

AMS400A

Universal auto-manual station

The AMS400A module is an interface device which can be used between control units and devices in the field. It carries out manual take-over of automatically controlled processes.

Typical applications are:

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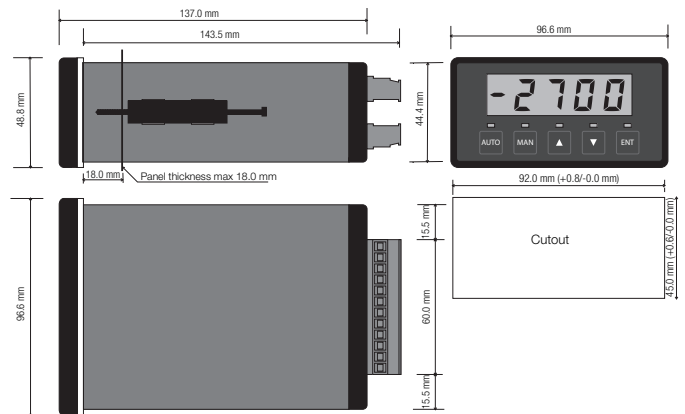
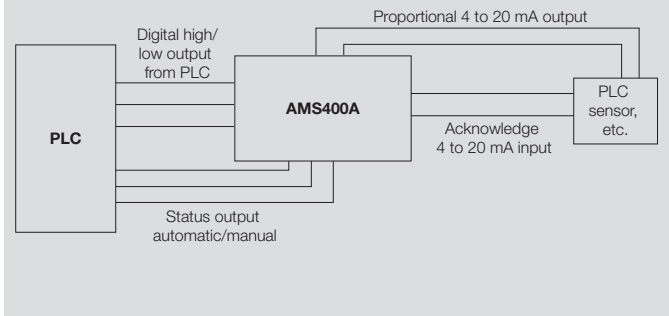
- Manual start-up of sensitive processes before handover to automatic control
- Manual over-ride in case of controller failure or malfunction.

The AMS400A offers three different I/O configurations, which serve as interfaces between:

- Analogue control equipment and analogue control devices
- Digital control equipment and analogue control devices
- Digital control equipment and digital control devices

During analogue-analogue operating mode, it is possible to use the digital outputs for switching between manual and automatic operations. Ramp rates and additional handover modes can be set globally in order to output signals to external controllers.

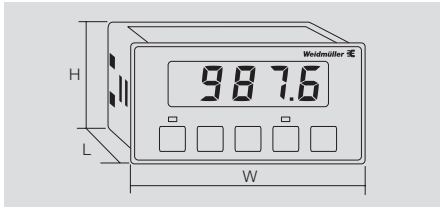
Typical application of AMS400A



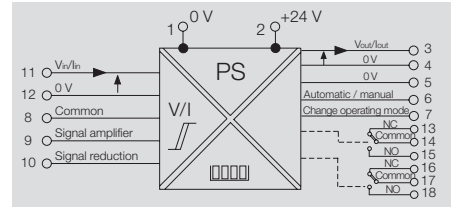
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Universal interface device

- 1/8 DIN standard front
- IP65 front protection
- Pluggable connection terminals



AMS400A



Technical data

Display	
Type	Digits, red LED, 14.2 mm
Display value	Percent or real-value displayed
Display range	-9999 bis +9999
Status indicator	Operating mode (auto./manual)
Input	
Type	Current input or digital input (pulse-controlled or no-voltage contact)
Input current limits	0...24 mA / 0...12 V DC
Input resistance (mA / V)	50 Ω / 10 MΩ
Scanning rate (current input)	5 per sec.
Pulse width, min. (digital input)	64 ms
Output	
Type	Analogue and digital output
Analogue output	Voltage or current, adjustable via jumper
Digital output	Opto, 50 V DC / 200 mA
Signalling contact (RO version only)	Status relay
Output current limits	0... 24 mA
Output voltage limits	0...18 V
Load resistance	900 Ω @ 20 mA
Residual ripple	20 mV _{eff}
Alarm (RO version only)	
Type	Status relay
Number of channels	2
Type of contact	CO contacts
Specifications	3 A @ 240 V AC or 5 A @ 24 V DC
Isolation	1,5 kV channel / channel
General information	
Supply voltage	24 V DC ± 10 %, other voltages on request
Power input	6 W @ 24 V DC
Accuracy	typ. ±0,1 % of signal range
Linearity	< 0,05 %
Repeat accuracy	±0,02 of signal range
Humidity	0...90 % (no condensation)
Temperature coefficient	< 0,02 % / °C
Long-term drift	0,1 % / 10.000 h
Cut-off frequency (-3 dB)	5 Hz
Step response time	300 ms (10...90 %)
Impulse withstand voltage	4 kV (1.2/50 μs)
Isolation voltage	1 kV between ports
Data backup	> 10 years without power supply
Operating temperature / storage temperature	0 °C to 60 °C / -25 °C to +70 °C
EMC standards	DIN EN 61326
Approvals	CE, cULus
Housing specifications	
Clamping range (nom. / min. / max.)	1,5 / 0,5 / 2,5 mm ²
Connection type / Mounting rail	Screw connection / panel assembly
Housing type / Weight	Plastic housing / 480 g
Length x width x height	137 x 96,6 x 48,8 mm
Note	
Additional input/output versions available on request.	

Ordering data

Type	Qty	Order No.
Analogue Output	1	7940011895
Analogue and relay output	1	7940015937
Special adjustment	1	8945000000

Note

Connections

Terminal	Signal	
1	-	Supply voltage
2	+	
3	Signal +	Analogue Output
4	Signal -	
5	Signal - 0 V	Status outputs
6	Automatic / manual	
7	Change operating mode	
8	Common	Digital inputs
9	Signal amplifier	
10	Signal reduction	
11	Signal +	Analogue inputs
12	Signal -	
13	NC contact	Relay output, signal amplifier
14	Common	
15	NO contacts	
16	NC contact	Relay output, signal reduction
17	Common	
18	NO contacts	