection. The sealing plugs supplied with the interfaces and additional components can also be ordered separately.

Interface addressing can be carried out before or after installation using ASI TERV2 or XZM C11 terminals equipped with an ASI TERACC2 cable and connected to the Jack connector.

Setting-up of remote connection modules (M12 type)

This connection method allows fast disconnection of the interfaces. It is particularly suitable for "star" wiring and requires the use of tap-offs for ribbon cable. It is advisable to reduce the length of these tap-offs to the minimum necessary.

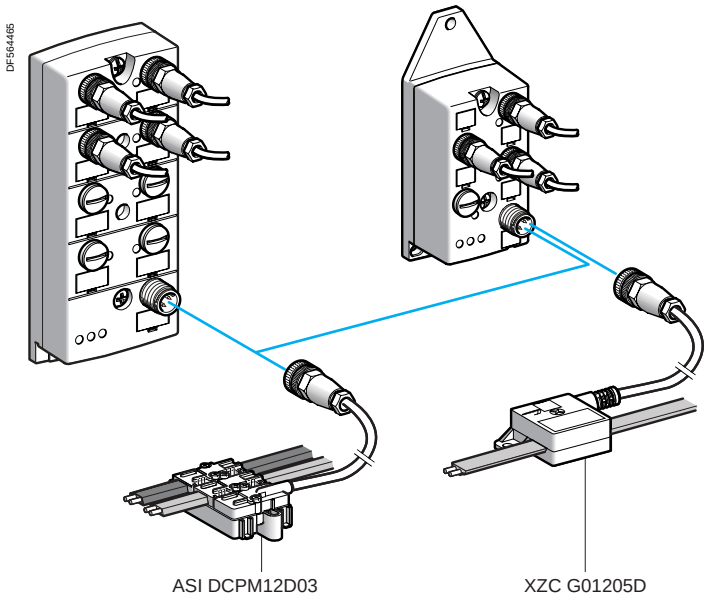
These modules are of the monobloc type; there is no need to order a separate connection base.

Fixing centres are identical to those of the ASI 67FFB03 connection base.

Any unused M12 connectors **must** be fitted with a sealing plug to guarantee the IP 67 degree of protection. The sealing plugs supplied with the interfaces and additional components can also be ordered separately.

Interface addressing can be carried out before or after installation using ASI TERV2 or XZM C11 terminals equipped with an ASI TERACC1F cable and connected to the AS-Interface/Aux. M12 connector.

Example showing connection of remote connection modules using tap-offs.



AS-Interface cabling system
Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

Environment

Product certifications			UL, CSA (GL pending)
Operating temperature	To IEC/EN 60529	**°C**	- 25…+ 70
Storage temperature		**°C**	- 40…+ 85
Installation category	To IEC 60664		II
Degree of protection	To IEC 60529		IP 67 (IP 54 for use as tap-off or at line end)
Shock resistance	To IEC 60068-2-27	**gn**	30 (for 11 ms)
Vibration resistance	To IEC/EN 60068-2-6		2…36 Hz: amplitude 1 mm, 36...150 Hz: 5 gn
	To GL		2…13.2 Hz: ± 1mm, 13.2…100 Hz: 0.7 gn
Dielectric test voltage conforming to IEC/EN 60664-1	Inputs and outputs	**V**	500 (for 1 minute)
	Inputs and auxiliary supply	**V**	500 (for 1 minute)
	Outputs and AS-Interface line	**kV**	2 for 1 minute between the M12 connectors and earth
	Auxiliary supply and AS-Interface line	**V**	500
	Inputs and AS-Interface line		No insulation
	Outputs and auxiliary supply		No insulation
Resistance to electrostatic discharge	To IEC/EN 61000-4-2	**kV**	8, level 3
Resistance to radiated fields	To IEC/EN 61000-4-3	**V/m**	10, level 3
Surge withstand	To IEC/EN 61000-4-5		1 kV at 2 Ohms (differential mode), 2 kV at 12 Ohms (common mode)
Resistance to transients	To IEC/EN 60100-4-4	**kV**	2, level 3
Degree of pollution	To IEC/EN 60604-4-1		Level 3
Flame resistance	To IEC/EN 60695-2-11		At 750 °C, extinction < 30 s (hot wire test)
Mechanical resistance	Product drop test	**m**	1 (no damage)
Mounting			2 or 3 x M4 screws On 35 mm rail IEC/EN 60715 (for connection base ASI 67FFB01)
Tightening torque	Fixing screws	**Nm**	0.6
Material of metal parts			Stainless steel
Housing material			PBT 30% GF Valox 553

AS-Interface characteristics

AS-Interface version			V2.1
AS-Interface supply		**V**	26.5…31.6
Protection			Against polarity inversion
Connection	To the addressing terminal		Jack connector (for ASI 67FFP●●●) M12 connector (for ASI 67FMP●●●)
Diagnostic signalling	AS-Interface power ON		Green LED
	Auxiliary supply ON		Green LED
	Fault		Red LED
	Input/output status		Yellow LED

Characteristics of V1 compatible interfaces

Interface type		**ASI 67FFP40A**	**ASI 67FFP22A**	**ASI 67FFP04A**	**ASI 67FFP44A**
AS-Interface max. consumption without sensor supply *(1)*		45 mA	32 mA	19 mA	49 mA
AS-Interface profile (I/O code, ID code, ID1, ID2)		00FF	30FF	80FF	70FF
AS-Interface certification		n° 55001	n° 55101	n° 55201	n° 55301
Maximum number of addresses		31			
Number of data bits/number of I/O					
	D0	I1	I1	O1	I1 / O1
	D1	I2	I2	O2	I2 / O2
	D2	I3	O3	O3	I3 / O3
	D3	I4	O4	O4	I4 / O4
Input or output status data bit value	D0 to D3	0 = input On / output Off 1 = input / output On			
Output fallback		Off in the absence of communication			
Parameter bits		Not used			
Product status in the event of a peripheral fault	-Sensor supply overload (I > 200 mA).	Interface inhibited *(2)*			
	Overload on one output	Interface not inhibited *(3)*			Interface inhibited *(2)* *(3)*
Peripheral fault information		–			

(1) Add the consumption of the sensor supply to obtain the total max. consumption on the AS-Interface line.
(2) The status of the inputs is no longer communicated to the master.
(3) All the outputs are off.

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AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

Characteristics of V2.1 compatible interfaces

Interface type		ASI 67F●P40D	ASI 67F●P22D	ASI 67F●P04D	ASI 67F●P44D/44DY
AS-Interface max. consumption without sensor supply *(1)*		45 mA	32 mA	19 mA	49 mA
AS-Interface profile (I/O code, ID code, ID1, ID2)		00FE	30FE	80FE	70FE (ASI 67F●P44D) 7FFE (ASI 67F●P44DY)
AS-Interface certification		n° 55001	n° 55101	n° 55201	n° 55301 (ASI 67F●P44D) pending (P44DY)
Maximum number of addresses		31			
Number of data bits/number of I/O	D0	I1	I1	O1	I1 or O1
	D1	I2	I2	O2	I2 or O2
	D2	I3	O3	O3	I3 or O3
	D3	I4	O4	O4	I4 or O4
Input or output status data bit value	D0 to D3	0 = input On / output Off. 1 = input / output On			
Output fallback		Off in the absence of communication			
Parameter bits		Not used			
Product status in the event of a peripheral fault		The interface is not inhibited. The peripheral fault bit is On and can be accessed by the master.			
Peripheral fault information		The peripheral fault bit is On in the case of: - output overload or short-circuit - absence of auxiliary supply - sensor supply overload (I > 200 mA). The interface is not inhibited.			

Characteristics of extended A/B addressing interfaces

Interface type		ASI 67F●P40E/40EY	ASI 67F●P22E	ASI 67F●P03E	ASI 67F●P43E/43EY
AS-Interface max. consumption without sensor supply *(1)*		45 mA	32 mA	18 mA	48 mA
AS-Interface profile (I/O code, ID code, ID1, ID2)		0A70 (ASI 67F●P40E) 0A72 (ASI 67F●P40EY)	BA70	8A70	7A70 (ASI 67F●P43E) 7A7E (ASI 67F●P43EY)
AS-Interface certification		n° 55001 (ASI 67F●P40E) pending (P40EY)	n° 55101	n° 55201	n° 55301 (ASI 67F●P43E) pending (P43EY)
Maximum number of addresses		62			
Number of data bits/number of I/O	D0	I1	O1	O1	I1 or O1
	D1	I2	O2	O2	I2 or O2
	D2	I3	I3	O3	I3 or O3
	D3	I4	I4	- Δ *(2)*	I4 Δ *(2)*
Input or output status data bit value	D0 à D3	0 = input or output Off. 1 = input or output On			
Output fallback		Off in the absence of communication			
Parameter bits		Not used			
Product status in the event of a peripheral fault		The interface is not inhibited. The peripheral fault bit is On and can be accessed by the master.			
Peripheral fault information		The peripheral fault bit is On in the case of: - output overload or short-circuit - absence of auxiliary supply - sensor supply overload (I > 200 mA). The interface is not inhibited.			

Input characteristics (sensor side)

Sensor type			PNP (2 and 3-wire)
Supply voltage	To IEC/EN 60947-5-1	V	18…30
Maximum sensor supply current	Via the AS-Interface line	mA	200 (for an operating temperature < 40°C). 150 (for an operating temperature between 40°C and 70°C). 100 for ASI 67F●P22●
State 1 guaranteed			U > 11 V and I > 6 mA
State 0 guaranteed			U < 5 V and I < 2 mA
Conformity of inputs	To IEC/EN 61131-2		Type 2

Output characteristics (sensor side)

Type			Solid state (PNP transistor)
Supply to actuators	By auxiliary supply	V	21.6...27.2 / Protective Extra Low Voltage (PELV)
Maximum drop-out voltage at In		V	1
Thermal current per channel		A	2
Thermal current per common		A	4 (for an operating temperature < 40°C). 2 (for a temperature between 40°C and 70°C)
Leakage current		µA	Max. 12 per channel
Protection	Against overload and short-circuits		Thermal (integrated). Individual protection for each channel (automatic reset on elimination of the fault)
	Against polarity inversion		Integrated
Nominal current	DC-12	A	2
	DC-13 *(3)*	A	2
Response time	OFF to ON	ms	< 20
	ON to OFF	ms	< 20

(1) Add the consumption of the sensor supply to obtain the total max. consumption on the AS-Interface line.
(2) O4 must not be used in the program
(3) An external protection device (diode) must be fitted in parallel with the load for highly inductive applications (L/R > 50 ms).

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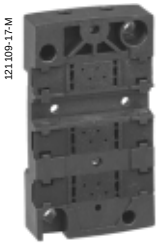
AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

ASI 67FFP40A

ASI 67FFP44A



ASI 67FFB01

ASI 67FFB02

ASI 67FFB03

V1 compatible interfaces

These interfaces replace the XZS CA and XZS DA ranges.
XZS CA and XZS DA interfaces can be replaced when maintenance work is carried out, without any need for adjustments on the PLC and reusing the existing fixing screws (profile and fixing centres are compatible).
The interfaces can also be used to build new installations with V1 masters.
They are only available with standard addressing and do not include any peripheral fault management functions.

Direct connection interfaces via IDC connector *(1)*, for use with a connection base

Addressing	Number of inputs	Number of outputs	Housing type	M12 connector pin arrangement	Reference	Weight kg
Standard	4	–	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP40A**	0.090
	2	2	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP22A**	0.090
	–	4	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP04A**	0.120
	4	4	Flat, 60 mm (8-channel)	Standard	**ASI 67FFP44A**	0.090

Connection bases for direct connection interfaces via IDC connector

For interfaces	Fixing	Rail mounting	Reference	Weight kg
Compact, 45 mm (4-channel)	2 fixing points	Yes	**ASI 67FFB01**	0.044
	4 fixing points (CNOMO centres)	No	**ASI 67FFB02**	0.039
Flat type, 60 mm (8-channel)	4 fixing points (CNOMO centres)	No	**ASI 67FFB03**	0.066

Separate component

Description	Sold in lots of	Unit reference	Weight kg
Sealing plug for M12 connector	10	**ASI 67FACC1**	0.013
Cable end *(2)*	10	**ASI 67FACC2**	0.020

(1) Product supplied with two M12 plugs, not fitted (for 45 mm compact type), with four M12 plugs, not fitted (for 60 mm flat type) and one M12 plug (addressing) fitted.
(2) Enables IP 67 sealing to be achieved at the end of a ribbon cable.

AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

ASI 67FFP40E

ASI 67FFP44D

ASI 67FFB01

ASI 67FFB02

ASI 67FFB03

V2.1 compatible interfaces

These interfaces fully comply with the AS-Interface V2.1 specification:
- Up to 62 interfaces can be associated with each master (extended A/B addressing).
- Peripheral fault management.

They replace and reinforce the ASIM range.
Two types of M12 connector pin arrangement are available for the inputs:
- Standard pin arrangement for sensors with single NO/NC output
- Dual pin arrangement (Y) for sensors with signal output + alarm output or sensors with single NO output.

Direct connection interfaces via IDC connector *(1)*, for use with a connection base

Addressing	Number of inputs	Number of outputs	Housing type	M12 connector pin arrangement	Reference	Weight kg
Standard	4	–	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP40D**	0.090
	2	2	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP22D**	0.090
	–	4	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP04D**	0.090
	4	4	Flat, 60 mm (8-channel)	Standard	**ASI 67FFP44D**	0.160
				Dual (Y)	**ASI 67FFP44DY**	0.160
Extended A/B	4	–	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP40E**	0.090
				Dual (Y)	**ASI 67FFP40EY**	0.090
	2	2	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP22E**	0.090
	–	3	Compact, 45 mm (4-channel)	Standard	**ASI 67FFP03E**	0.090
	4	3	Flat, 60 mm (8-channel)	Standard	**ASI 67FFP43E**	0.160
				Dual (Y)	**ASI 67FFP43EY**	0.160

Connection bases for direct connection interfaces via IDC connector

For interfaces	Fixing	Rail mounting	Reference	Weight kg
Compact, 45 mm (4-channel)	2 fixing points	Yes	**ASI 67FFB01**	0.044
	4 fixing points (CNOMO centres)	No	**ASI 67FFB02**	0.039
Flat type, 60 mm (8 channel)	4 fixing points (CNOMO centres)	No	**ASI 67FFB03**	0.066

Separate components

Description	Sold in lots of	Unit reference	Weight kg
Sealing plug for M12 connector	10	**ASI 67FACC1**	0.011
Cable end *(2)*	10	**ASI 67FACC2**	0.020

(1) Product supplied with two M12 plugs, not fitted (for 45 mm compact type), with four M12 plugs, not fitted (for 60 mm flat type) and one M12 plug (addressing) fitted.
(2) Enables IP 67 sealing to be achieved at the end of a ribbon cable.

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AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

DF564408-19-M

ASI 67FMP40E

121100-24-M

ASI 67FMP43E

V2.1 compatible interfaces (continued)

Interfaces with remote M12 connector *(1)*

Addressing	Number of inputs	Number of outputs	Housing type	M12 connector pin arrangement *(2)*	Reference	Weight kg
Standard	4	–	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP40D**	0.125
	2	2	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP22D**	0.125
	–	4	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP04D**	0.125
	4	4	Flat, 60 mm (8-channel)	Standard	**ASI 67FMP44D**	0.220
				Dual (Y)	**ASI 67FMP44DY**	0.220
Extended A/B	4	–	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP40E**	0.125
				Dual (Y)	**ASI 67FMP40EY**	0.125
	2	2	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP22E**	0.125
	–	3	Compact, 45 mm (4-channel)	Standard	**ASI 67FMP03E**	0.125
	4	3	Flat, 60 mm (8-channel)	Standard	**ASI 67FMP43E**	0.220
				Dual (Y)	**ASI 67FMP43EY**	0.220

Separate components

Description	Sold in lots of	Unit reference	Weight kg
Sealing plug for M12 connector	10	**ASI 67FACC1**	0.013
IP 54 tap-off for connecting ASI 67FMP40● to ribbon cable, cable length 0.6 m with M12 straight connector	1	**XZ CG01205D**	0.090
IP67 tap-off for connecting ASI 67FMP (except ASI 67FMP40) to ribbon cable, cable length 0.3 m with M12 straight connector	1	**ASI DCPM12D03**	0.150

(1) Product supplied with two M12 plugs, not fitted (for 45 mm compact type) or with four M12 plugs, not fitted (for 60 mm flat type). These are monobloc products; there is no need to order a connection base.

(2) Connector for connecting sensors/actuators.

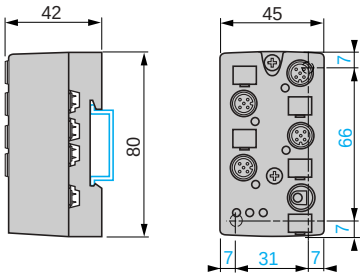
AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

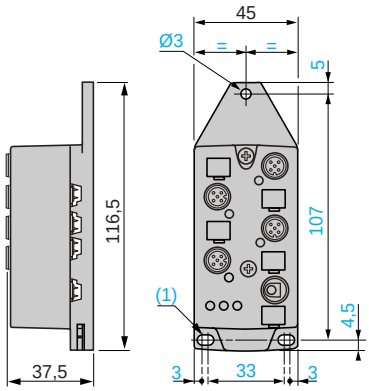
Assembled products (direct connection modules)

4-channel interfaces with connection base ASI 67FFB01

Can be mounted on 35 mm ⊓⊔ rail.

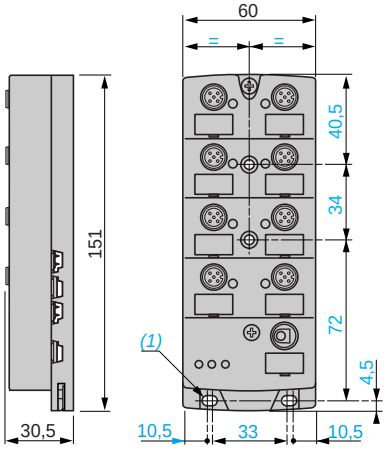


4-channel interfaces with connection base ASI 67FFB02



(1) 2 elongated holes Ø 4.6 x 3.

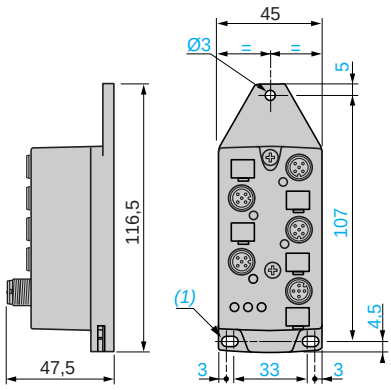
8-channel interfaces with connection base ASI 67FFB03



(1) 2 elongated holes Ø 4.6 x 3.

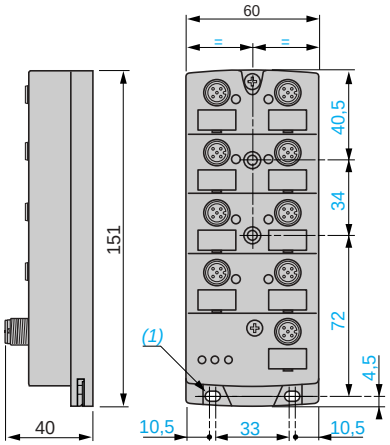
Monobloc products (remote connection modules)

4-channel interfaces



(1) 2 elongated holes Ø 4.6 x 3.

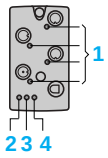
8-channel interfaces



(1) 2 elongated holes Ø 4.6 x 3.

Explanation of LEDs

4-channel interfaces

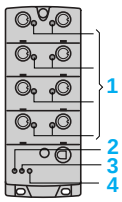


1 I/O LED

I/O ON: ⊗, I/O OFF: ⊗

2 AS-Interface power On LED (ASI PWR)
3 Fault LED
4 AUX power On LED (AUX PWR)

8 channel interfaces



1 I/O LED

I/O ON: ⊗, I/O OF : ⊗

2 AS-Interface power On LED (ASI PWR)
3 Fault LED
4 AUX power On LED (AUX PWR)

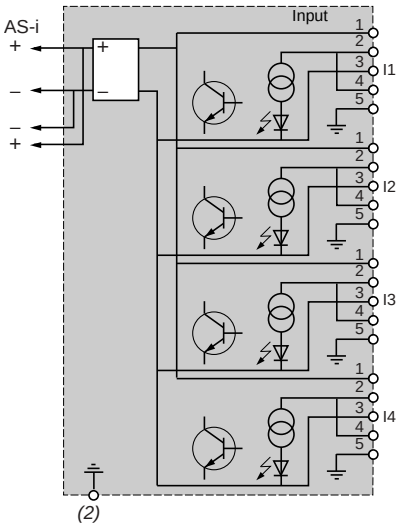
Status		ASI PWR	Fault	AUX PWR
⊗	Off	Power off or reversed polarity on the AS-Interface line	OK *(1)*	Power off or reversed polarity on the AUX line *(4)*
⊗	ON	OK	No communication *(2)*	OK *(4)*
⊗	Flashing	–	Peripheral fault *(3)*	–

(1) No fault indication if power off or reversed polarity on the AS-Interface line.
(2) Master in STOP condition, incorrect IO/ID configuration, Slave at address 0.
(3) Sensor supply or output overload, undervoltage or reversed polarity on AUX line, only for ASI 67F●P●●D/ASI 67F●P●●E.
(4) LED not working on ASI 67F●P40●●.

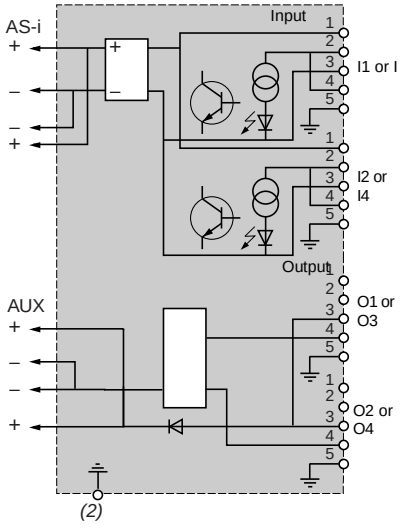
AS-Interface cabling system

Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

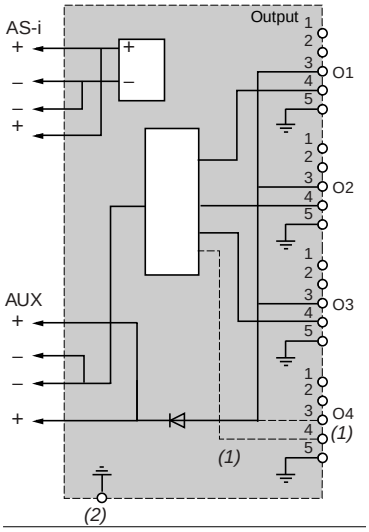
ASI 67FFP40●



ASI 67FFP22●

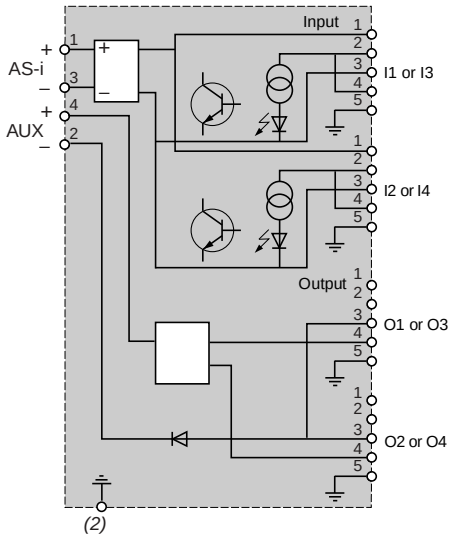


ASI 67FFP03●, ASI 67FFP04●

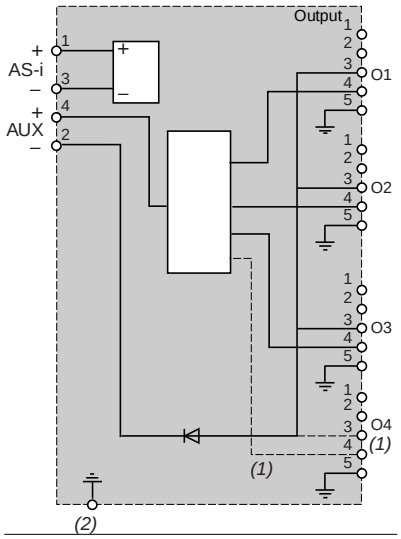


(1) Links on ASI 67FFP04● only

ASI 67FMP22●

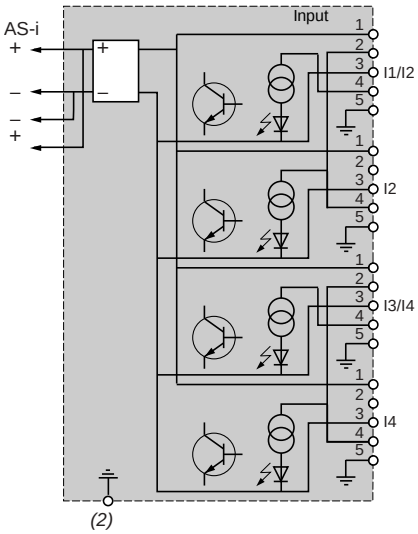


ASI 67FMP03●, ASI 67FMP04●

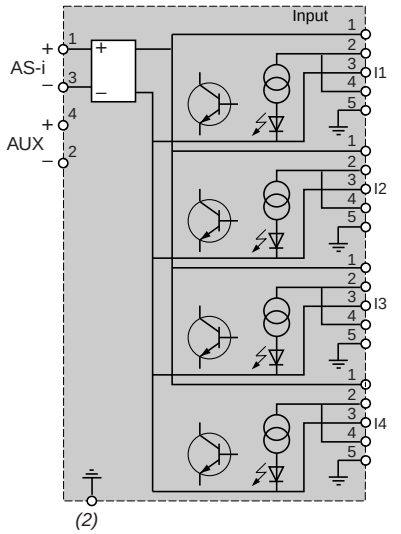


(1) Links on ASI 67FMP04● only

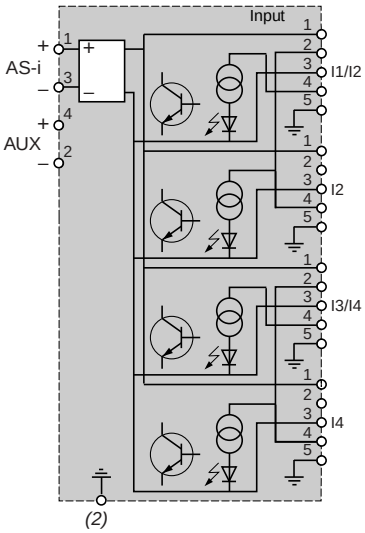
ASI 67FFP40EY



ASI 67FMP40●



ASI 67FMP40EY



(2) Fixing screw making it possible to connect all no. 5 pins to earth.

Presentation, description : page 14
Setting-up : pages 15 and 16
Characteristics : pages 17 and 18
References : pages 19 to 21
Dimensions : page 22

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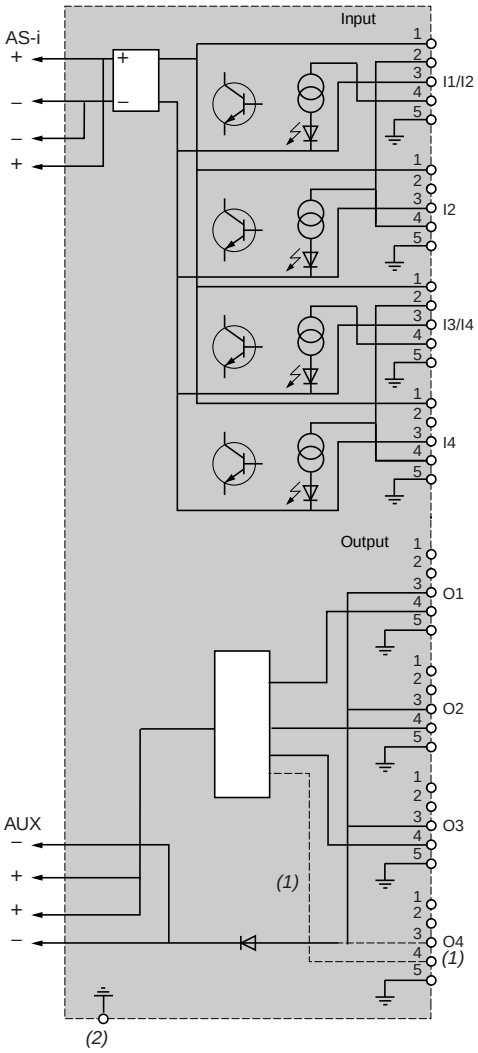
AS-Interface cabling system

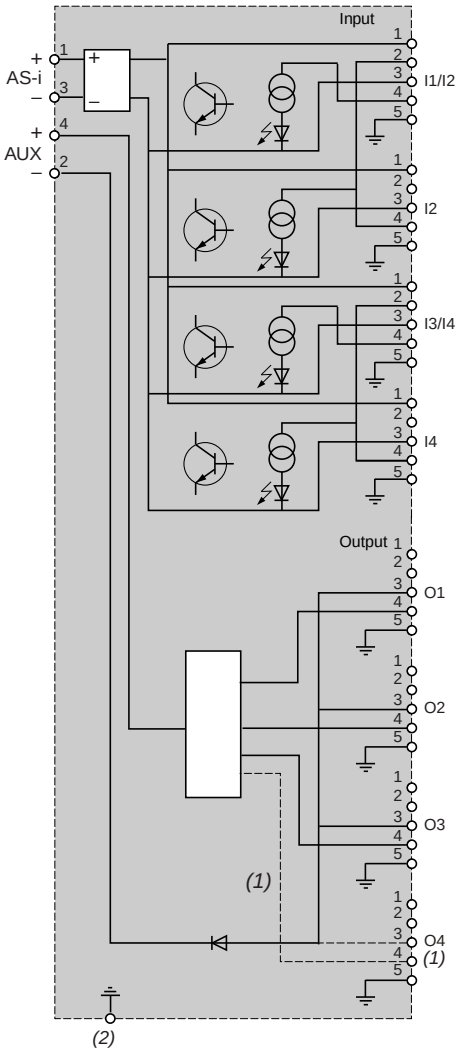
Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

ASI 67FFP43EY, ASI 67FFP44DY



(1) Links on ASI 67FFP43EY only
(2) Fixing screw making it possible to connect all no. 5 pins to earth.

ASI 67FMP43EY, ASI 67FMP44DY



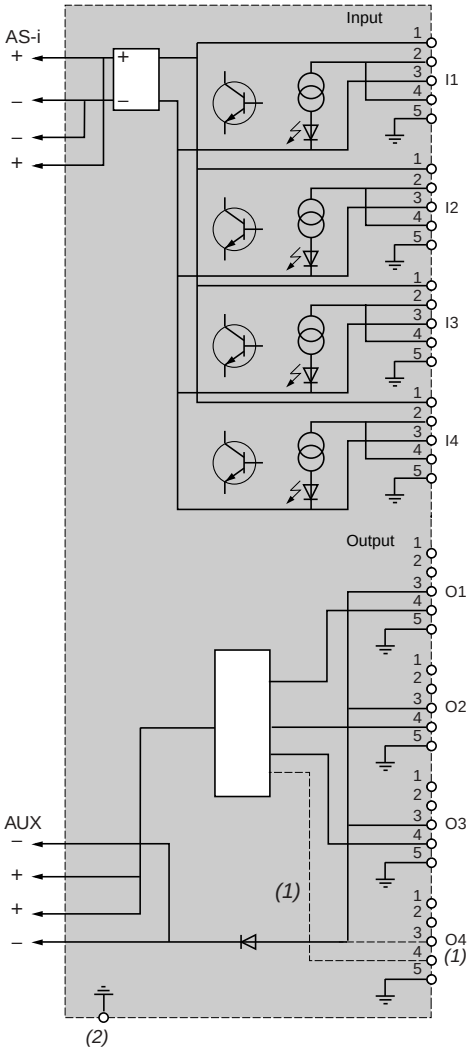
(1) Links on ASI 67FMP43EY only
(2) Fixing screw making it possible to connect all no. 5 pins to earth.

AS-Interface cabling system

Advantys, interfaces for generic products

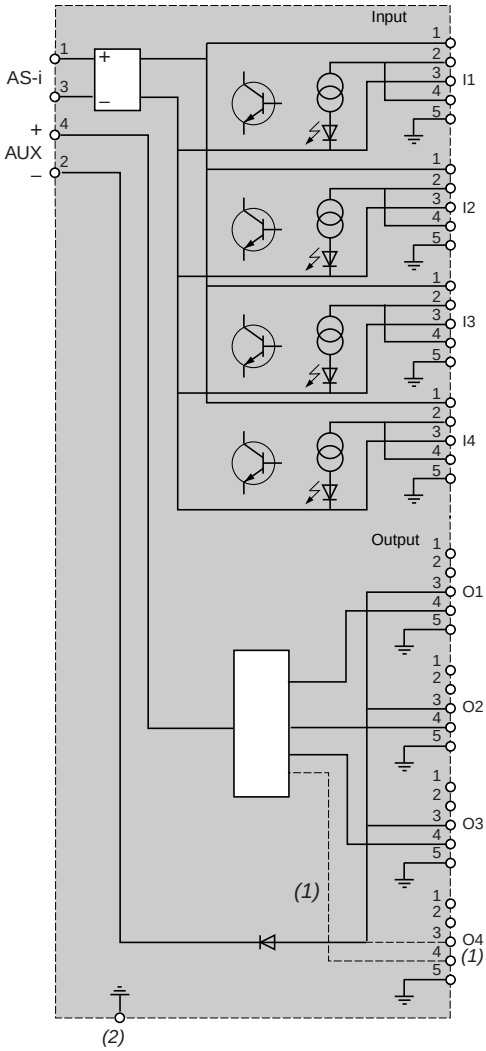
IP 67 I/O, AS-Interface V2.1

ASI 67FFP43E, ASI 67FFP44●



(1) Links on ASI 67FFP43E only
(2) Fixing screw making it possible to connect all no. 5 pins to earth.

ASI 67FMP43E, ASI 67FMP44D



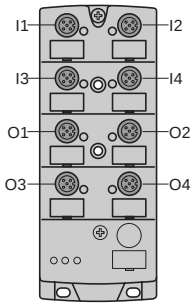
(1) Links on ASI 67FMP43E only
(2) Fixing screw making it possible to connect all no. 5 pins to earth.

AS-Interface cabling system

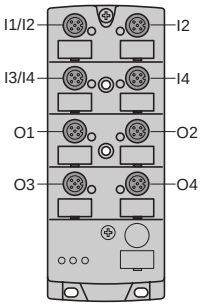
Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

Connector locations

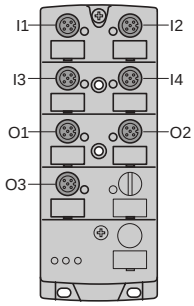
ASI 67FFP44●/FMP44●



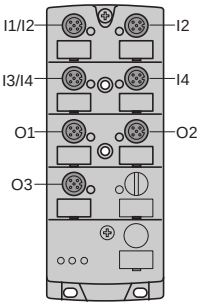
ASI 67FFP44DY/FMP44DY



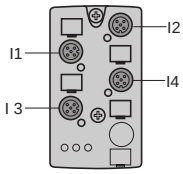
ASI 67FFP43E/FMP43E



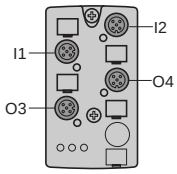
ASI 67FFP43EY/FMP43EY



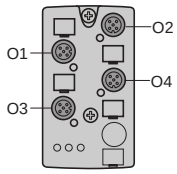
ASI 67FFP40●
ASI 67FMP40●



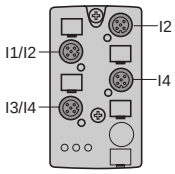
ASI 67FFP22A/22D
ASI 67FMP22A/22D



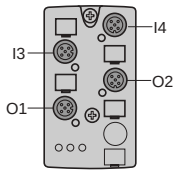
ASI 67FFP04●
ASI 67FMP04●



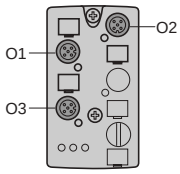
ASI 67FFP40EY
ASI 67FMP40EY



ASI 67FFP22E
ASI 67FMP22E



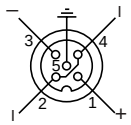
ASI 67FFP03E
ASI 67FMP03E



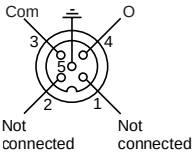
Pin arrangement of connectors for connecting sensors/actuators.

ASI 67F●P●●●

Connector I1…I4

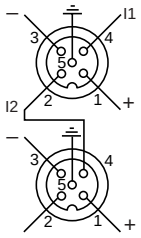


Connector O1…O4

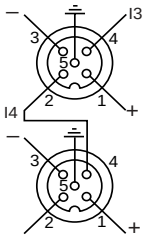


ASI 67F●P●●●Y

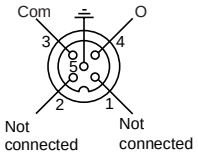
Connector I1/I2



Connector I3/I4



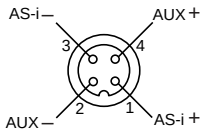
Connector O1…O4



Connector I2

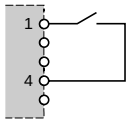
Connector I4

Pin arrangement of connectors AS-i AUX (ASI 67FMP●●●)

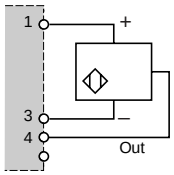


Example of input connections.

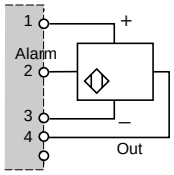
Volt-free contact or 2-wire sensor



3-wire sensor

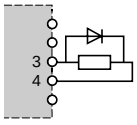


Sensor signal + alarm



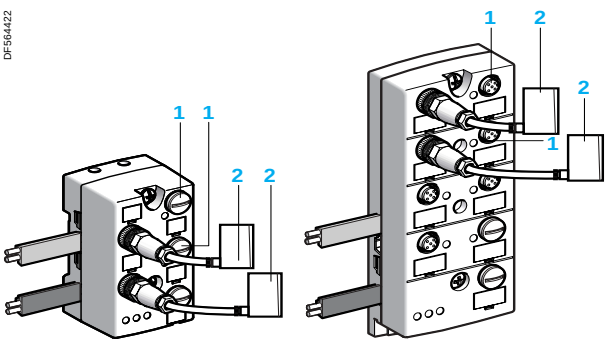
Example of output connections

Load



Example of connection of sensors with signal + alarm output to interfaces with dual pin arrangement

DF564422



1 Do no use this connector
2 Sensor with signal + alarm output
example: XU MO●●●, XU KO●●●, XU XO●●●

AS-Interface cabling system
Advantys, interfaces for generic products
IP 67 I/O, AS-Interface V2.1

The Advantys ASI 67F interface range can be used to fully replace the range of V1 and V2.1 interfaces with the following references: XZS ●●● and ASI M●●●.

Substitution table

Old range		New range	
Interface	**Connection base**	**Interface**	**Connection base**
ASI ME2I2O	ASI B4VM12	ASI 67FFP22D	ASI 67FFB02
ASI ME2I2OE	ASI B4VM12	ASI 67FFP22E	ASI 67FFB02
ASI ME4I	ASI B4VM12	ASI 67FFP40D	ASI 67FFB02
ASI ME4I4O	ASI B8VM12	ASI 67FFP44D	ASI 67FFB03
ASI ME4IE	ASI B4VM12	ASI 67FFP40E	ASI 67FFB02
ASI ME4O	ASI B4VM12	ASI 67FFP04A	ASI 67FFB02
XZS CA44D21	Integrated	ASI 67FFP44A	ASI 67FFB03
XZS DA04D32	XZS DE1133	ASI 67FFP04A	ASI 67FFB01
XZS DA22D32	XZS DE1133	ASI 67FFP22A	ASI 67FFB01
XZS DA40D3	XZS DE1113	ASI 67FFP40A	ASI 67FFB01
XZS DA40D3	XZS DE1133	ASI 67FFP40A	ASI 67FFB01
ASI DCPACC3	–	ASI 67FACC1	–
XZL G102	–	ASI 67FACC1	–

Replacement of older interfaces with the Advantys ASI 67F range during maintenance operations has the following advantages:
- The old product fixings can be reused.
- The installation can be restarted without having to adjust the PLC and without an addressing terminal (provided that the PLC is configured for automatic addressing and that the interfaces are replaced one by one).
- Identical behaviour of old and new range interfaces in the event of a peripheral fault (sensor or output supply overload, absence of auxiliary voltage).

Note: old connection bases are not compatible with new interfaces and old interfaces are not compatible with new connection bases.
Both the interface and connection base must be replaced in all cases.

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