무효전력 변환기 (Var Transducer)

■ 주요사양 (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 – 1R1	110V or 220V	5A or 1A	0~1mA	< 10kΩ	50Hz or 60Hz	Current : 1.0VA / phase	110 / 220V	≒700	TL
		TA – 1R2			4~20mA	< 500Ω					
		TA – 1R3			−1~0~+1mA	< 10kΩ					
	1P 3W	TA – 2R1			0~1mA	< 10kΩ				≒850	
		TA – 2R2			4~20mA	< 500Ω					
		TA – 2R3			−1~0~+1mA	< 10kΩ					
	3P 3W	TA – 3R1			0~1mA	< 10kΩ					
		TA – 3R2			4~20mA	< 500Ω					
		TA – 3R3			−1~0~+1mA	< 10kΩ					
	3P 4W	TA – 4R1	190/√3V		0~1mA	< 10kΩ				≒1030	
		TA – 4R2			4~20mA	< 500Ω					
		TA – 4R3			−1~0~+1mA	< 10kΩ					
DC Voltage	1P 2W	TV – 1R1	110V or 220V		0~1V	> 200Ω		Voltage : 0.5VA / phase		≒700	
		TV – 1R2			1~5V	> 1kΩ					
		TV – 1R3			−1~0~+1V	> 200Ω					
	1P 3W	TV – 2R1			0~1V	> 200Ω				≒850	
		TV – 2R2			1~5V	> 1kΩ					
		TV – 2R3			−1~0~+1V	> 200Ω					
	3P 3W	TV – 3R1			0~1V	> 200Ω					
		TV – 3R2			1~5V	> 1kΩ					
		TV – 3R3			−1~0~+1V	> 200Ω					
	3P 4W	TV – 4R1	190/√3V		0~1V	> 200Ω				≒1030	
		TV – 4R2			1~5V	> 1kΩ					
		TV – 4R3			−1~0~+1V	> 200Ω					

※ 주문사양에 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 var

(Unit : kvar)

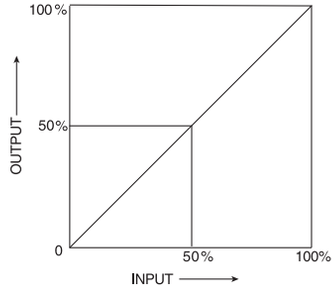
		1P2W	1P3W	3P3W								3P4W				
		110	110	220	380/110	440/110	3300/110	6600/110	22000/110	22900/110	154kV/110	208/√3	380/√3 / 190/√3	380/√3	11400/√3 / 190/√3	22900/√3 / 190/√3
C.T 2'ry A	5A	0.6	1.0	2.0	1.158	1.0	1.0	1.0	1.0	0.961	1.0	2.0	2.0	4.0	1.666	1.666
	1A	0.12	0.2	0.4	0.232	0.2	0.2	0.2	0.2	0.192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

※ 3상3선식의 표준교정 무효전력은 1.0kvar 이고, 3상4선식은 1.666kvar 입니다.
The standard calibration var of 3P3W is 1.0kvar and that of 3P4W is 1.666kvar.

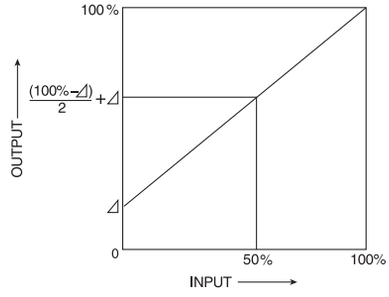
※ 변환기의 교정 무효전력은 무효전력계의 교정 무효전력과 같습니다.
The calibration vars of transducer is same the calibration of varmeter.

■ Input – Output Curve

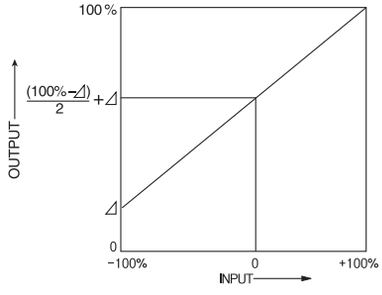
• Output Range : 0~1mA
0~1V



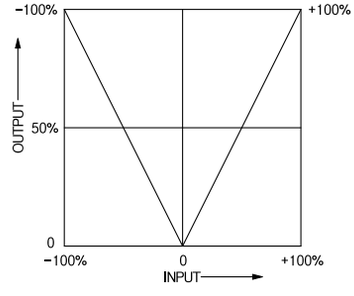
• Output Range : 4~20mA
1~5V



• Output Range : 4~12~20mA
1~3~5V

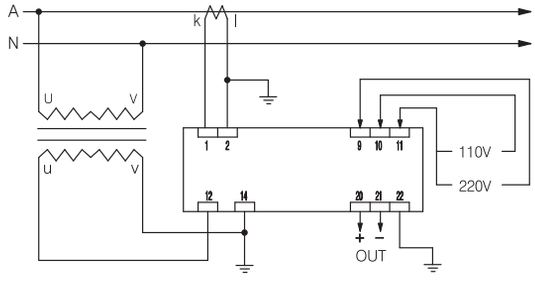


• Output Range : -1~0~+1mA
-1~0~+1V

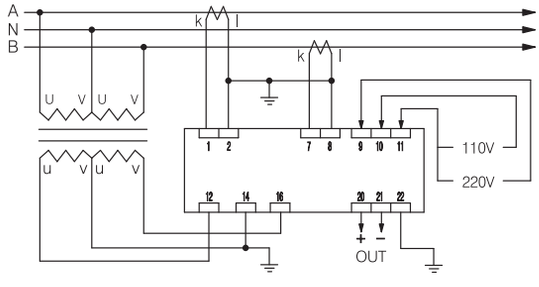


■ 외부 결선 (External Connection)

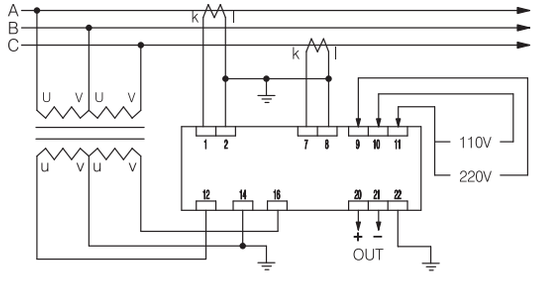
• 1P 2W



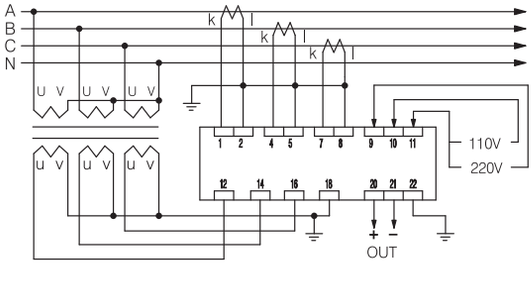
• 1P 3W



• 3P 3W



• 3P 4W

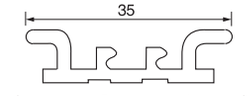


■ 주요성능 (Performance)

• Standard Test Temperature	:	23℃ ± 2℃
• Operating Temperature Range	:	0℃ ~ 40℃
• Storage Temperature Range	:	-10℃ ~ 60℃
• 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	:	±10% minimum
• Span Adjustment	:	±10% minimum
• Influences Affecting Accuracy		
- Temperature	:	Less than 0.2% from 0 to 50℃
- 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 In continuous 10 In 3 sec.
Voltage	:	1.2 Vn continuous 1.5 Vn 10sec.
• Dielectric Strength	:	Input terminal to Case AC 2000V 1 minute Input to Output terminal AC 2000V 1 minute
• Impulse / Surge	:	1.2×50㎲, 5kV / 2.5kV 1MHz

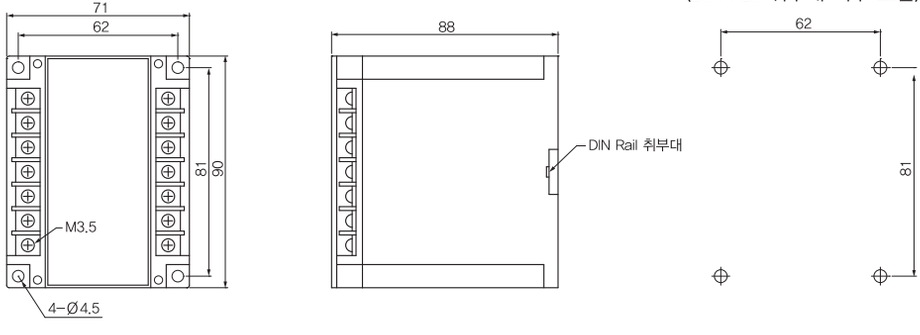
■ 외형 치수 (Dimension)

Unit : mm



〈DIN Rail 취부대 치수 그림〉

▣ TS Type



▣ TL Type