

전압 변환기 (Voltage Transducer)

AC Voltage 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
				Range	Load Com.					
DC Current	1P 2W	TA - 1V1	150 V or 300 V	0 ~ 1mA	< 10kΩ	50Hz / 60Hz	1.0 VA / phase	110 / 220V	≒ 480	TS
		TA - 1V2		4 ~ 20mA	< 500Ω					
	3P 3W	TA - 3V1		0 ~ 1mA	< 10kΩ				≒ 860	TL
		TA - 3V2		4 ~ 20mA	< 500Ω					
	3P 4W	TA - 4V1		0 ~ 1mA	< 10kΩ					
		TA - 4V2		4 ~ 20mA	< 500Ω					
DC Voltage	1P 2W	TV - 1V1		0 ~ 1V	> 200Ω				≒ 480	TS
		TV - 1V2		1 ~ 5V	> 1kΩ					
	3P 3W	TV - 3V1		0 ~ 1V	> 200Ω				≒ 860	TL
		TV - 3V2		1 ~ 5V	> 1kΩ					
	3P 4W	TV - 4V1		0 ~ 1V	> 200Ω					
		TV - 4V2		1 ~ 5V	> 1kΩ					

※ 주문사항에 따라 입력, 출력, 제어전원 및 주파수를 변경하여 제작이 가능합니다.
Order made is available except for standard products. (Input, Output, Auxiliary power, Frequency)

AC Voltage Transducer (True R.M.S)

■ 주요사항 (Specification)

- Accuracy Class : 0.2% of span
- Ripple : 0.5% P-P of span
- Response Time : 0.4sec (0~99% for step change)
- Crest Factor : Waveforms with peak/rms ratio of 1:1 to 3:1

Output Mode	Circuit	Type	Rated Input(AC)	Output(DC)		Freq.	Burden	Auxiliary Power (AC)	Weight (g)	Case Model
				Range	Load Com.					
DC Current	1P 2W	TA-1V1T	150 V or 300 V	0 ~ 1mA	< 10kΩ	50Hz / 60Hz	1.0 VA	110 / 220V	≒ 480	TS
		TA-1V2T		4 ~ 20mA	< 500Ω					
DC Voltage	1P 2W	TV-1V1T		0 ~ 1V	> 200Ω					
		TV-1V2T		1 ~ 5V	> 1kΩ					

※ 주문사항에 따라 입력, 출력, 제어전원 및 주파수를 변경하여 제작이 가능합니다.
Order made is available except for standard products. (Input, Output, Auxiliary power, Frequency)

※ 전압값은 True RMS(실효치)로 표시됩니다. 그러므로 DC 출력은 사이리스터 사용에 따른 왜곡된 파형이나 다른 노이즈가 포함되더라도 파형의 실효치 값을 정확히 나타냅니다.
Voltage value is indicated true root-mean-square. Thus, DC output accurately represents the RMS value of the waveform, even though the circuit may contain distortion-producing SCRs or other noise sources.

■ Operating Area of Input

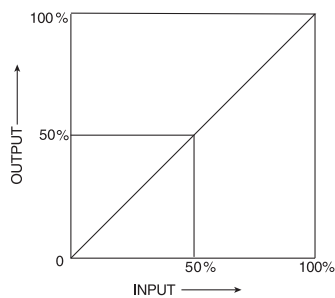
	Voltage		Frequency		Auxiliary Power (AC)	
Rating	150 V	300 V	50Hz	60Hz	110V	220V
Range	0~180V	0~360V	47~53Hz	57~63Hz	90~130V	180~260V

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

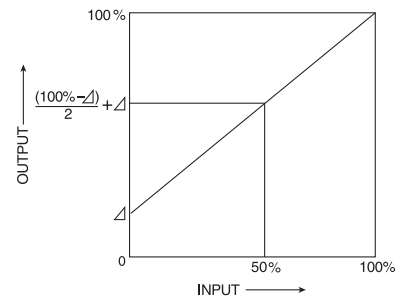
Operation range of voltage and auxiliary power is not continuous rating. Therefore it is operation range of output value compared to input value during a short time.

■ Input – Output Curve

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

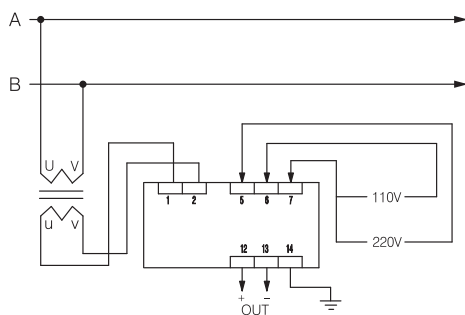


- Output Range : 4~20mA
1~5V

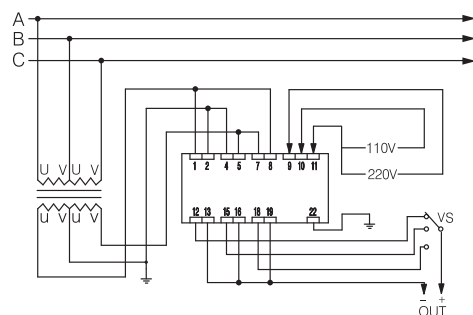


■ 외부 결선 (External Connection)

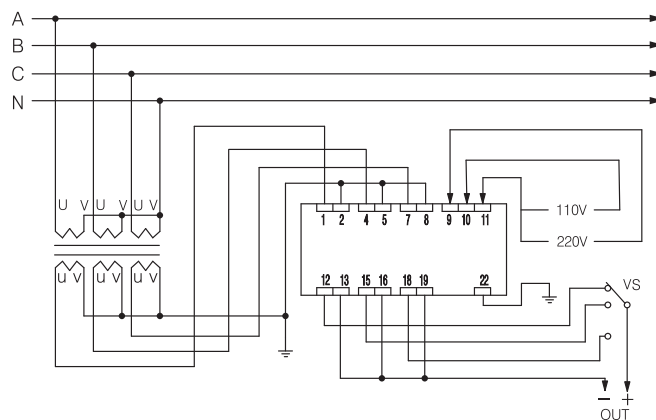
- 1P 2W



- 3P 3W



- 3P 4W



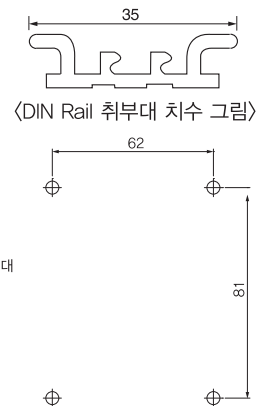
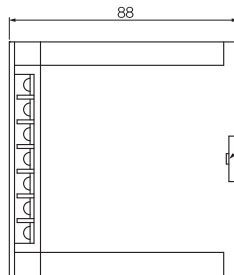
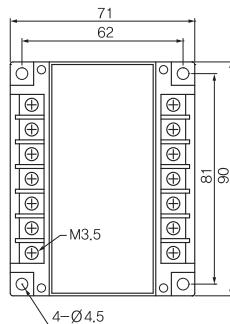
■ 주요성능 (Performance)

- 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



〈DIN Rail 취부대 치수 그림〉

■ TL Type

