

전력 변환기 (Watt Transducer)

■ 주요사항 (Specification)

- Accuracy Class : 0.2% of span
- Ripple : 0.5% P-P of span
- Response Time : 0.4sec (0~99% for step change)

Output Mode	Circuit	Type	Rated Input(AC)		Output(DC)		Freq.	Burden	Auxiliary Power (AC)	Weight (g)	Case Model	
			Voltage	Current	Range	Load Com.						
DC Current	1P 2W	TA - 1W1	110V or 220V	5A or 1A	0~1mA	< 10kΩ	50/60Hz	Current : 1.0VA / phase	110 / 220V	≐ 700	TL	
		TA - 1W2			4~20mA	< 500Ω						
		TA - 1W3			-1~0~+1mA	< 10kΩ						
	1P 3W	TA - 2W1			0~1mA	< 10kΩ				≐ 850		
		TA - 2W2			4~20mA	< 500Ω						
		TA - 2W3			-1~0~+1mA	< 10kΩ						
	3P 3W	TA - 3W1			190/√3V	0~1mA				< 10kΩ		≐ 1030
		TA - 3W2				4~20mA				< 500Ω		
		TA - 3W3				-1~0~+1mA				< 10kΩ		
	3P 4W	TA - 4W1	0~1mA			< 10kΩ				≐ 1030		
		TA - 4W2	4~20mA			< 500Ω						
		TA - 4W3	-1~0~+1mA			< 10kΩ						
DC Voltage	1P 2W	TV - 1W1	110V or 220V	0~1V	> 200Ω	50/60Hz	Voltage : 0.5VA / phase	110 / 220V	≐ 700	TL		
		TV - 1W2		1~5V	> 1kΩ							
		TV - 1W3		-1~0~+1V	> 200Ω							
	1P 3W	TV - 2W1		0~1V	> 200Ω				≐ 850			
		TV - 2W2		1~5V	> 1kΩ							
		TV - 2W3		-1~0~+1V	> 200Ω							
	3P 3W	TV - 3W1		190/√3V	0~1V				> 200Ω		≐ 1030	
		TV - 3W2			1~5V				> 1kΩ			
		TV - 3W3			-1~0~+1V				> 200Ω			
	3P 4W	TV - 4W1	0~1V		> 200Ω				≐ 1030			
		TV - 4W2	1~5V		> 1kΩ							
		TV - 4W3	-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)

■ Operating Area of Input

	Voltage		Current		Frequency		Auxiliary Power (AC)	
Rating	110V	220V	1A	5A	50Hz	60Hz	110V	220V
Range	0~120V	0~240V	0~1.5A	0~7.5A	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.

■ Calibration Watt

(Unit : kW)

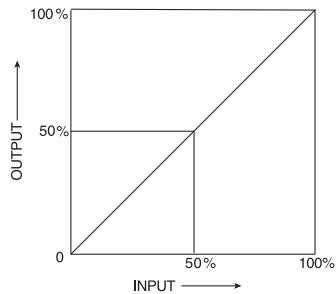
		1P2W	1P3W	3P3W								3P4W				
		110	110	220	380 110	440 110	3300 110	6600 110	22000 110	22900 110	154kV 110	208/ $\sqrt{3}$	380/ $\sqrt{3}$ 190/ $\sqrt{3}$	380/ $\sqrt{3}$	11400/ $\sqrt{3}$ 190/ $\sqrt{3}$	22900/ $\sqrt{3}$ 190/ $\sqrt{3}$
C.T 2'ry A	5A	0.6	1.0	2.0	1.158	1.0	1.0	1.0	1.0	0.961	1.0	2.0	2.0	4.0	1.666	1.666
	1A	0.12	0.2	0.4	0.232	0.2	0.2	0.2	0.2	0.192	0.2	0.4	0.4	0.8	0.333	0.333

※ 3상3선식의 표준교정 전력은 1.0kW이고, 3상4선식은 1.666kW 입니다.
The standard calibration Watt of 3P 3W is 1.0kW and that of 3P4W is 1.666kW.

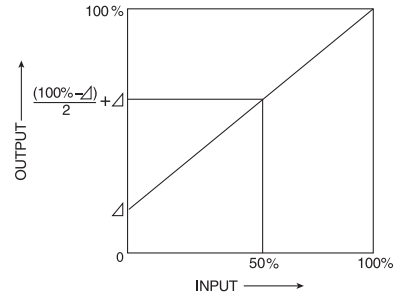
※ 변환기의 교정 전력은 전력계의 교정 전력과 같습니다.
The calibration Watts of transducer is same the calibration of Wattmeter.

■ Input – Output Curve

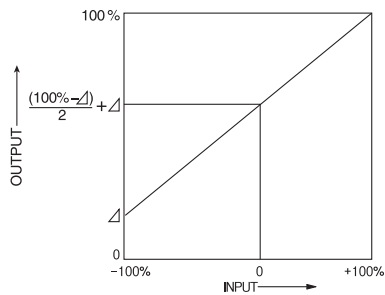
- Output Range : 0~1mA
0~1V



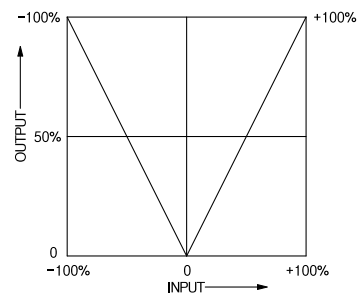
- Output Range : 4~20mA
1~5V



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

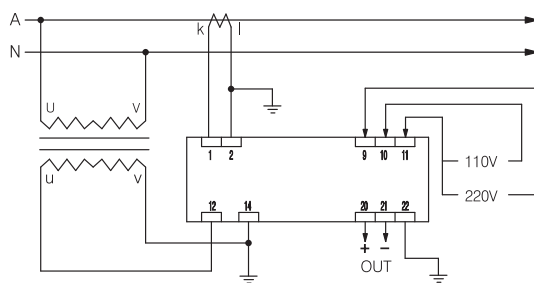


- Output Range : -1~0~+1mA
-1~0~+1V

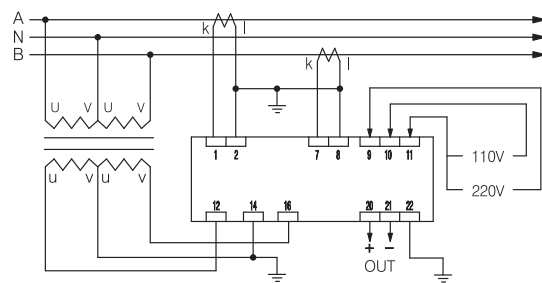


■ 외부 결선 (External Connection)

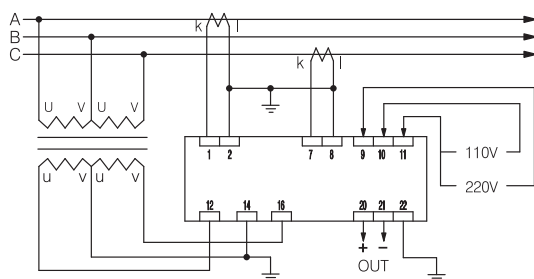
- 1P 2W



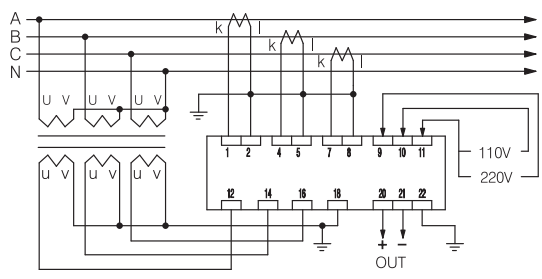
- 1P 3W



- 3P 3W



- 3P 4W



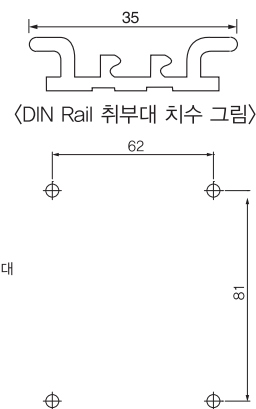
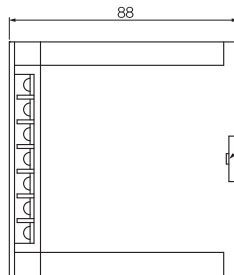
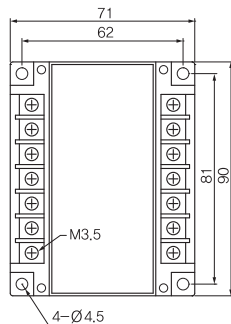
■ 주요성능 (Performance)

- 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



■ TL Type

