RUDOLF™ Transducer

Watt & Var Transducer

Specification

- Accuracy : 0.2% F.S. (23 ± 5°C)
- Temp. coefficient : 100ppm/°C (0~50°C)
- Input burden : ≤ 0.2VA (voltage)
  ≤ 0.2VA (current)
- Maximum input over : Current related input: 3 x rated continuous
  10 x rated 30 sec, 25 x rated 3 sec, 50 x rated 1 sec
  Voltage related input: maximum 2 x rated continuous
- Response time : ≤ 250ms (0-90%)
- Output ripple (p-p) : < 0.1% F.S.
- Output drive capability : ≤ 10mA for voltage output model
  ≤ 10V for current output model
- Dielectric strength : 2kVAC/1 min. (input / output / aux. power / case)
- Surge test : ANSI C37.90a/1974, DIN-IEC 255-4 impulse voltage 5KV (1.2 x 50μs)
- Operating condition : 0~55°C (20 to 95% RH non-condensed)
- Storage condition : 0~70°C (20 to 95% RH non-condensed)
- Power supply : AC 110V/220V ± 20% (50/60Hz) ≤ 3.5VA (Optional DC 48V or DC 110V ± 20%)
- Magnetic effect : < 0.005% change 1M center 100 ampere-turn, synchronized with line frequency
- Aux. power effect : < 0.005% per voltage change
- Impulse/surge test IEC255-4 : IEC 688, 5 kV, 1.2/50ms waveform, IEC 255-22-1, 2.5 kV (1MHz/400Hz)
- Housing : Flame proof, self-extinguishing grey polycarbonate.
  Case IP 50 snap mounting on DIN EN 50022-35 or surface mounting.
  Compliance with IEC 529, BS 5490, DIN 40054
  Protection touch-proof terminals and enclosure meeting requirements of VBG 4 & VDE 0106 part 100 (Germany).

Insulation

- Protection class : Class II complying with IEC 348 / BS 4735 / DIN 57411 / VDE 0411
- Test voltage : 4kV rms 50 Hz 1 min. between Input / Case / Auxiliary / Output

Applied Standards

- General : IEC 688-1 / IEC 255-4 / BS 6253: Part 1
- Safety : IEC 348-1 / BS 4753 / DIN 57411 / VDE 0411 / ANSI C 37
- Surge withstand : IEC 801 / EN55020 / ANSI C37-90a
- Radio Screening : RFI degree N Complies with VDE 0875
- Adaptability for power system : EN 61010, IEC 0110-1