

ATS - PANEL MOUNTED TRANSDUCERS

AC POWER FREQUENCY

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

The Measurlogic frequency transducer is a fully solid state crystal controlled frequency transducer either employing the measured voltage for its auxiliary supply or with separate auxiliary supply source.

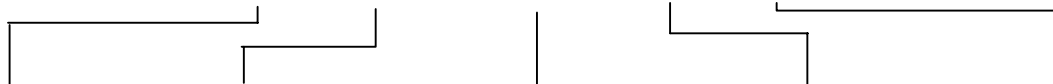
These versatile frequency transducers may be used in a wide range of applications, amongst others, power network frequency monitoring, standby generator outputs and inverter systems.

The measurement employs a crystal controlled oscillation gated by the measurand to give accurate suppressed range (eg. 45 – 55Hz or 55 – 65 Hz) measurements.

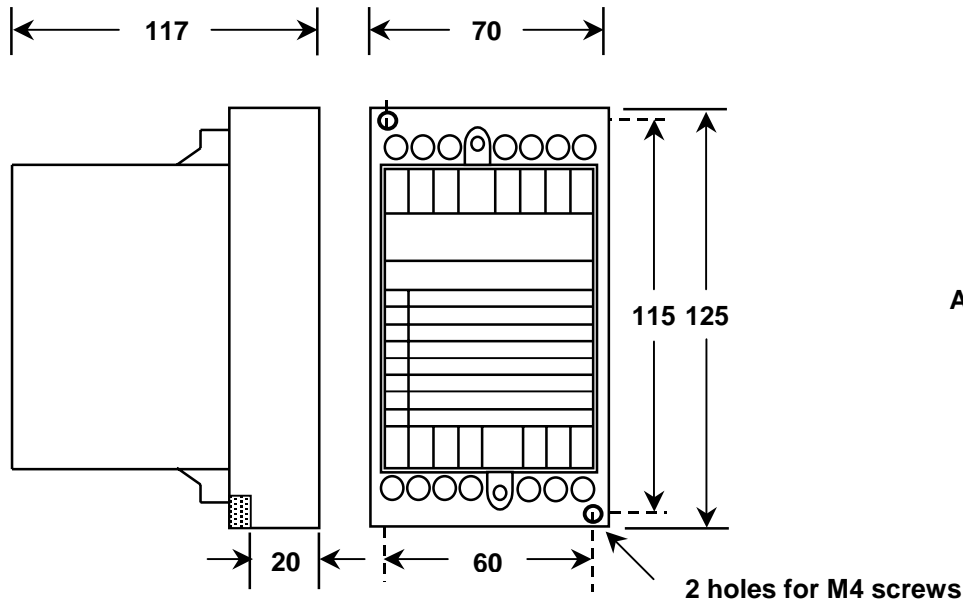
ORDERING INFORMATION

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

Model : K - - - - -



Transducer Type (group 2)		Input Data (for voltage) (group 3)		Output Data (group 4)		Class Accuracy (group 5)		Auxiliary Supply (group 6)	
F1	FREQUENCY	V132	33 – 132V	A5M	5mA	C5	0,5	3	18-70Vac/dc
		V230	132 – 230V	A20M	20mA			4	90-260Vac/dc
				A4	4-20mA			5	115/230Vac
				V10	10V				



Transducer Model	KF
Measurand	Power frequency
Input Voltage	150, 300, 600V (other on request)
Input Voltage Range	30...120%
Voltage Overload	1,2x continuously, 2x for 10 seconds
Input Frequency	50Hz or 60Hz
Range	45...50...55Hz, 48...50...52Hz, or 49...50...51Hz (other ranges on request) 55...60...65Hz, 58...60...62Hz, or 59...60...61Hz (other ranges on request)
Input Wave Shape	arbitrary
Consumption	<2mA
Output	4 – 20mA _{dc} (other on request)
Output Burden Voltage	10V, (eg. 2k ohm for 5mA)
Burden Influence	<0,1%
Output ripple	2% ptp
Response Time T80	200ms for 10Hz span
Ambient Temperature	-10... +60°C
Temp. Influence	<0,2%/10°C
Accuracy Class	0,5 (referred to range)
Auxiliary supply	115/230 ±20%, 50/60Hz or 18-70V ac/dc or 90-260V ac/dc
Insulation	2kV, 50Hz, 1 minute
Impulse withstand	5kV peak, 1/50us wave, 0.5J
Housing	Surface or DIN Rail mounted hard plastic base with protected screws for 2,5mm ² (12 AWG) conductors, and fire retardant removable cover
Mass	0,6 kg (1.32 lb)

CONNECTIONS

TRANSDUCER TYPE	TERMINALS													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FREQUENCY		V ₁			V ₂					0	115	230	O-	O+

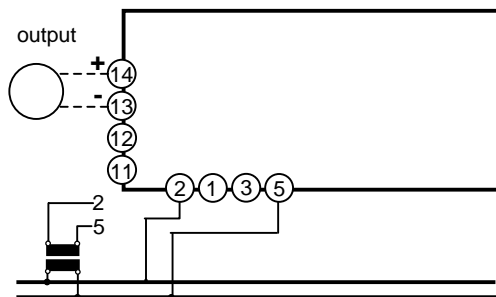
Also available with a SMPS with 18-70Vac/dc or 90-260Vac/dc and terminal connections 11(-ve) & 12(+ve)

TERMINAL DESIGNATION

V ₁	INPUT VOLTAGE RED	I ₁	INPUT CURRENT RED
V ₂	INPUT VOLTAGE YELLOW	I ₂	INPUT CURRENT YELLOW
V ₃	INPUT VOLTAGE BLUE	I ₃	INPUT CURRENT BLUE
N	INPUT NEUTRAL	115	AUXILIARY SUPPLY 115V
O+	OUTPUT POSITIVE	230	AUXILIARY SUPPLY 230V
O-	OUTPUT NEGATIVE	0	AUXILIARY SUPPLY NEUTRAL

CONNECTION DIAGRAMS

Frequency (Self Powered): Type KF1



Frequency (Aux Power): Type KF1

