

# Var Transducer VAR95



- Voltage Input 110 VAC, 220 VAC, 380 VAC
- Current Input 1 A, 5 A
- Analog Output 4-20 mA, 0-5 VDC

**The Var Transducers VAR95** are used to convert single or three phase unbalance load reactive power into a proportional load independent DC. output. Based fully electronic Time-Division Multiplication measuring principle, the reactive power of a network with any power factor range are linearly produced by Var Transducers output.

### Calibration var of rated output

| Connection   | V=110V  |          | V=220V  |          | V=380V  |          |
|--------------|---------|----------|---------|----------|---------|----------|
|              | I=1A    | I=5A     | I=1A    | I=5A     | I=1A    | I=5A     |
| Single Phase | ±100var | ±500var  | ±200var | ±1000var | -       | -        |
| 3phase,3wire | ±200var | ±1000var | ±400var | ±2000var | ±600var | ±3000var |
| 3phase,4wire | ±200var | ±1000var | ±400var | ±2000var | ±600var | ±3000var |

Note. V= Line voltage

### Equation to calculated measuring range

Measuring range = Calibration var x PT ratio x CT ratio

Example 3 phase, 3 wire, PT 220 V/110 V, CT 250/5 A, Calibration var = 1000 W

Measuring range = 1000 x (220/110) x (250/5) = 100 Kvar

## Specifications

### Input

**Number of channel:** 3 Channels

**Input type:** Current, Voltage  
(1 phase, 3 phase 3 wire, 3 phase 4 wire)

### Input range:

Current (1, 5 A AC)

Voltage (110, 220, 380 VAC (Line voltage for 3 phase)

### Power consumption:

< 0.2VA for input current

<0.4VA for voltage input

**Frequency:** 50 Hz.

### Analog Output

**Number of channel:** 1 Channel

**Output type:** Current, Voltage

### Output range:

Current Max (-)1 to 1 mA (Load Resistance 10 K $\Omega$ )

Current Max 4 to 20 mA (Load Resistance 600  $\Omega$ )

Voltage Min 0 to 10 mVDC (Load Resistance 500  $\Omega$ )

Voltage Min 0 to 100 mVDC (Load Resistance 500  $\Omega$ )

**Ordering Information:** Specify connection, Input voltage, Input current, Output, Power supply

Example VAR95/3 phase 4 wire/380 VAC./5A/4-20 mA/220 VAC

### Package Checklist

1. VAR95

Voltage Min 0 to 1 VDC (Load Resistance 500  $\Omega$ )

Voltage Min 0 to 5 VDC (Load Resistance 1 K $\Omega$ )

Voltage Min 1 to 5 VDC (Load Resistance 1 K $\Omega$ )

Voltage Min 0 to 10 VDC (Load Resistance 2 K $\Omega$ )

**Linearity:** < ¼ 0.5% of span

### Power Requirements

**Power Supply:** 110, 220 VAC

### Environmental Limits

**Operating Temperature:** 0 to 55 °C

**Operating Humidity:** 5 to 95% RH

**Storage Temperature:** 0 to 70 °C

### Physical Characteristics

**Dimension:** W132 x H132 x D162 mm.

**Mounting:** Wall Mount

**Wiring:** Screw terminals

### Warranty

**Warranty Period:** 5 year