

ATS - PANEL MOUNTED TRANSDUCERS

DC SIGNAL CONDITIONERS

FEATURES

- designed to International Standards
- proven reliability – over 27 years of experience
- high accuracy and stability
- IEC688 specification compliant
- 2kV isolation
- fire retardant, DIN rail and panel mount housing
- ac and dc auxiliary supplies
- simplified connection details on label
- extensive input and output combinations
- non-standard inputs and outputs available
- removable cover for quick inspection
- technical and after-sales support

APPLICATION

A dc signal conditioner, as the name implies, is a device which will convert a dc input signal into a dc output signal which is proportional to, and galvanically isolated from the input signal.

These transducers are particularly suited for use with measuring transducers with forced milliamp outputs to achieve a galvanic isolation between the two signals permitting combining of signal conductors as may be required by certain data acquisition or transmission equipment, as well as range changing or summing to a required signal.

Also, dc current shunt voltages (50mV) can be converted to standardized mA signals (0-1mA or 4-20mA) which are galvanically isolated from the shunt circuit.

As with the range of Measurlogic power measurement transducers, the dc signal conditioners embody components which are liberally rated to ensure high accuracy, long life and stability.

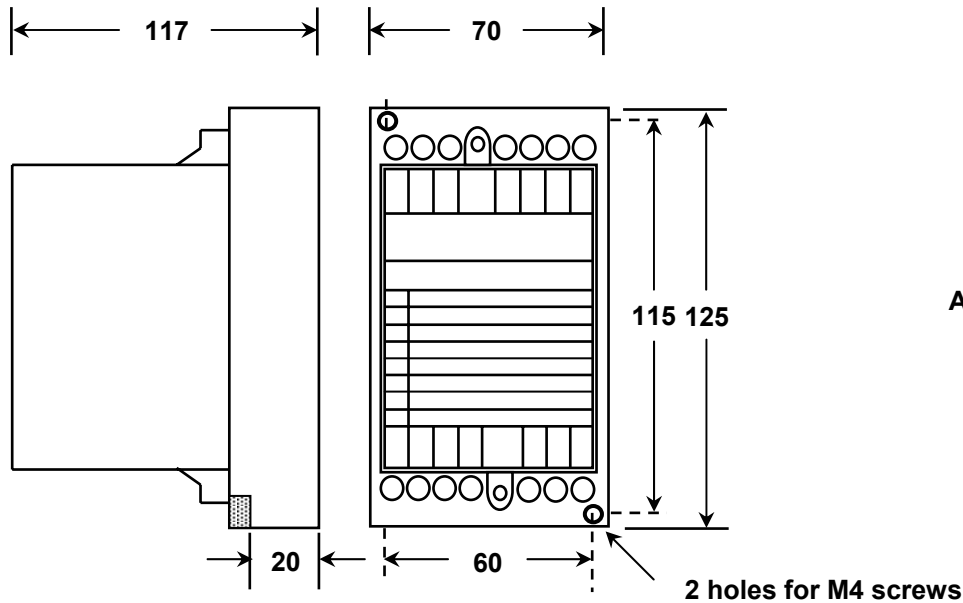
ORDERING INFORMATION

(Specific combinations to be confirmed on ordering. Other input/output values available.)

Model : K - - - -



Transducer Type (group 2)		Input Data (for voltage) (group 3)		Input Data (for current) (group 3)		Output Data (group 4)		Class Accuracy (group 5)		Auxiliary Supply (group 6)	
Z1	Voltage In	V50M	50mV	A5M	5mA	A5M	5mA	C5	0,5	3	18-70Vac/dc
Z2	Current In	V10	<10V	A4M	4-20mA	A20M	20mA			4	90-260Vac/dc
		V400	<400V	A20M	20mA	A4M	4-20mA			5	115/230Vac
		V500	<500V	A500M	500mA	V10	10V				
		Vx	other	A2	2A	V4	1-5V				
Z3	Resistance	R140	0-140Ω	Ax	other						



All Dimensions in Millimeters

Model	KZ1	KZ2	KZ3
Input	DC voltage	DC current	Resistance (Ω)
No. of channels	1	1	1
Signal	0...50mV / 900Vdc bi-directional	0...1 / 5 / 10 / 20 / 500mA & 1 / 2 A bi-directional	0...140 ohms (other ranges on request)
Burden	> 1M ohm	500mV nominal	> 1M ohm
Output	DC current or DC voltage	DC current or DC voltage	DC current or DC voltage
Current	0...1/5/10/20mA bi-directional or 4-20mA	0...1/5/10/20mA bi-directional or 4-20mA	0...1/5/10/20mA bi-directional or 4-20mA
Voltage	0...10Vdc bi-directional	0...10Vdc bi-directional	0...10Vdc bi-directional
Burden	0...10V	0...10V	0...10V
Burden influence	<0,1%	<0,1%	<0,1%
Ripple content	<2% ptp	<2% ptp	<2% ptp
Summation	Galvanically coupled	Galvanically coupled	Galvanically coupled
Isolation	2kV, 50Hz, 1 minute	2kV, 50Hz, 1 minute	2kV, 50Hz, 1 minute
Accuracy	0,5% of span	0,5% of span	0,5% of span
Ambient temp.	-10... +55°C	-10... +55°C	-10... +55°C
Temp Influence	<0,2% / 10°C	<0,2% / 10°C	<0,2% / 10°C
auxiliary supply			
Input	115/230Vac \pm 20% 50/60Hz \pm 10% or 18-70 and 90-260Vac/dc	115/230Vac \pm 20% 50/60Hz \pm 10% or 18-70 and 90-260Vac/dc	115/230Vac \pm 20% 50/60Hz \pm 10% or 18-70 and 90-260Vac/dc
Influence	<0,1% for 20% change	<0,1% for 20% change	<0,1% for 20% change
Burden	<4VA	<4VA	<4VA
Housing	Surface or optional DIN Rail mounted hard plastic base with protected screws for 2,5mm ² (12 AWG) conductors, and fire retardant removable cover.		

CONNECTIONS

TRANSDUCER TYPE	TERMINALS													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
KZ1 – Voltage Input		V-			V+					0	115	230	O-	O+
KZ2 – Current Input	I-		I+							0	115	230	O-	O+
KZ3 - Resistance		Ω			Ω					0	115	230	O-	O+

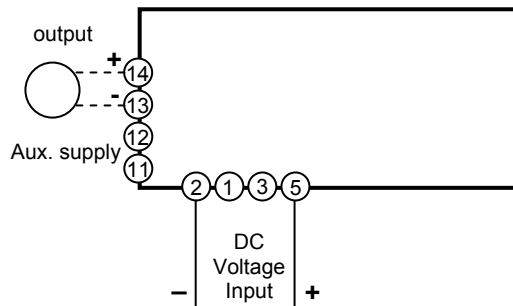
Also available with a SMPS with 18-70Vac/dc or 90-260Vac/dc and terminal connections 11(-ve) & 12(+ve)

TERMINAL DESIGNATION

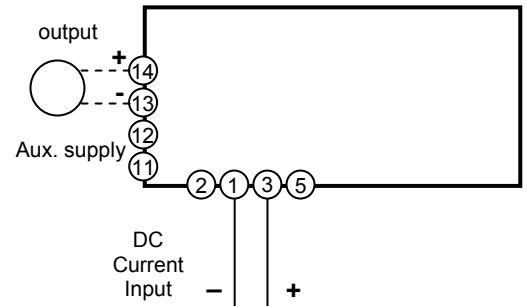
I+	INPUT CURRENT (+)	O+	OUTPUT POSITIVE
I-	INPUT CURRENT (-)	O-	OUTPUT NEGATIVE
V-	INPUT VOLTAGE (+)	115	AUXILIARY SUPPLY 115V
V+	INPUT VOLTAGE (-)	230	AUXILIARY SUPPLY 230V
Ω	RESISTANCE	0	AUXILIARY SUPPLY NEUTRAL

CONNECTION DIAGRAMS

DC Voltage Input : Type KZ1



DC Current Input : Type KZ2



Resistance Input : Type KZ3

