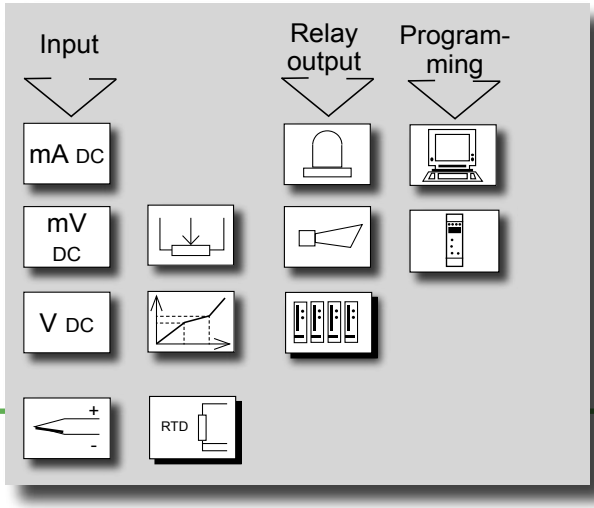
PROGRAMMABLE SETPOINT DETECTORS

DAS 10
DAS 10F

DAS C10
DAS C10F

- **Universal power supply:**
  20 to 270 Vac and 20 to 300 Vdc
- **Universal input** :
  ± 100 mV, ± 1V, ± 10V, ± 300V, ± 20mA.
  Pt100 3 wire, Ni 100, ΔPt100, thermocouple, resistance and potentiometer
  Average response time: 150ms in standard version, or 20ms max. in fast version (F)
  - Supply for 2-wire sensor.
- **Outputs** :
  ⇒ 2 inverting relays
  (8A/250 VAC on resistive load)
- Programming with the µconsole or by PC via the software MC VISION.
  The µconsole is systematically delivered with the DAS C 10.

Functions



Easy programming on front face with a micro-console or via the PC software MCVISION.

Programming with the micro-console

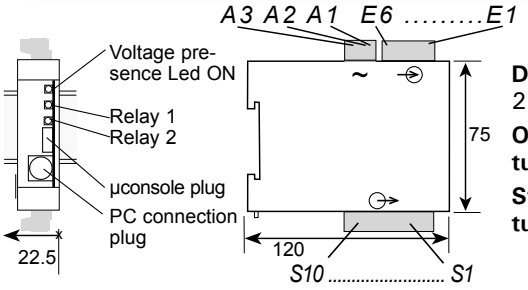
The series DAS accepts 2 types of µconsoles:
• The old generation with 4 electroluminescent alphanumerical green digits
• The new generation with graphical rear-lit LCD
The LCD allows visualising 4 pieces of information:
- the value of the measure,
- the unit of the displayed measure,
- the marking name of the product,
- the status of the relay outputs.

This µconsole with LCD also allows the display of this information either vertically or horizontally, according to the sense in which the converter is mounted.

Programming by PC: MCVISION

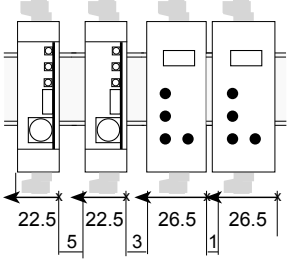
Programming software (Window environment) allowing:
the storage of configurations as files which can be consulted, modified, duplicated or loaded into the converters,
the edition and printing of files with or without having a converter connected.

Dimensions



Dimensions: 22.5x75x120mm
Operating temperature: -10° to 50°C
Storage temperature: -20 to 70°C

Self-extinguishing case of black UL 94VO ABS.
Mounting in switchbox: latching on symmetrical DIN rail.
Rack version: consult.



Dimensions with µconsole: 26.5x80x130 mm

To allow the inserting of the µconsole: mount the instruments vertically (on horizontal DIN rail), leaving a 5 mm space between each.

Coding

Type	DAS C 10 F
	fast version
	with micro console

♦ CE according to IEC 61000-6-4, IEC 61000-6-2 (industrial environment).

♦ Disturbance immunity according to the standard IEC 61000-6-2(IEC 61000-4-3 level 3, IEC 61000-4-4 level 4, IEC 61000-4-6 level 3)

sfere®
The friendly interface

SETPOINTS

CA SE/07

Features

Inputs

Types of inputs	Measure range adjustable from:		Permanent overload	Intrinsic error	Console resolution	Input impedance
mA	-22 to +22mA with √ ♠		± 100mA	< ±0.05% of the MR	10 µA	Max. drop 0.9V
mV♠	-110 to +110mV with √♠		± 1V		10 µV	≥ 1MΩ
V	- 1.1 to +1.1V with √♠		± 50V		1 mV	
	-11 to +11V with √♠				1 mV	
	-330 to +330V with √♠		± 600V		10mV	
Thermocouples ♠ Standard IEC 581	°C	°F	-	♦(2) <±0.1% of the MR	0.1°C / 0.1°F	≥ 1 MΩ
J	-160/1200	-256/2192				
K	-270/1370	-454/2498				
B	200/1820	392/3308				
R	-50/1770	-58/3218				
S	-50/1770	-58/3218				
T	-270/410	-454/770				
E	-120/1000	-184/1832				
N	0/1300	-32/2372				
L	-150/910	-238/1670				
W	1000/2300	1832/4172				
W3	0/2480	32/4496				
WRE5	0/2300	32/4172				
Sensor Pt100Ω (1)♠ 3 wire, Stand. IEC 751 (DIN 43760)	°C	°F	-	<±0.1% of the MR	0.1°C / 0.1°F	Current 250µA
	-200/850	-328/1562				
Sensor Ni 100 3 wire (1)♠	-60/260	-76/500	-			
Differential measu-res from 2 sensors Pt100Ω 2 wire Standard IEC 751 ♠**	-200/270	-328/518	-			
Resistive sensors	Calibers 0-440 Ω and 0-2.2 kΩ ♣ (0-8.8 kΩ optional)		-	<±0.1% of the MR (0.5% for 0-2KΩ)	-	
Potentiometer	from 100Ω to 10 kΩ ♣		-			
Supply for 2-wire sensor	24 VDC ±15% with protection from short-circuits. 25 mA max.					
Special linearisation *programming up to 20 points*	On input: mV, V, mA. Resistive sensors and potentiometer					

(1) Line resistance <25Ω
(2) Or 30 µV typical (60µV Max.)
♦ CJC efficiency: ±0.03°C/°C ±0.5°C from -5°C to +55°C
MR Measure range
** Line resistance <10Ω and R. max. 400Ω
√ Extraction of the square root

♠ A 12 µA pulsed current allows the detection of line or sensor rupture.
♣ Cut off: the display of the console remains at down scale for an input signal < to the cut off value, programmable from 0% to 100% of the input scale.

Thermic drift <150ppm /°C

Outputs

Types of **OUTPUTS**	Featrures
2 change-over relays	2 setpoints per relay, configurable on the whole MR. Hysteresis programmable from 0 to 100%. Time delay programmable from 0 to 25 sec. (8A/250VAC on resistive load)

Response time of the relay outputs:

• Standard version:
Average response time = 150ms
Max. response time = 215ms

• Fast version (F):

Programmable cycle time	Max. response time of the relays	Rejection
2 ms	20 ms	-
20.0 ms	55 ms	50 Hz
100 ms	215 ms	50 Hz / 60Hz

The response times are garanteed 10 min. after setting the converter on tension and 30 sec. after a saving of the programming, an end of measure overrange, or a sensor rupture.

For the inputs with 2 measures (Tc, Pt100, ni 100 and potentiometer) the 2nd measure is performed every minute. During that measure the max. response time on the relays will increase by 5 ms, 20 ms or 100 ms according to the programmed cycle time value (2ms, 20 ms, 100 ms).
In case the sensor rupture detection is being used (mV and t° inputs), add 2 ms to the response time of the outputs.
The ΔPt100 input is available only with a cycle time of 100 ms. The maximum response time is then 430 ms.

Power supply

Operating range: 20 to 270 Vac and 20 to 300 Vdc

Power draw: 2.5 w max. 4 VA max.
Dielectric withstanding: 2 kV-50Hz-1min.

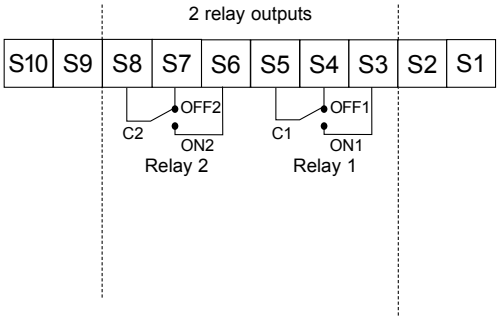
Galvanic partition:

2kV-50Hz-1min. between supply, input, relay outputs

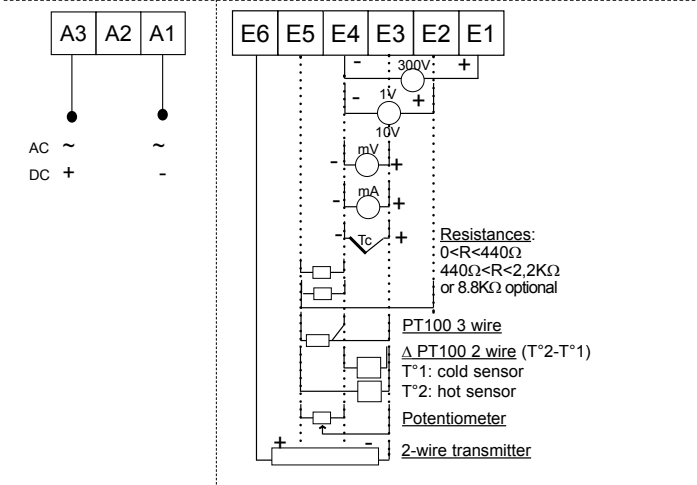
Wiring

Lower connector

Outputs of the DAS 10



Upper connectors



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