

HD POWER TRANSDUCER SERIES

POWER FACTOR TRANSDUCER

MODEL  
HDPF -

MODEL & SUFFIX CODE SELECTION

MODEL **HDPF** -

■ INPUT

phase/wire

1	1 P 2 W
2	1 P 3 W
3	3 P 3 W
4	3 P 4 W

voltage/ampere

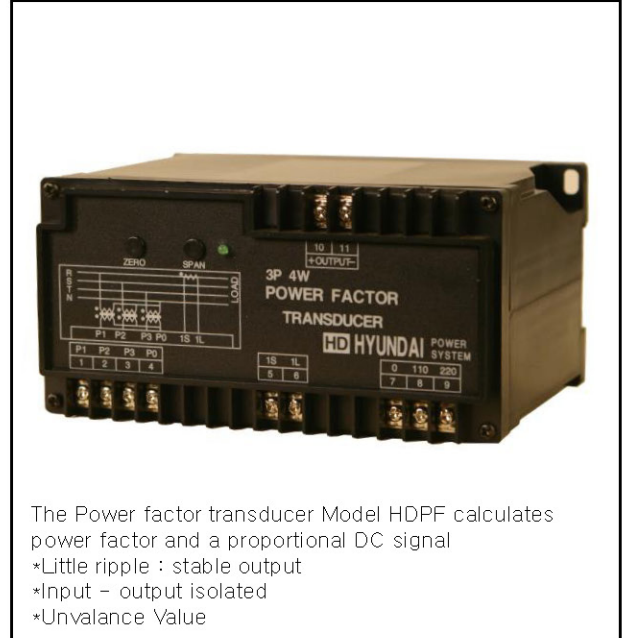
A	110V/5A
B	220V/5A
C	190/√3V/5A
D	380/√3V /5A

■ Analog output

A	DC 4-20mA	1	DC 0-10mV
B	DC 0-1mA	2	DC 0-100mV
C	DC 0-10mA	3	DC 0-1V
D	DC 0-20mA	4	DC 0-10V
E	DC 1-5mA	5	DC 0-5V
O	Spec Order	6	DC 1-5V
		O	Spec Oredr

■ Output polarity

P	0.5(LEAD) to 1to 0.5 (lag)
N	0.5(lag) to 1to 0.5 (LEAD)



The Power factor transducer Model HDPF calculates power factor and a proportional DC signal  
 \*Little ripple : stable output  
 \*Input - output isolated  
 \*Unvalance Value

ORDERING INFORMATION

Specify code number and variables  
 \* Code number : HDPF-input/output/mode  
 ex : HDPF-4AAP

\* special output range :  
 A = -10~20mA  
 V = -10~12V

GENERAL SPECIFICATIONS

**Construction** : DIN housings Terminal access on front face  
**Housing material** : plastic(black)  
**Wiring** : 3.0M screw terminals  
**Isolation** : AC input/DC output/power  
**Adjustments** : zero and span 5%  
 Over-range output = 0-120%

PERFORMANCE

**Accuracy** : 2 % at input 1 - 0.866; balanced load  
 4 % at input 0.866 - 0.5; balanced load  
**Temp.coefficient** : 0.03%/C  
**Insulation resistance** : 100Mohm or more with 500V DC  
**Response time** : 0.4sec(400ms)  
**Line Voltage effect** : 0.1% with 10% change  
**Ripple** : 0.5% p-p max. (100/120Hz)  
**Dielectric strength** : 2000V AC 1minute  
 input/output/power  
**Surge withstand Voltage** : 1.2/50μsec, ±5KV  
 (INPUT to OUTPUT to GROUND)

INSTALLATION

**Operating temperature** : -5 to +55C  
**Operating humidity** : 20-80%RH(non-condensing)  
**Mounting** : Wall or DIN rail  
**Power supply** : AC 110V or 220V (-15/+10%) , 50/60Hz,2VA  
**Size** : W75 H150 D113mm  
**Weight** :

INPUT & OUTPUT

■ INPUT

\* **Input range** : (0.5)LEAD - 1 - 0.5 (log)  
 # Voltage Size ( PT Size )  
**Operational range** : 85-110%  
**Permissible over range** : 150% 10 seconds  
 120% continuously  
**Input loss** : 0.5VA  
 # Current Size ( CT Size )  
**Operational range** : 10-120%  
**Permissible over range** : 1000% 3 seconds  
 200% 15 seconds  
 120% continuously  
**Input loss** : 0.5VA

**OUTPUT**

DC Current : 0-20mA DC

Minimum span : 1mA

zero bias : max. 1.5 tions of span

**LOAD resistance**

OUTPUT	LOAD RESISTANCE	IMPEDANCE
4-20mA	0-600 Ω	5 MΩ or more
0-20mA	0-600 Ω	
0-16mA	0-750 Ω	
0-10mA	0-1200 Ω	
0-1mA	0-12 kΩ	
0-5mA	0-2400 Ω	

DC Voltage : 0-12V DC

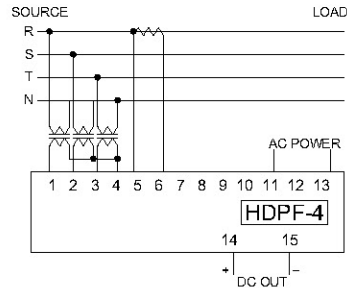
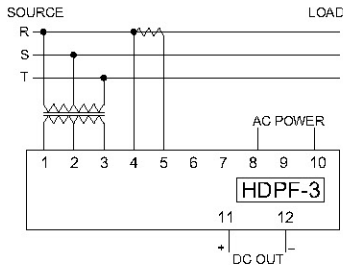
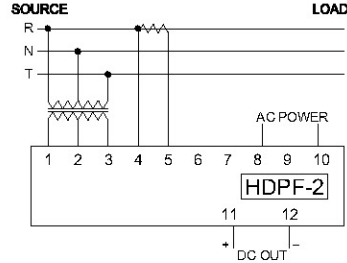
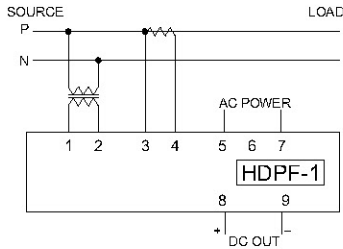
Minimum span : 5mV

zero bias : max. 1.5 tions of span

OUTPUT	LOAD RESISTANCE	IMPEDANCE
0-10mV	10 kΩ or more	10 Ω
0-100mV	100 kΩ or more	100 Ω
0-1V	1 kΩ or more	1 Ω or less
0-10V	10 kΩ or more	
0-5V	5 kΩ or more	
1-5V		

\* for other ranges within 0-12V, use equation  
 $R = E/I$  where : R = load resistance (Ω)  
 E = full-scale output (V)  
 I = 1 mA

**CONNECTION DIAGRAM**



**DIMENSION & INSTRUCTIONS**

