

1&2 ISOLATED OUTPUTS CONVERTER

DE - SERIES

■ FEATURE

- 1&2 Isolated output
- Actualization of high accuracy
- Free voltage power (AC85~264V) / DC24V
- Improvement on reliability by hybrid package
- CE Apporved



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General Specifications

1&2 OUTPUT SIGNAL ISOLATOR & POWER DISTRIBUTOR 1&2出力 信號絶縁 變換器 & 傳送器用 電源



This instrument is a high accurate converter that provides simultaneously all transmitters such as pressure transmitter, flow transmitter, and level transmitter with power supply and signal conversion. Also, it contains overcurrent and overvoltage protection circuit inside. It is totally isolated between input signal from transmitter and output signal of a converter so it does not need extra isolator when the loop is constructed.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
OUTPUT RATING SUPPLY TO X' TR	DC 24V 30mA Max, Ripple : less than 0.1Vp-p
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.1% Max.
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC 85 ~ 264V, 50 ~ 60Hz
	ISOLATOR : 5VA
	POWER DISTRIBUTOR : 6VA DC 24V 85mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

ORDERING CODE

MODEL : DEIP -

• INPUT SIGNAL

4~20mA DC (2-Wire DC24V)

• OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |

• OUTPUT2 SIGNAL

N. None
Same Range Available as OUTPUT 1

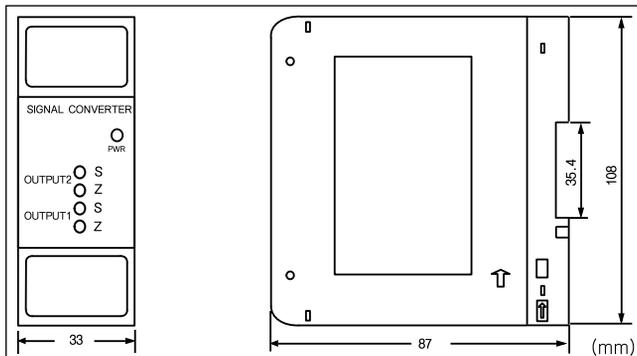
• POWER SUPPLY

1. AC 85V~264V 2. DC 24V

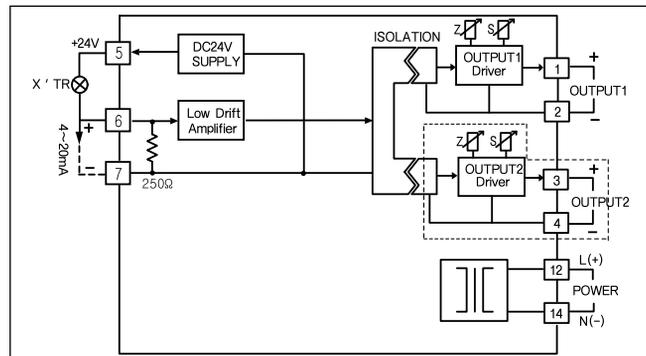
■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT R, T, D CONVERTER

1&2出力 測溫抵抗體 變換器



This instrument is a high and accurate converter that receives RTD as an input signal then converts resistance variations into DC voltage and DC current output signal following the temperature. Also the feed back circuit developed by our company actualized high accurate linearization and compensation of line resistance. Power adopts free voltage. In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

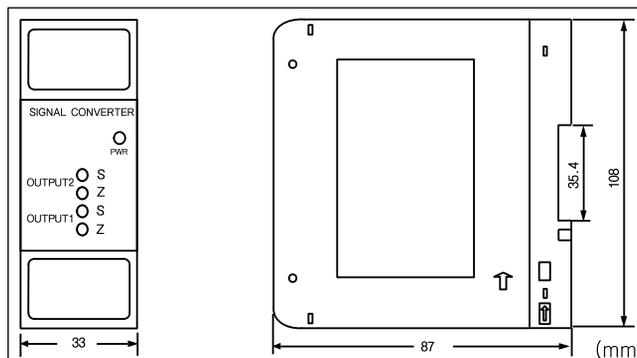
ITEMS	DESCRIPTIONS
INPUT	Pt 100Ω 3-Wire (Over 50deg) Adjustment needed for 2wire Bulb Permissible resistance of cable less than 10Ω
UPPLY CURRENT TO Pt BULB	DC 2mA
BURN - OUT	Upper Limit
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.2% Max,
TEMP. COEFFICIENT	±0.025% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 6VA
	DC Driven DC 24V 70mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

STANDARD INPUT RANGE

(UNIT : °C)

INPUT	RANGE
Pt 100Ω	0~50, 0~100, 0~150, 0~200, 0~250, 0~300, 0~400 0~500, -20 ~ +80, -50 ~ +50, -50 ~ +150, 50~100 50~150, 100~200, 100~300, 200~400

DIMENSION



ORDERING CODE

MODEL : DERB - [] [] [] - [] / []

INPUT SIGNAL

1. JPt 100Ω (JIS) 3-Wire
2. Pt 100Ω (DIN) 3-Wire
3. Others

OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |

OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

POWER SUPPLY

1. AC 85V~264V
2. DC 24V

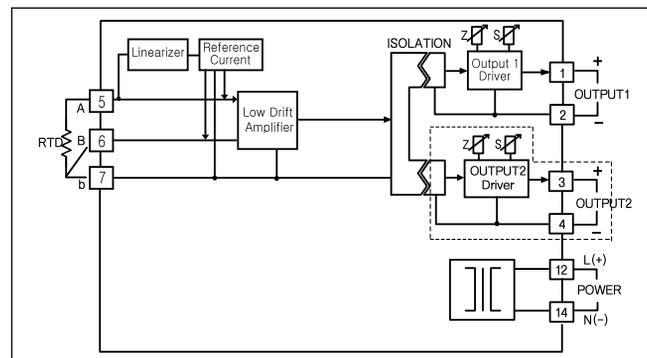
BURN OUT

- U. Up scale

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT THERMOCOUPLE CONVERTER

1&2出力 熱電對 變換器



This instrument is a high accurate converter that receives various T/C as an input signal and converts the T/C temperature into DC voltage and current through the temperature compensation and linear circuit that correspond the various T/C. Input, output and power have isolation circuit that is separated from each other. Power adopts Free voltage.

In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

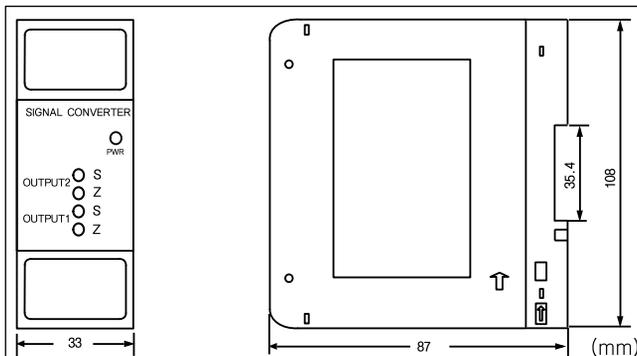
ITEMS	DESCRIPTIONS
INPUT	Thermocouple (K, J, T, E, B, R, S)
BURN - OUT	Upper Limit
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.3% Max.
TEMP. COEFFICIENT	±0.02% / °C
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 6VA
	DC Driven DC 24V 70mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

STANDARD INPUT RANGE

(UNIT : °C)

INPUT	RANGE
K	-50~+100, 0~300, 0~400, 0~500, 0~600 0~800, 0~1000, 0~1200
J	0~200, 0~300, 0~400, 0~800
T	-20~80, 0~100, 0~200
R	600~1600

DIMENSION



ORDERING CODE

MODEL : DETC - [] [] [] - [] / []

INPUT SIGNAL

- | | |
|-----------|-----------------------|
| 1. K(CA) | 5. B |
| 2. J(IC) | 6. S |
| 3. T(CC) | 7. R |
| 4. E(CRC) | 8. Other Thermocouple |

OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |

OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

POWER SUPPLY

1. AC 85V~264V 2. DC 24V

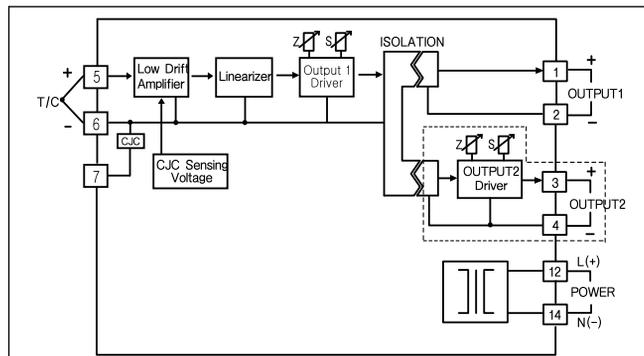
BURN OUT

- U. Up scale

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT POTENTIOMETER CONVERTER

1&2出力 可變抵抗 變換器



This instrument is a high and accurate converter that receives resistance signals of 3 wires potentiometer (100Ω ~ 100kΩ) and converts them into DC voltage and current. Especially, it is widely used for float type water level detector. And mutual interference by zero adjustment is hardly occurred.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	Potentiometer (from 100Ω ~ 100KΩ)
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA DC Driven DC 24V 60mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

ORDERING CODE

MODEL : DEPC -

• INPUT SIGNAL

POTENTIOMETER (Total resistance 100Ω ~ 100KΩ)

• OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |
- (Less than 20mA)

• OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

• POWER SUPPLY

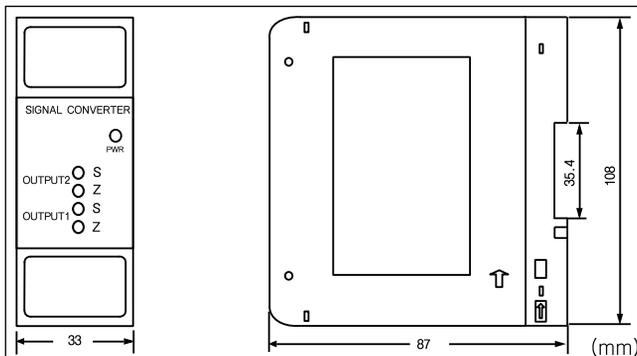
1. AC 85V~264V 2. DC 24V

* Please Specify the Input Range When you Order.

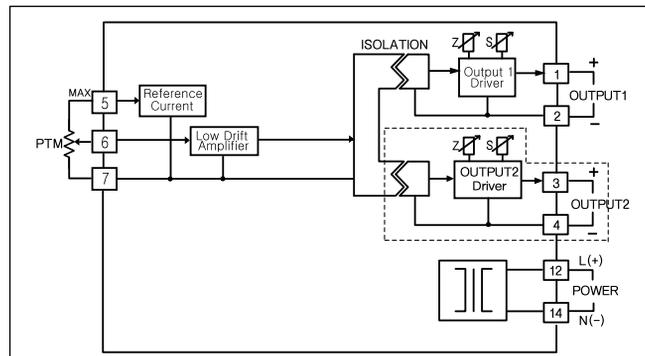
■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT SIGNAL ISOLATOR

1&2出力 信號絕緣 變換器



This instrument receives DC voltage and current as an input signal and provides conversion output when the input & output is separated completely. Especially, an input, an output, and power are isolated using a transformer and it is called 3ways isolator.

This instrument is a high accurate converter which is the most suitable to prevent impulse noise and high peak voltage from the interval between field instrument and computer interface. Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

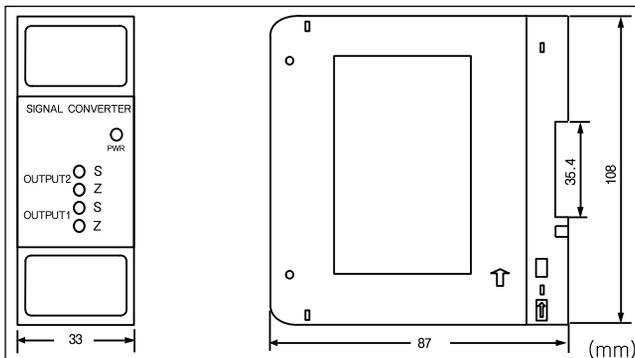
SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT	DC Current or DC Voltage signal	
OUTPUT	DC Current or DC Voltage signal	
ACCURACY	±0.2% Max.	
TEMP. COEFFICIENT	±0.015% / °C	
RESPONSE TIME	Less than 0.15Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power AC 1,500V	1 Minute
	Input - Output1 - Output2 AC 1,500V	
	Input1 - Output2 AC 500V	
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA	
	DC Driven DC 24V 60mA	
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)	
HUMIDITY	Less than 90% RH (no condensation)	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 180g	
DIMENSION	W33 X H108 X D87mm	
MOUNTING	DIN RAIL	

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DESI - [] [] [] - [] []

INPUT SIGNAL

- | | |
|------------------|-----------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Input voltage range) |

OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |

OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

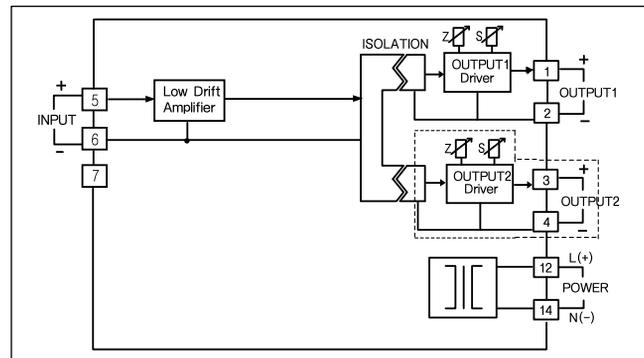
POWER SUPPLY

1. AC 85V~264V 2. DC 24V

INPUT VOLTAGE RANGE

1. 0 ~ 300V DC

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT REVERSE CONVERTER

1&2出力 逆信號 變換器



This instrument receives DC voltage and current as an input signal then reverse output signals of all instrument if the reverse is needed. Especially, an in, an output, and power are isolated by a transformer and it is called "3 ways isolator". Power adopts free voltage. In the mounting method is DIN RAIL mounting.

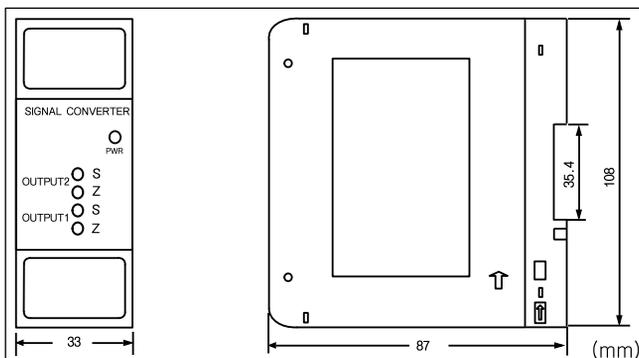
SPECIFICATIONS

ITEMS	DESCRIPTIONS		
INPUT	DC Current or DC Voltage signal		
OUTPUT	DC Current or DC Voltage signal		
ACCURACY	±0.2% Max.		
TEMP. COEFFICIENT	±0.015% / °C		
RESPONSE TIME	Less than 0.15Sec (0~90%)		
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V		
DIELECTRIC - STRENGTH	Input - Power	AC 1,500V	1 Minute
	Input - Output1 - Output2	AC 1,500V	
	Input1 - Output2	AC 500V	
POWER SUPPLY	AC Driven	AC 85~264V, 50~60Hz, 5VA	
	DC Driven	DC 24V 60mA	
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)		
HUMIDITY	Less than 90% RH (no condensation)		
CASE MATERIAL	ABS		
COLOR	Black		
WEIGHT	About 180g		
DIMENSION	W33 X H108 X D87mm		
MOUNTING	DIN RAIL		

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DERC - [] [] [] - []

INPUT SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | |

OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 1~0mA DC | A. 10~0mV DC |
| 2. 10~0mA DC | B. 100~0mV DC |
| 3. 16~0mA DC | C. 1~0V DC |
| 4. 20~0mA DC | D. 5~0V DC |
| 5. 5~1mA DC | E. 10~0V DC |
| 6. 10~2mA DC | F. 5~1V DC |
| 7. 20~4mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |
| (Less than 20mA) | |

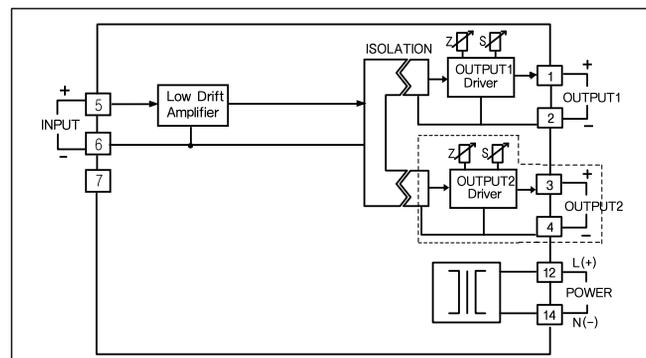
OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

POWER SUPPLY

1. AC 85V~264V 2. DC 24V

BLOCK DIAGRAM

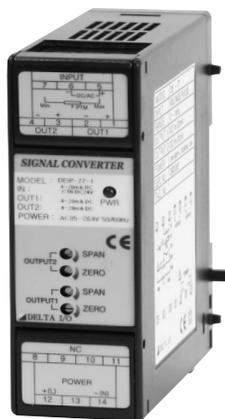


Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT STRAIN GAUGE CONVERTER

1&2出力 Strain gauge 變換器



This instrument converts Load cell or strain gauge as an input signal into DC voltage and current, it actualizes a high and accurate performance that residual magnetic voltage selects constant voltage and amplifier circuit select low noise type. Power adopts free voltage. In the mounting method is DIN RAIL mounting.

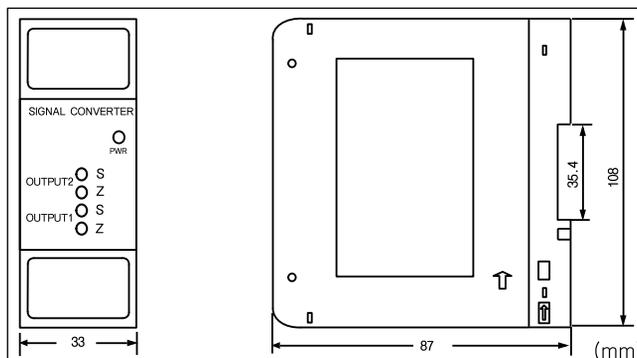
SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	Bridge Resistance 350Ω or more rated output Voltage 2mV/V and other
OUTPUT	DC Current or DC Voltage signal
ACCURACY	± 0.2% Max.
TEMP. COEFFICIENT	± 0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 6VA DC Driven DC 24V 80mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION

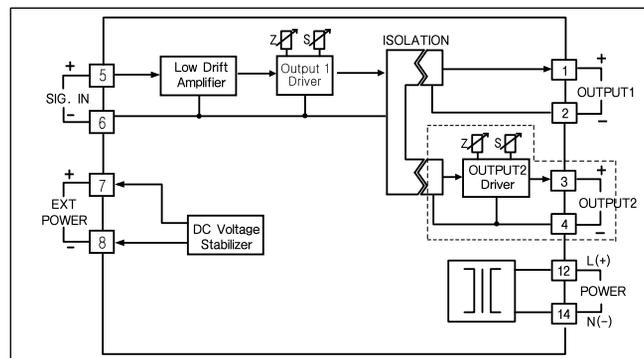


ORDERING CODE

MODEL : DELS - [] [] [] - []

- **EXT. VOLTAGE**
Excitation : DC 10V (Order - Voltage)
- **LOAD CELL**
 - 1. 1mV/V
 - 2. 2mV/V
 - 3. 3mV/V
 - 4. 4mV/V
 - 5. 5mV/V
 - 6. Other
- **OUTPUT1 SIGNAL**
 - 1. 0~1mA DC
 - 2. 0~10mA DC
 - 3. 0~16mA DC
 - 4. 0~20mA DC
 - 5. 1~5mA DC
 - 6. 2~10mA DC
 - 7. 4~20mA DC
 - 0. Other Current (Less than 20mA)
 - A. 0~10mV DC
 - B. 0~100mV DC
 - C. 0~1V DC
 - D. 0~5V DC
 - E. 0~10V DC
 - F. 1~5V DC
 - Z. Other Voltage (Less than 12V)
- **OUTPUT2 SIGNAL**
N. None
Same Range Available as OUTPUT 1
- **POWER SUPPLY**
 - 1. AC 85V~264V
 - 2. DC 24V

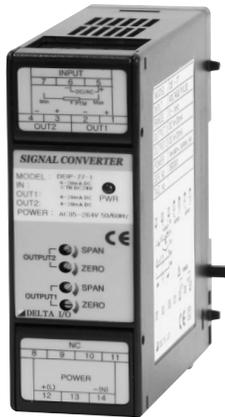
BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT HIGH / LOW SELECTOR 1&2出力 信號 選擇器



This instrument has two different input signals in all process amounts. (temperature, flow, pressure, level, components, etc) Then the instrument compares two signals to select the highest or lowest value to output. It is used for a variable control of process control and alternative amounts control. Power adopts free voltage. In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Voltage(1~5V) or DC Current(4~20mA)Signal
OUTPUT	DC Voltage(1~5V) or DC Current(4~20mA)Signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA
	DC Driven DC 24V 60mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

ORDERING CODE

MODEL : DEHL - [] [] [] [] - []

• SELECTING FUNCTION

1. Low Signal
2. High Signal

• INPUT SIGNAL

7. 4~20mA DC
0. Other Current (Less than 20mA)
- F. 1~5V DC
- Z. Other Voltage (Less than 12V)

• OUTPUT1 SIGNAL

7. 4~20mA DC
0. Other Current (Less than 20mA)
- F. 1~5V DC
- Z. Other Voltage (Less than 12V)

• OUTPUT2 SIGNAL

- N. None
- Same Range Available as OUTPUT 1

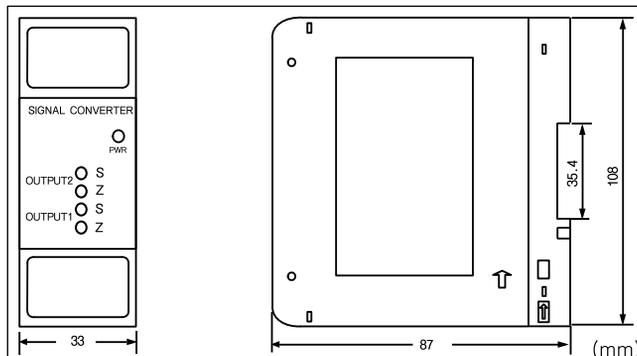
• POWER SUPPLY

1. AC 85V~264V
2. DC 24V

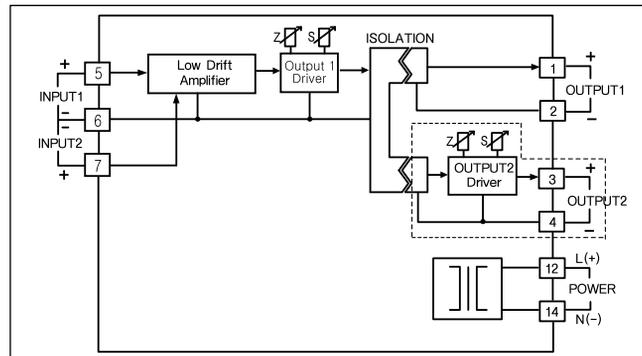
■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT SIGNAL LIMITER

1&2出力 信號 制限器



This converter is possible to limit output range to high / low limit 0~100% as being input of DC Voltage and current output signal.

It is used in limit control system in combination with output signal of main controller.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA
	DC Driven DC 24V 60mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

ORDERING CODE

MODEL : DESL - [] [] [] [] - []

• SELECTING FUNCTION

1. Low Signal
2. High Signal

• INPUT SIGNAL

- 7. 4~20mA DC F. 1~5V DC
- 0. Other Current Z. Other Voltage (Less than 20mA) (Less than 12V)

• OUTPUT1 SIGNAL

- 7. 4~20mA DC F. 1~5V DC
- 0. Other Current Z. Other Voltage (Less than 20mA) (Less than 12V)

• OUTPUT2 SIGNAL

- N. None
- Same Range Available as OUTPUT 1

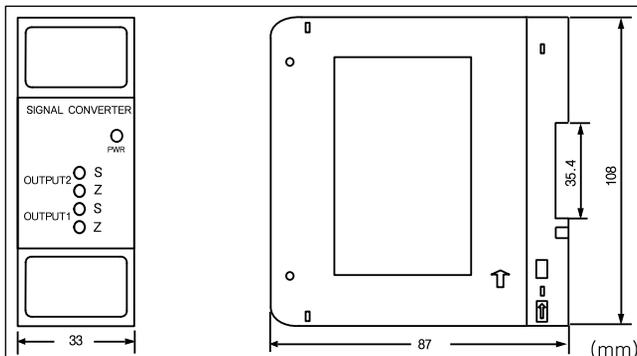
• POWER SUPPLY

- 1. AC 85V~264V
- 2. DC 24V

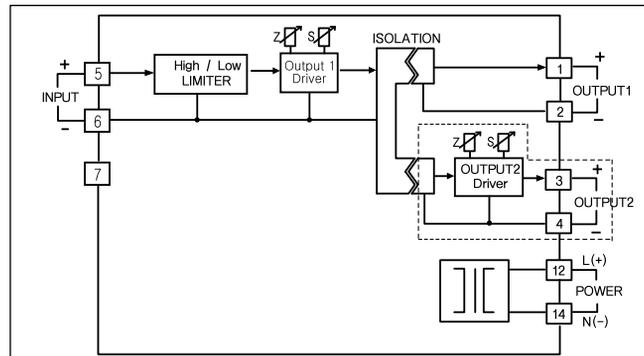
■ OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT ADDER & SUBTRACTOR 1&2出力 加減演算器



This converter is used for addition and subtraction process of temperature and flow, etc. This converter completes the best system combining computer console with each instrument such as controller, recorder, and integrator according to application positions.

Power adopts free Voltage.
In the mounting method is DIN RAIL mounting.

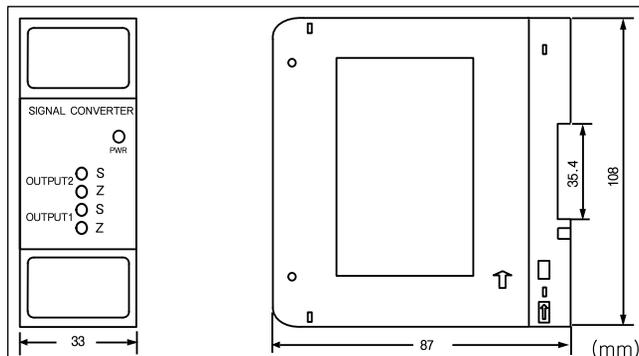
SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Voltage(1~5V) or DC Current(4~20mA)/Signal
OUTPUT	DC Voltage(1~5V) or DC Current(4~20mA)/Signal
ACCURACY	±0.2% Max.
TEMP. COEFFICIENT	±0.015% / °C
RESPONSE TIME	Less than 0.15Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
	1 Minute
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA
	DC Driven DC 24V 60mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DEAS - [] [] [] [] - []

SELECTING FUNCTION

- Adder
- Subtractor

INPUT SIGNAL

- 4~20mA DC
- Other Current (Less than 22mA)
- 1~5V DC
- Other Voltage (Less than 12V)

OUTPUT1 SIGNAL

- 0~1mA DC
- 0~10mA DC
- 0~16mA DC
- 0~20mA DC
- 1~5mA DC
- 2~10mA DC
- 4~20mA DC
- Other Current (Less than 20mA)
- 0~10mV DC
- 0~100mV DC
- 0~1V DC
- 0~5V DC
- 0~10V DC
- 1~5V DC
- Other Voltage (Less than 12V)

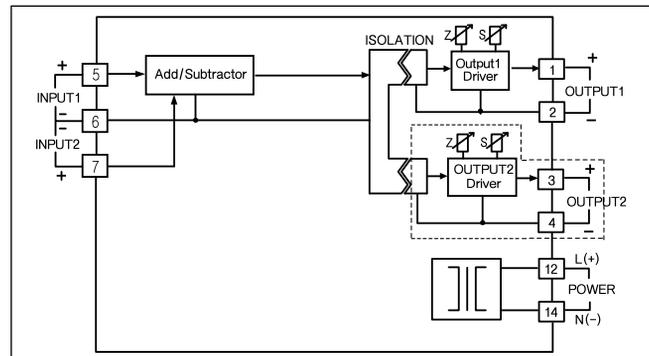
OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

POWER SUPPLY

- AC 85V~264V
- DC 24V

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT AC VOLTAGE TRANSDUCER

1&2出力 交流電壓 變換器



This instrument has alternating sinusoidal voltage as an input, and then calculates as average value and converts it into DC signal proportional to an effective value of input.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

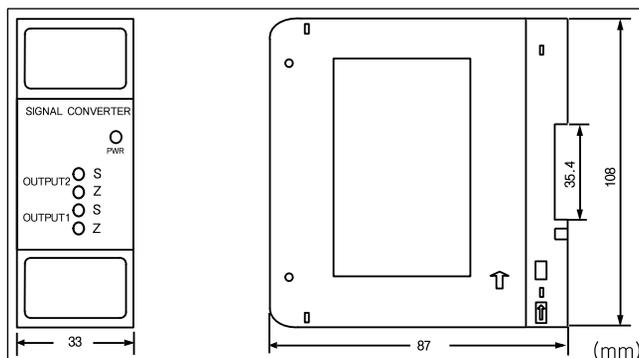
SPECIFICATIONS

ITEMS	DESCRIPTIONS	
INPUT LOSS	Less than 0,5VA	
OVER-INPUT	200% 1 minute	
OUTPUT	DC Current or DC Voltage signal	
ACCURACY	± 0,3% Max.	
TEMP. COEFFICIENT	± 0,02% / °C	
RESPONSE TIME	Less than 0,5Sec (0~90%)	
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V	
DIELECTRIC - STRENGTH	Input - Power AC 1,500V	1 Minute
	Input - Output1 - Output2 AC 1,500V	
	Input1 - Output2 AC 500V	
POWER SUPPLY	AC 85~264V, 50~60Hz, 5VA DC 24V 60mA	
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)	
HUMIDITY	Less than 90% RH (no condenstation)	
CASE MATERIAL	ABS	
COLOR	Black	
WEIGHT	About 180g	
DIMENSION	W33 X H108 X D87mm	
MOUNTING	DIN RAIL	

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2,5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DEPT -

INPUT SIGNAL

1. AC 0 ~ 110V
2. AC 0 ~ 150V
3. AC 0 ~ 300V
4. AC 0 ~ 600V
5. Other Voltage by specified

OUTPUT1 SIGNAL

1. 0~1mA DC
 2. 0~10mA DC
 3. 0~16mA DC
 4. 0~20mA DC
 5. 1~5mA DC
 6. 2~10mA DC
 7. 4~20mA DC
 0. Other Current (Less than 20mA)
- A. 0~10mV DC
 - B. 0~100mV DC
 - C. 0~1V DC
 - D. 0~5V DC
 - E. 0~10V DC
 - F. 1~5V DC
 - Z. Other Voltage (Less than 12V)

OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

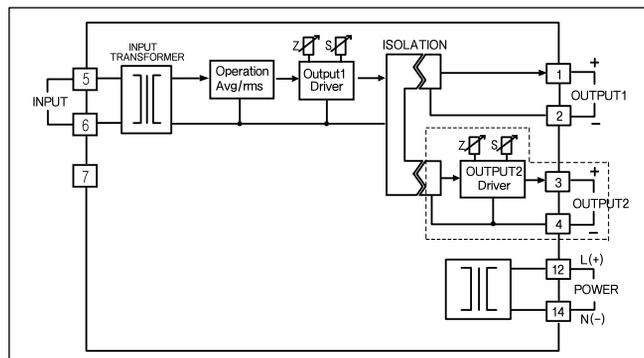
POWER SUPPLY

1. AC 85V~264V
2. DC 24V

OPTION

- R. RMS Sening

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

1&2 OUTPUT AC CURRENT TRANSDUCER

1&2出力 交流電流 變換器



This instrument has alternating sinusoidal current as an input, and then calculates as average value and converts it into DC signal proportional to an effective value of input.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

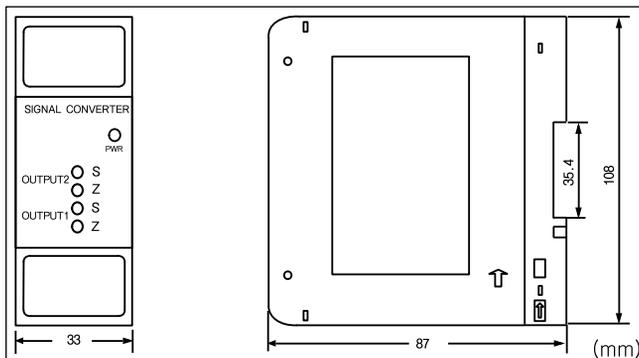
SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT LOSS	Less than 0.5VA
OVER-INPUT	200% 1 minute
OUTPUT	DC Current or DC Voltage Signal
ACCURACY	± 0.3% Max.
TEMP. COEFFICIENT	± 0.02% / °C
RESPONSE TIME	Less than 0.5Sec (0~90%)
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
	1 Minute
POWER SUPPLY	AC 85~264V, 50~60Hz, 5VA DC 24V 60mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DECT -

INPUT SIGNAL

1. AC 0 ~ 1A
2. AC 0 ~ 5A
3. Other

OUTPUT1 SIGNAL

1. 0~1mA DC A. 0~10mV DC
2. 0~10mA DC B. 0~100mV DC
3. 0~16mA DC C. 0~1V DC
4. 0~20mA DC D. 0~5V DC
5. 1~5mA DC E. 0~10V DC
6. 2~10mA DC F. 1~5V DC
7. 4~20mA DC Z. Other Voltage
0. Other Current (Less than 12V)

OUTPUT2 SIGNAL

- N. None
Same Range Available as OUTPUT 1

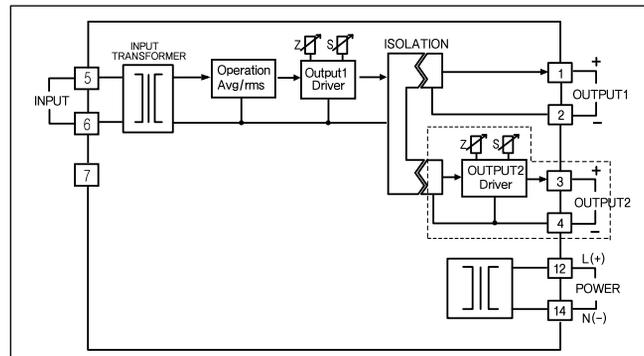
POWER SUPPLY

1. AC 85V~264V
2. DC 24V

OPTION

- R. RMS Sensing

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

ALALOG TO PULSE CONVERTER 直流/PULSE 變換器



This instrument has a DC voltage and current signal that generated from electromagnetic flow meter and area type flow meter, etc as an input.

Then it converts them into pulse signals.

Input and output power select separated each isolation circuit.

Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	DC Current or DC Voltage signal
OUTPUT	Open Collector (DC 24V 50mA Max) Voltage Pulse
ACCURACY	±0.3% Max.
TEMP. COEFFICIENT	±0.02% / °C
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output AC 1,500V 1 Minute
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 5VA
	DC Driven DC 24V 50mA
AMBIENT - TEMP	-5 ~ +55°C (20 ~ 130 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

ORDERING CODE

MODEL : DEAP -

INPUT SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | |

OUTPUT SIGNAL

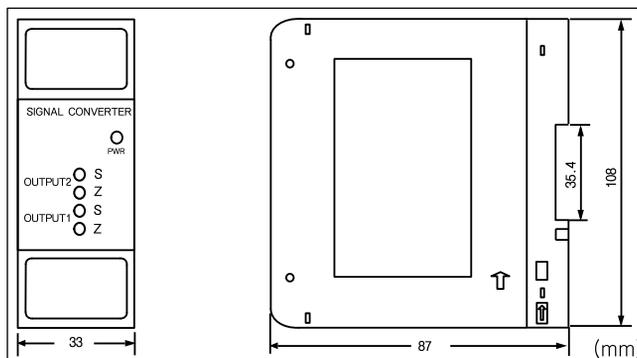
- Open Collector (Max Frequency 1KHz)
- Voltage Pulse (Max Frequency 1KHz)
- Other

POWER SUPPLY

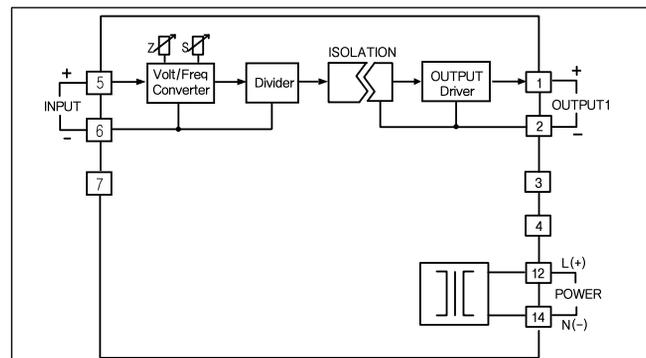
- AC 85V~264V
- DC 24V

* Please Specify the Input Range When you Order.

DIMENSION



BLOCK DIAGRAM



General Specifications

PULSE TO ANALOG CONVERTER PULSE/直流 變換器



This instrument has various pulse signals as input then converts it into DC current and voltage signals to output.

Also it is a converter that an input, an output and a power are isolated electrically. Power adopts free voltage.

In the mounting method is DIN RAIL mounting.

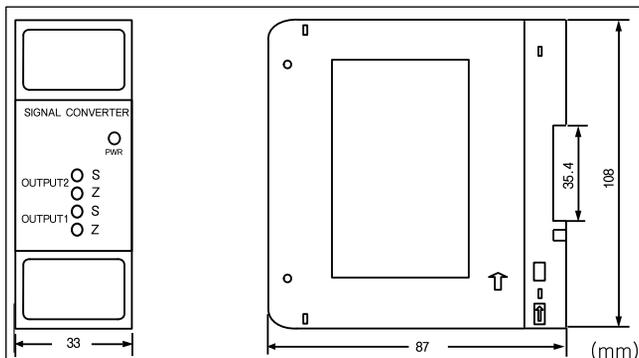
SPECIFICATIONS

ITEMS	DESCRIPTIONS
INPUT	Dry Contact, Open Collector, Voltage pulse Current Pulse
DETECTING CURRENT	30mA Max, DC12V
OUTPUT	DC Current or DC Voltage Signal
ACCURACY	±0.2% Max,
TEMP. COEFFICIENT	±0.02% / °C
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Input - Power AC 1,500V
	Input - Output1 - Output2 AC 1,500V
	Input1 - Output2 AC 500V
POWER SUPPLY	AC Driven AC 85~264V, 50~60Hz, 6VA
	DC Driven DC 24V 80mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 180g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 2.5KΩ
DC 0~10V	More than 5KΩ

DIMENSION



ORDERING CODE

MODEL : DEPA - [] [] [] - []

INPUT SIGNAL

1. Dry Contact (Max, 130pulse / 1min)
2. Open Collector (Max, Frequency 10KHz)
3. Voltage Pulse (Max, Frequency 10KHz)
4. Current Pulse (DC 4 ~ 20mA)
5. Others

OUTPUT1 SIGNAL

- | | |
|------------------|------------------|
| 1. 0~1mA DC | A. 0~10mV DC |
| 2. 0~10mA DC | B. 0~100mV DC |
| 3. 0~16mA DC | C. 0~1V DC |
| 4. 0~20mA DC | D. 0~5V DC |
| 5. 1~5mA DC | E. 0~10V DC |
| 6. 2~10mA DC | F. 1~5V DC |
| 7. 4~20mA DC | Z. Other Voltage |
| 0. Other Current | (Less than 12V) |

OUTPUT2 SIGNAL

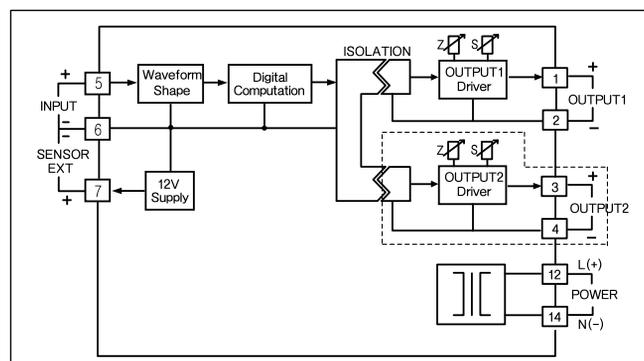
- N. None
Same Range Available as OUTPUT 1

POWER SUPPLY

1. AC 85V~264V
2. DC 24V

* Please Specify the Input Range When you Order.

BLOCK DIAGRAM



Remark : the section enclosed by broken line is only for 2nd output channel

General Specifications

3 OUTPUT HIGH SPEED SIGNAL ISOLATOR & POWER DISTRIBUTOR 3出力 高速 信號絶縁 變換器 & 傳送器用 電源



This instrument is a high accurate converter that provides simultaneously all transmitters such as pressure transmitter, flow transmitter, and level transmitter with power supply and signal conversion.

It is especially advantageous to construct loop because input and output are separated completely and isolated between three outputs.

This instrument is a high-speed response converter like computer interface.

In the mounting method is DIN RAIL mounting.

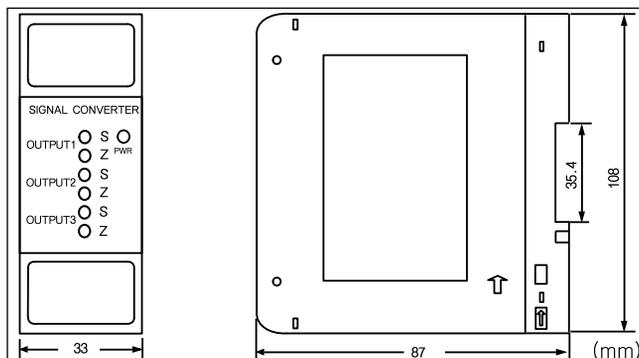
SPECIFICATIONS

ITEMS	DESCRIPTIONS
OUTPUT RATING SUPPLY TO X' TR	DC 24V 30mA Max, Ripple : less than 0.1Vp-p
OUTPUT	DC Current or DC Voltage signal
ACCURACY	±0.1% Max.
TEMP. COEFFICIENT	±0.02% / °C
RESPONSE TIME	Less than 1msec (0~90%)
ISOLATION	Input - Output1 - Output2 - Output3 - Power
INSULATION RESISTANCE	Greater than 100MΩ at DC 500V
DIELECTRIC - STRENGTH	Power - Input, Output1, 2, 3 AC 1,500V
	Input-Output1, Output2, Output3 AC 1,000V 1 Minute
	Output1, Output2, Output3 AC 1,000V
POWER CONSUMPTION	Approx. DC 24V / 150mA
AMBIENT - TEMP	-5 ~ +55°C (23 ~ 131 °F)
HUMIDITY	Less than 90% RH (no condensation)
CASE MATERIAL	ABS
COLOR	Black
WEIGHT	About 200g
DIMENSION	W33 X H108 X D87mm
MOUNTING	DIN RAIL

OUTPUT LOAD RESISTANCE

OUTPUT SIGNAL	LOAD RESISTANCE
DC 4~20mA	Less than 500Ω
DC 1~5V	More than 5KΩ
DC 0~10V	More than 10KΩ

DIMENSION



ORDERING CODE

MODEL : DEHI - [] [] [] [] - []

- INPUT SIGNAL**
 - 7. 4~20mA DC
 - 2. 4~20mA DC (2-Wire DC24V)
 - F. 1~5V DC
 - G. Other
- OUTPUT1 SIGNAL**
 - 7. 4~20mA DC
 - D. 0~5V DC
 - F. 1~5V DC
 - 0. Other Current(Less than 20mA)
 - E. 0~10V DC
 - Z. Other Voltage (Less than 12V)
- OUTPUT2 SIGNAL**
 - 7. 4~20mA DC
 - D. 0~5V DC
 - F. 1~5V DC
 - 0. Other Current (Less than 20mA)
 - E. 0~10V DC
 - Z. Other Voltage (Less than 12V)
 - N. None
- OUTPUT3 SIGNAL**
 - D. 0~5V DC
 - F. 1~5V DC
 - E. 0~10V DC
 - Z. Other Voltage (Less than 12V)
 - N. None
- POWER SUPPLY**
 - 1. DC 24V

BLOCK DIAGRAM

