





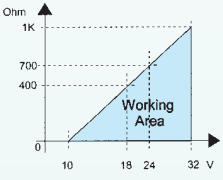
TECHNICAL SPECIFICATIONS (Typical at 25 °C and in nominal conditions)



DAT1015

Two wire universal transmitter
Programmable by Personal Computer






INPUT				INPUT CALIBRATION (1)	RESPONSE TIME
INPUT TYPE	MIN	MAX	MIN SPAN		
TC (CJC int./ext.) J K S R B E T N	-200°C -200°C -50°C -50°C 400°C -200°C -200°C -200°C	1200°C 1370°C 1760°C 1760°C 1820°C 1000°C 400°C 1300°C	2mV 2mV 2mV 2mV 2mV 2mV 2mV 2mV	RTD > ± 0.1% f.s. or ± 0.2°C Low res. > ± 0.1% f.s. or ± 0.15Ω High res. > ± 0.2% f.s. or ± 1Ω mV, TC > ± 0.1% f.s. or ± 18 uV	(10÷ 90%) about 400 ms
RTD (*) 2, 3, 4 wires Pt100 Pt1000 Ni100 Ni1000	-200°C -200°C -60°C -60°C	850°C 200°C 180°C 150°C	50°C 50°C 50°C 50°C	OUTPUT CALIBRATION Current ± 7 uA	POWER SUPPLY Power supply voltage 10..32 Vdc Reverse polarity protection 60 Vdc max
VOLTAGE mV	-100 mV	+700 mV	2 mV	INPUT IMPEDANCE TC, mV ≥ 10 MΩ	LOAD CHARACTERISTIC - RLOAD
POTENTIOMETER (Nominal value)	0 Ω 200 Ω 0.5 KΩ	200 Ω 500 Ω 2 KΩ	10% 10% 10%	LINEARITY (1) TC ± 0.2% f.s. RTD ± 0.1% f.s.	
RES. 2, 3, 4 wires Low High	0 Ω 0 Ω	300 Ω 2000 Ω	10 Ω 200 Ω	LINE RESISTANCE INFLUENCE (1) TC, mV ≤ 0.8 uV/Ohm RTD 3 wires 0.05%/Ω (50 Ω balanced max.) RTD 4 wires 0.005%/Ω (100 Ω balanced max.)	
OUTPUT TYPE	Min	Max	Min Span	RTD EXCITATION CURRENT Typical 0.350 mA	TEMPERATURE AND HUMIDITY Operative temperature -20°C .. +70°C Storage temperature -40°C .. +85°C Humidity (not condensed) 0 .. 90%
Direct current	4 mA	20 mA	4 mA	CJC COMP. ± 0.5°C	EMC (for industrial environments) Immunity EN 61000-6-2 Emission EN 61000-6-4
Reverse current	20 mA	4 mA	4 mA	THERMAL DRIFT (1) FULL SCALE ± 0.01% /°C CJC ± 0.01% /°C	
				BURN-OUT VALUES Max. value about 22.5 mA Min. value about 3.6 mA	


(1) referred to input Span (difference between max. and min. values)

Input connections

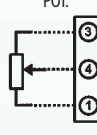
mV



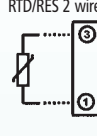
TC



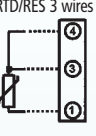
POT.



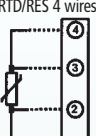
RTD/RES 2 wires



RTD/RES 3 wires

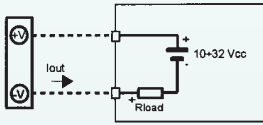



RTD/RES 4 wires



Terminal 1 = GND Input





Output/Power supply connections

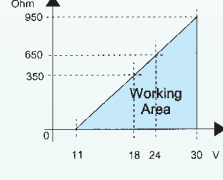




DAT1015 IS DAT1015 IS/HT

Intrinsically safe two wire universal transmitter
Programmable by Personal Computer







INPUT				INPUT CALIBRATION (1)	RESPONSE TIME
INPUT TYPE	MIN	MAX	MIN SPAN		
TC (CJC int./ext.) J K S R B E T N	-200°C -200°C -50°C -50°C 400°C -200°C -200°C -200°C	1200°C 1370°C 1760°C 1760°C 1820°C 1000°C 400°C 1300°C	2mV 2mV 2mV 2mV 2mV 2mV 2mV 2mV	RTD > ± 0.1% f.s. or ± 0.2°C Low res. > ± 0.1% f.s. or ± 0.15Ω High res. > ± 0.2% f.s. or ± 1Ω mV, TC > ± 0.1% f.s. or ± 10 uV	(10÷ 90%) about 400 ms
RTD (*) 2, 3, 4 wires Pt100 Pt1000 Ni100 Ni1000	-200°C -200°C -60°C -60°C	850°C 200°C 180°C 150°C	50°C 50°C 50°C 50°C	OUTPUT CALIBRATION Current ± 7 uA	POWER SUPPLY Power supply voltage 11..30 Vdc Reverse polarity protection 60 Vdc max
VOLTAGE mV	-100 mV	+700 mV	2 mV	INPUT CALIBRATION TC, mV ≥ 10 MΩ	LOAD CHARACTERISTIC - RLOAD
POTENTIOMETER (Nominal value)	0 Ω 200 Ω 0.5 KΩ	200 Ω 500 Ω 2 KΩ	10% 10% 10%	LINEARITY (1) TC ± 0.2% f.s. RTD ± 0.1% f.s.	
RES. 2, 3, 4 wires Low High	0 Ω 0 Ω	300 Ω 2000 Ω	10 Ω 200 Ω	LINE RESISTANCE INFLUENCE (1) TC, mV ≤ 0.8 uV/Ohm RTD 3 wires 0.05%/Ω (50 Ω balanced max.) RTD 4 wires 0.005%/Ω (100 Ω balanced max.)	
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
(1) referred to input Span (difference between max. and min. values)

Input connections

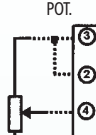
mV



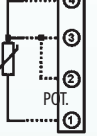
TC



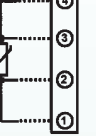
POT.




RTD/RES 3 wires



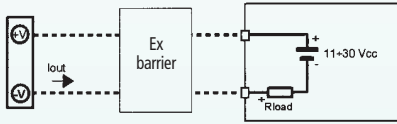
RTD/RES 4 wires



RTD/RES 2 wires



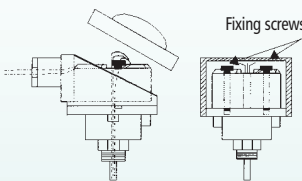
Output/Power supply connections



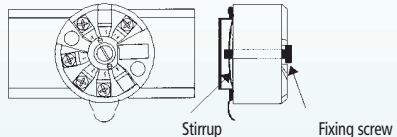
EX DATA:	
OUTPUT/SUPPLY	INPUT
Ui = 30 V Ii = 100 mA Pi = 0.75 W Li = 0.1 mH Ci = 10 nF	Uo = 6.2 V Io = 100 mA Po = 500 mW Lo = 3.6 mH Co = 5 uF
T6: -20 ÷ + 55 °C T5: -20 ÷ + 70 °C T4: -20 ÷ + 85 °C ('HT' vers.)	

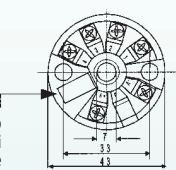
Mechanical dimensions (mm)

DIN B in-head mounting



DIN rail mounting (DIN RAIL Option)





Coperchio
plastico di
protezione

