

PROGRAMMABLE SETPOINT DETECTORS

ARDETEM

DSv10
without
display

DSCv10
with
display

SFERE

DASv10
without
display

DASCv10
with
display

Features

- **Universal power supply:**
20 to 250 Vac and
20 to 250 Vdc
- **Universal input:**
 $\pm 100\text{mV}$, $\pm 1\text{V}$, $\pm 10\text{V}$, $\pm 270\text{V}$,
 $\pm 20\text{mA}$,
Pt100, Ni 100 (2, 3 or 4
wire), ΔPt100 thermocouple,
resistance and potentiometer.
- **Response time**
average: 150ms
(15ms version F)
- **Supply for 2-wire sensor**

Relay outputs (R): 2 change-over relays (8A/250 VAC on resistive load).

Sensor break detection and self-diagnosis.

Isolation input/outputs/supply.

Mode simulation allowing to validate the configuration or the installation.

Programming either with the micro-console or by the PC software SlimSET via a standard USB / μUSB cable.

Configuration

Easy programming with a micro-console or with the PC software via a standard USB/ μUSB cable.

Programming with the Micro-console

The graphical rear-lit LCD with tactile keyboard allows to visualise 3 pieces of information:

- the value of the measure and its unit,
- the product tag name,
- the status of the relay outputs.
- Scrolling message for programming help in various languages
- Passcode protected programming
- Programmable keys for direct access

Programming by PC: SlimSET

Programming software (Windows environment) allowing:

The storage of the configurations as files which can be consulted, modified, duplicated or loaded into the instruments.

The edition and printing of files with or without having a setpoint detector connected.

Features

Supply: 20 to 250 Vac and 20 to 250Vdc

Power draw: 2.8 W max. 8 VA max.

Dielectric withstanding: 3,0 kV-50Hz-1min.

Operating temperature: -20 to +60°C

Storage temperature: -20 to +70°C

Installation: Pollution degree 2 / voltage surge II

- Protection: case / terminals: IP 20
- Removable terminal blocks for screwed connections (2.5 mm², flexible or rigid)
- Weight: 290g (with packaging)
- Self-extinguishing case of black UL 94VO PA66.
- Mounting in switchbox: latching on symmetrical DIN rail.

Compliance with standards:

Directive LV 2014/35/UE	EN 61010-1
Standard for UL electrical safety	UL 61010-1
.....	CSA C22.2 NO.61010-1-12
Directive ATEX 2014/34/UE area 2.....	EN 60079-0
.....	EN 60079-15
Directive EMC 2014/30/UE	EN 61326-1

Marking:

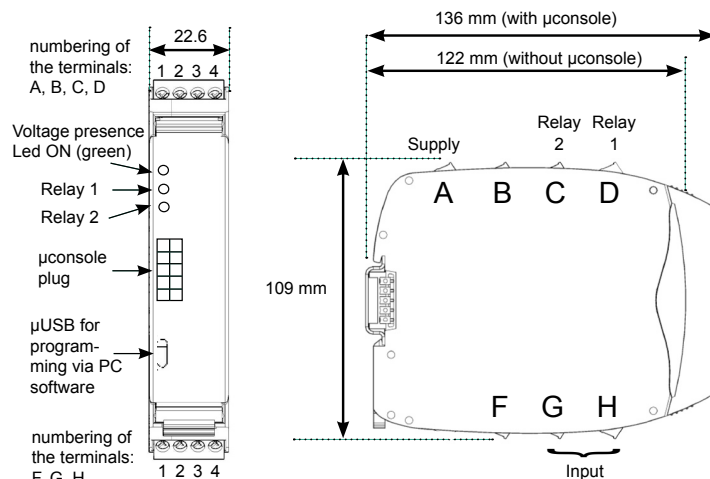


II 3 G Ex nA IIC T4 Gc



Process
Control
Equipment
E482453

Dimensions



Features

Inputs

Types of INPUTS	Measure range adjustable from:		Permanent overload	Intrinsic error	Input impedance
mA(1)	-2 to +22mA (U) ----- -22 to +22mA (B)		±100mA	< ±0.1% of the MR for inputs of the type (U) < ±0.05% of the MR for inputs of the type (B) (4)	Max. drop 0.9V
mV(1)	-10 to +110mV (U) ----- -110 to +110mV (B)		±1V		≥ 1MΩ
V	-0.1 to +1.1V (U) ----- -1.1 to +1.1 V (B)		±50V		
	-1 to +11V (U) ----- -11 to +11V (B)				
	-30 to +300V (U) ----- -300 to +300V (B)		±300V		
Thermocouples(1) Standard IEC 581 J K B R S T E N L W W3 WRE5	°C -160/1200 -270/1370 200/1820 -50/1770 -50/1770 -270/410 -120/1000 0/1300 -150/910 1000/2300 0/2480 0/2300	°F -256/2192 -454/2498 392/3308 -58/3218 -58/3218 -454/770 -184/1832 -32/2372 -238/1670 1832/4172 32/4496 32/4172	-	(3) <±0.1% of the MR or 30µV typical (60µV max.)	≥ 1 MΩ
Sensor Pt100Ω (1)(2) Standard IEC 751 (DIN 43760)	°C -200/850	°F -328/1562	- -	<±0.1% of the MR	Current 250µA
Sensor Ni 100 (1)(2)	-60/260	-76/500	-		
Resistive sensors	Calibers 0-440 Ω(1)(2) and 0-10 kΩ		-	<±0.1% of the MR	Max. current 250µA
Potentiometer	from 100Ω to 10 kΩ		-		Max. voltage 100mV
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 sensor and potentiometer				
Extraction of the square root	On input mV, V or mA				

- (1) Sensor break detection:
mA input (if down scale ≥ 3,5mA)
Other inputs: a 12µA pulsed current allows the detection of line or sensor break.
- (2) Wiring possible in 2, 3 and 4 wire
Influence of the line resistance ($0 < R_l < 25\Omega$) included in the announced intrinsic error.
- (3) CJC efficiency (-20 to +60°C):
Internal CJC: $\pm 2^\circ\text{C} \pm 0.03^\circ\text{C}/^\circ\text{C}$
CJC (option terminal): $\pm 1^\circ\text{C}$
- (4) $< \pm 0.1\%$ of the MR (B) for the version F if acquisition time $< 100\text{ms}$
- MR Measure range
Thermal drift $< 150\text{ppm}/^\circ\text{C}$

Outputs

Types of OUTPUTS	Features
2 change-over relays	2 setpoints per relay configurable over the whole MR. Hysteresis programmable from 0 to 100%. Time delay programmable from 0 to 999.9 sec. (8A/250 VAC on resistive load)

Response time of the outputs:

(for a variation from 10 to 90% of the input signal)
Average response time: 150 ms (15ms for the version F)
Add 10 ms for the response time on the relay outputs

Galvanic isolation:

3.0kV-50Hz-1min. between Supply, Input and Relay output.



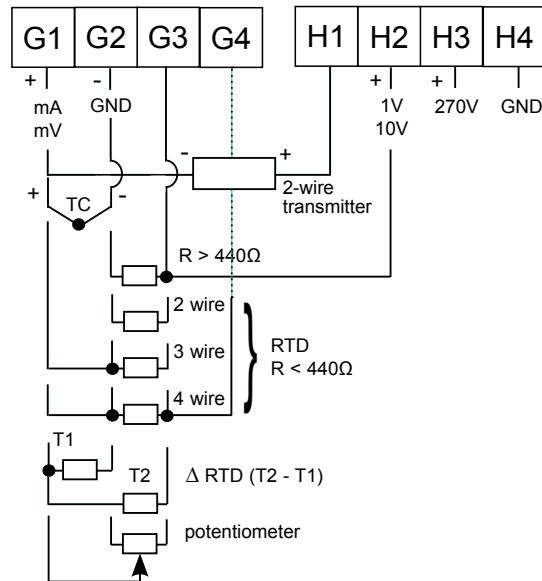
e-mail : info@ardetem.com
http : www.ardetem.com

Route de Brindas
Parc d'activité d'Arbora N°2
69510 SOUCIEU EN JARREST
- FRANCE -

Tél. : 33 (0)4 72 31 31 30
Fax. : 33 (0)4 72 31 31 31

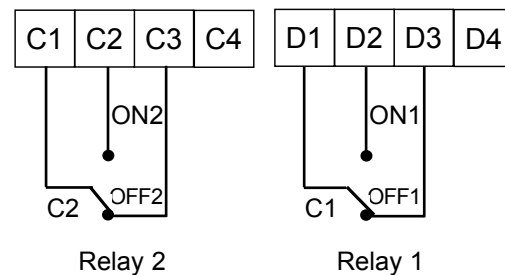
Connectings

Inputs

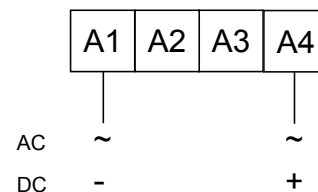


Outputs

Relay outputs



Supply



Coding

ARDETEM reference: DS(C)v10
SFERE reference: DAS(C)v10

Type of Type	DSv10 / DASv10	without display
Type of Type	DSCv10 / DASCv10	with display

Available options:

FAST VERSION
DSv10 / DASv10 F
DSCv10 / DASCv10 F

- Standard programming cable USB type A male to µUSB type B male: reference C1-µUSB
- CJC terminal (option): reference B1CSF-4

Your representative

