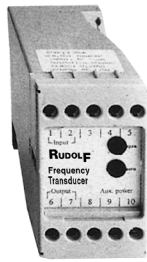


# RUDOLF™ Transducer

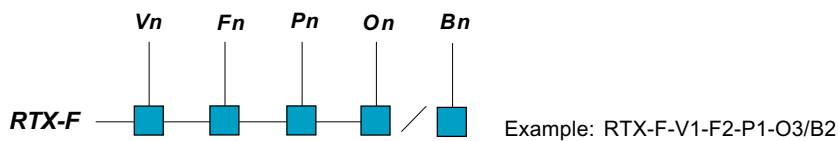
## Frequency Transducer



### Features

- Measuring & Conversion DIN-IEC 688
- Dielectric Strength DIN-IEC 688  
2 kVAC 50/60Hz/1 minute
- Impulse test ANSI C37.90a/1974, IEEE 587/1983, IEC 255-4,  
5kV (1.2x50µs)
- Surge test (ring wave) IEC 255-4 (2.5KV - 0.25ms/1 MHz)

### Order Form



### Input & Output Parameters

Vn: Voltage input	Vn range	V1 60~300V AC	V2 300~500V AC	On: Output			
				O1 0~1mA	O2 0~20mA	O3 4~20mA	
Fn: Frequency	Fn rating	F1 50 Hz	F2 60 Hz		O5 0~10mA	O6 0~1V	
Bn: Calibration band	Bn range	B1 ± 0.5 Hz	B2 ± 1 Hz	B3 ± 2 Hz	O7 0~5V	O8 0~10V	O9 2~10V
		B4 ± 5 Hz	B5 ± 10 Hz		O10 1~5V		
Pn: Auxiliary power input	Pn rating	P1 120 V AC	P2 240 V AC	P3 415V AC	P4 30V DC	P5 110V DC	

**Note:** For internal powered type .... zero based outputs and Vn operation range 85%~115%

# RUDOLF™ Transducer

## Frequency Transducer

### Specification

- Accuracy : 0.1% F.S. (23 ± 5°C)
- Temp. coefficient : 50ppm/°C (0-50°C)
- Input burden : ≤ 0.2VA
- Maximum input over : Maximum 2 x rated continuous
- Response time : ≤ 250ms (0-90%)
- Output ripple (p-p) : < 0.1% F.S.
- Output drive capability : ≤ 10mA for voltage mode  
≤ 10V for current mode
- 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) ≤ 2VA
- 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).

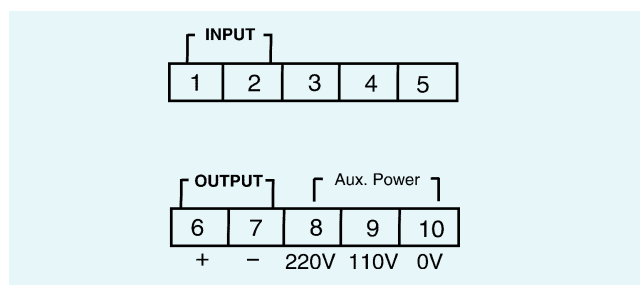
### Insulation

- 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 C37
- 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

### Terminal Connection



### Dimension (unit: mm)

