

역률 변환기 (Power Factor Transducer)

평형 PF Transducer (Analog Type)

■ 주요사항 (Specification)

- Accuracy Class : 0.5% of span
- Ripple : 0.5% P-P of span
- Response Time : 0.4sec (Lead 0.5~1~Lag 0.5 for step change)

Output Mode	Circuit	Type	Rated Input(AC)			Output(DC)		Freq.	Burden	Auxiliary Power (AC)	Weight (g)	Case Model	
			Voltage	Current	cosφ	Range	Load Com.						
DC Current	1P 2W	TA - 1P1	110V or 220V	5A or 1A	Lead 0.5 ~ 1 ~ Lag 0.5	0~0.5~1mA	< 10kΩ	50Hz or 60Hz	Current : 1.0VA / phase	110 / 220V	≒ 700	TL	
		TA - 1P2				4~12~20mA	< 500Ω						
		TA - 1P3				-1~0~+1mA	< 10kΩ						
	1P 3W	TA - 2P1				0~0.5~1mA	< 10kΩ				≒ 850		
		TA - 2P2				4~12~20mA	< 500Ω						
		TA - 2P3				-1~0~+1mA	< 10kΩ						
	3P 3W	TA - 3P1	190/√3V			0~0.5~1mA	< 10kΩ				≒ 760		
		TA - 3P2				4~12~20mA	< 500Ω						
		TA - 3P3				-1~0~+1mA	< 10kΩ						
	3P 4W	TA - 4P1				0~0.5~1mA	< 10kΩ						≒ 700
		TA - 4P2				4~12~20mA	< 500Ω						
		TA - 4P3				-1~0~+1mA	< 10kΩ						
DC Voltage	1P 2W	TV - 1P1	110V or 220V	50Hz or 60Hz	Voltage : 0.5VA / phase	110 / 220V	≒ 700	TL					
		TV - 1P2							1~3~5V	> 1kΩ			
		TV - 1P3					-1~0~+1V		> 200Ω				
	1P 3W	TV - 2P1					0~0.5~1V		> 200Ω	≒ 850			
		TV - 2P2					1~3~5V		> 1kΩ				
		TV - 2P3					-1~0~+1V		> 200Ω				
	3P 3W	TV - 3P1	190/√3V				0~0.5~1V		> 200Ω	≒ 760			
		TV - 3P2					1~3~5V		> 1kΩ				
		TV - 3P3					-1~0~+1V		> 200Ω				
	3P 4W	TV - 4P1					0~0.5~1V		> 200Ω		≒ 700		
		TV - 4P2					1~3~5V		> 1kΩ				
		TV - 4P3					-1~0~+1V		> 200Ω				

※ 주문사항에 따라 입력, 출력, 제어전원 및 주파수를 변경하여 제작이 가능합니다.

Order made is available except for standard products. (Input, Output, Auxiliary power, Frequency)

불평형 PF Transducer (Digital Type)

■ 주요사항 (Specification)

- Accuracy Class : 0.5% of span
- Ripple : 0.5% P-P of span
- Response Time : 2.0sec (Lead 0.5~1~Lag 0.5 for step change)

Output Mode	Circuit	Type	Rated Input(AC)			Output(DC)		Freq.	Burden	Auxiliary Power (AC)	Weight (g)	Case Model
			Voltage	Current	cosφ	Range	Load Com.					
DC Current	3P 4W	TDA - 4P1	190/√3V	5A or 1A	Lead 0.5 ~ 1 ~ Lag 0.5	0~0.5~1mA	< 10kΩ	50Hz or 60Hz	Current : 1.0VA /phase Voltage : 0.5VA /phase	110 / 220V	≒910	TL
		TDA - 4P2				4~12~20mA	< 500Ω					
		TDA - 4P3				-1~0~+1mA	< 10kΩ					
DC Voltage	3P 4W	TDV - 4P1	190/√3V			0~0.5~1V	> 200Ω					
		TDV - 4P2				1~3~5V	> 1kΩ					
		TDV - 4P3				-1~0~+1V	> 200Ω					

■ Operating Area of Input

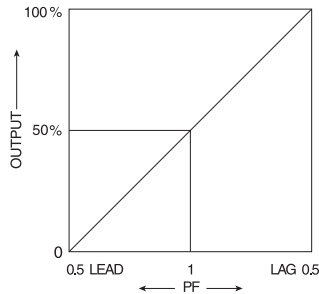
	Voltage		Current		Frequency		Auxiliary Power (AC)	
Rating	110V	220V	1A	5A	50Hz	60Hz	110V	220V
Range	80~120V	160~240V	0.1~1.5A	0.5~7.5A	47~53Hz	57~63Hz	90~130V	180~260V

※ 전압, 전류 및 제어전원의 동작범위는 연속 정격이 아니므로 단시간 동안의 입력값 대비 출력값의 동작 범위입니다.

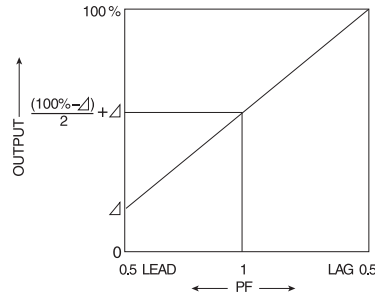
Operation range of voltage, current and auxiliary power is not continuous rating. Therefore it is operation range of output value compared to input value during a short time.

■ Input-Output Curve

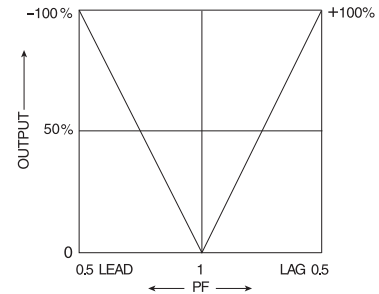
- Output Range : 0~0.5~1mA
0~0.5~1V



- Output Range : 4~12~20mA
1~3~5V

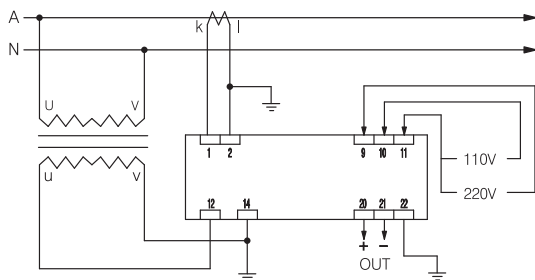


- Output Range : -1~0~1mA
-1~0~1V

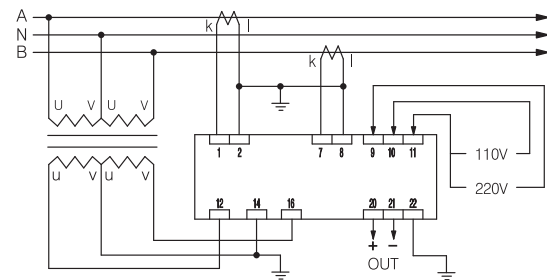


■ 외부 결선 (External Connection)

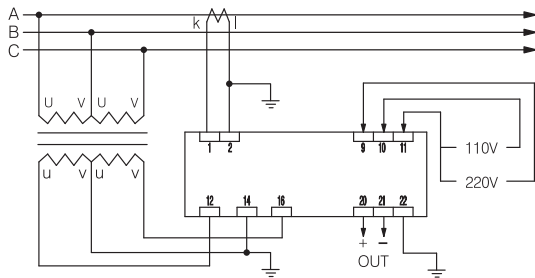
- 1P 2W



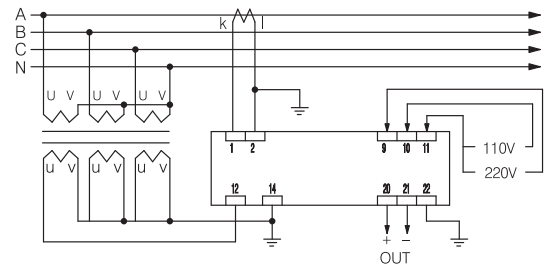
- 1P 3W



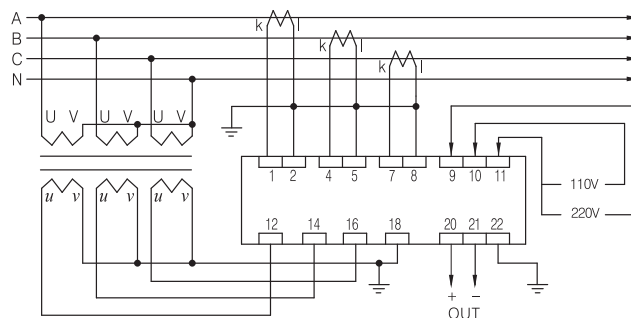
- 3P 3W



- 3P 4W (평형 PF Transducer)



- 3P 4W (불평형 PF Transducer)



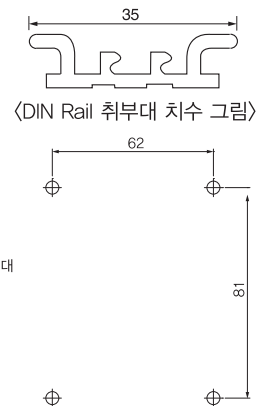
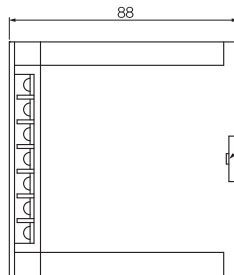
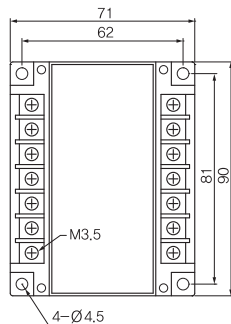
■ 주요성능 (Performance)

- Standard Test Temperature : $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$
- Operating Temperature Range : $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$
- Storage Temperature Range : $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- Operating Humidity : 30~85%, non-condensing
- Color of case : Black (Munsell No N1.5)
- Material of Case : ABS Resin / DIN rail type
- Terminal Screws : M3.5
- Auxiliary Power : AC 110 / 220 V
- Zero Adjustment : $\pm 10\%$ minimum
- Span Adjustment : $\pm 10\%$ minimum
- Influences Affecting Accuracy
 - Temperature : Less than 0.2% from 0 to 50°C
 - Long-term Stability : Less than 0.2% / year non-cumulative
 - Frequency : Less than 0.1% 50Hz or 60Hz
 - External magnetic field : Less than 0.2% 400 A / m
- Overload Current : 1.2 I_n continuous
10 I_n 3 sec.
- Voltage : 1.2 V_n continuous
1.5 V_n 10sec.
- Dielectric Strength : Input terminal to Case AC 2000V 1 minute
Input to Output terminal AC 2000V 1 minute
- Impulse / Surge : $1.2 \times 50\mu\text{s}$, 5kV / 2.5kV 1MHz

■ 외형 치수 (Dimension)

Unit : mm

■ TS Type



〈DIN Rail 취부대 치수 그림〉

■ TL Type

