

## □ Function & Features

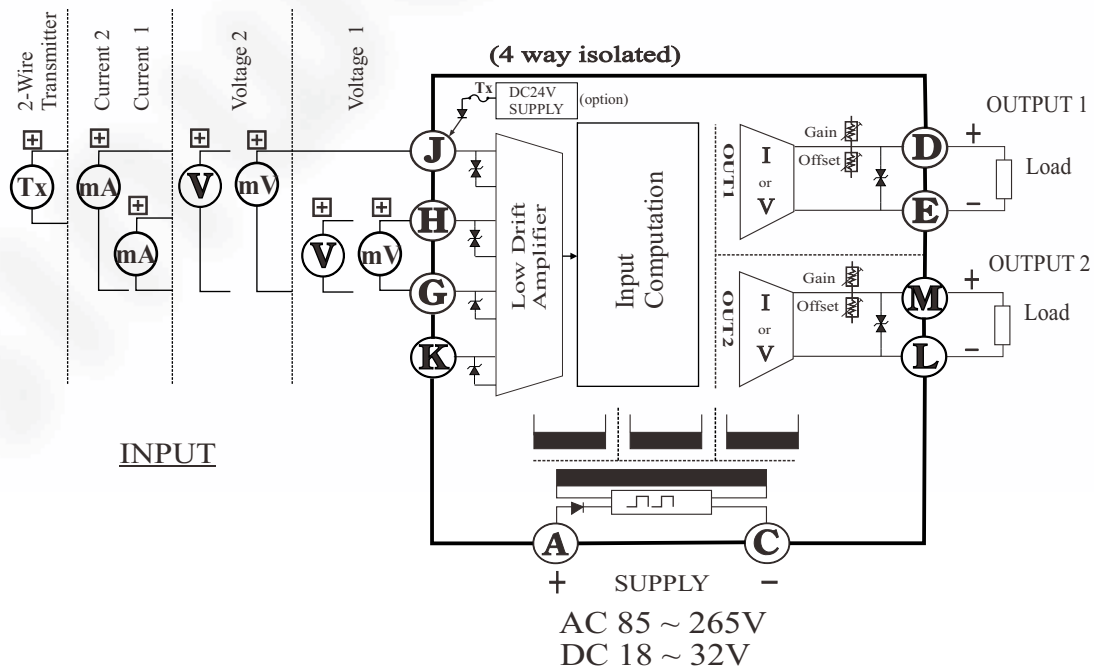
- One or Two analog inputs
- Converting a DC input into two isolated process signals
- Multiple functions
- Received two DC inputs and provides outputs proportional to the calculation functions of the inputs
- FUNCTIONS (addition, subtraction, multiplication, division, etc.)
- Four-way isolation (input/output1/output2/power)
- Protection Input and output TVS diode
- Analog One or Two outputs (independent output module)
- Universal power input
- Power fuse (240V/0.12A)



## □ GENERAL SPECIFICATIONS

- Housing Material : polyamide UL94.V0 Grey
- Rated wire size : 0.3~2.5mm<sup>2</sup> / 22~14 AWG
- Isolation : Input to Output to Power
- Easy Calibration of the Gain (Max. ±15% of F.S) and Offset(Max. ±15% of F.S)
- Power Supply : DC 18~32V or AC 85~265V
- Operating Temperature : -5~55 °C (storage : -20~70 °C)
- Operating Humidity : 90% RH max. (Non-condensing)
- Mounting : Rail Mounting
- Dimension : 22.5(W) X 75(H) X 107(D) (Unit : mm)
- Weight : about 140g

## SCHEMATIC CIRCUIT & CONNECTION DIAGRAM



## □ Input &amp; Output

## ■ INPUT (A &amp; B) :

## ● CURRENT

- Programmable range : -20 mA ~ +20 mA DC
- Measurement range : ±21 mA Max.
- Input resistance : 50Ω(0.5W)

## ● LOOP POWERED CURRENT

- Supply Voltage : 18 ~25 V DC(Terminal) / 4~20 mA

## ● VOLTAGE :

- Programmable Range : -10V ~ +10V DC
- Measurement range : ±11V DC
- Input resistance Normal : 1 MΩ

## ■ ANALOG OUTPUT :

- DC Current : 0(4)~20 mA DC max. ( Load resistance : 600Ω max. )
- DC Voltage : -10V min. ~ +10V DC max. ( Load Resistance : 10 KΩ or more )
- 2-Wire Transmitter(4~20 mA DC), supply out voltage (9 V ~ 35 V DC)

## ■ FUNCTIONS

- Analog Calculations
  - [000] Normal input (A)
  - [001] Square Root (A)
  - [002] Root Extraction (A)
  - [007] ADDER(A+B) : Addition of 2 analog inputs
  - [008] SUBTRACTOR(A-B) : Subtraction of 2 analog inputs
  - [009] MULTIPLIER(A\*B) : Multiplication of 2 analog inputs
  - [010] DIVIDER(A/B) : Division of 2 analog inputs
  - [101] Normal input (B)
  - [102] Square Root (B)
  - [103] Root Extraction (B)
  - [108] SUBTRACTOR(B-A) : Subtraction of 2 analog inputs
  - [109] DIVIDER(B/A) : Division of 2 analog inputs
- Two Converters
  - [201] There are two converters in the product (Only DC input (A and B))  
[ Input-A to Output-1, and Input-B to Output-2 ]

## MODEL & SUFFIX CODE

SL-NDSC-

### Input Type Selection (Available for Input A & Input B)

0 : None

A :  $\pm 20$  mA DC (Impedance :  $50 \Omega / 0.5 W$ ) [DC 0~1mA, 0~20mA, 4~20mA]

B : 2-Wire Transmitter(4~20mA DC, Impedance :  $50 \Omega / 0.5 W$ ) [supply out voltage (18 V ~ 25 V DC)]

C :  $\pm 10$  V DC (Impedance :  $1 M\Omega$  min.) [DC 0~10V, -10~+10V]

D :  $\pm 5$  V DC (Impedance :  $1 M\Omega$  min.) [DC 0~5V, 1~5V, -5~+5V]

E :  $\pm 1$  V DC (Impedance :  $1 M\Omega$  min.) [DC 0~100mV, 0~1V, -1~+1V]

F :  $\pm 100$ mV DC (Impedance :  $10 K\Omega$  min.) [DC 0~10mV, 0~50mV, 0~100mV, -100~+100mV]

R : Other Special Spec.

### Output Type & Range Selection (Available for Output 1 & Output 2)

0 : Not Used

1 : DC 4~20mA (Load Resistance : 0~600  $\Omega$ )

2 : DC 0~20mA (Load Resistance : 0~600  $\Omega$ )

3 : DC 1~5V (Load Resistance : 5 K $\Omega$  or more)

4 : DC 0~5V (Load Resistance : 5 K $\Omega$  or more)

5 : DC 2~10V (Load Resistance : 10 K $\Omega$  or more)

6 : DC 0~10V (Load Resistance : 10 K $\Omega$  or more)

7 : DC -5~+5V (Load Resistance : 10 K $\Omega$  or more)

8 : DC -10~+10V (Load Resistance : 10 K $\Omega$  or more)

9 : 2-Wire Transmitter(4~20mA DC) (9V ~ 35V DC)

A : Frequency output( Voltage )

B : Frequency output(Open Collect(Drain))

C : Serial Port RS-485

D : Serial Port RS-232

R : Other Special Spec.

### Power Supply

Z : AC 85~265V

Y : DC 18~32V

R : Other Special Spec.

### Function

0 : Normal(Input-A) [Input-A to Output-1,2]

1 : Square root(A)

2 : Square Root Extractor(A)

3 : Adder (A + B)

4 : Subtractor (A - B)

5 : Multiplier (A \* B)

6 : Divider (A / B)

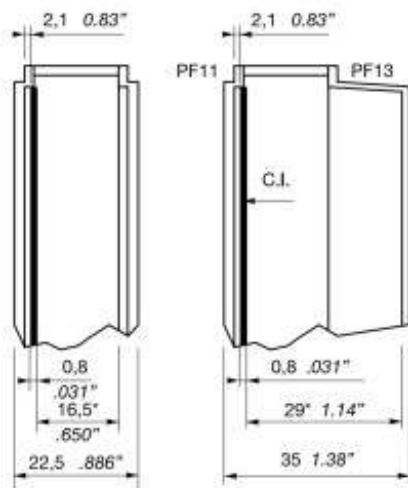
7 : Normal(Input-B) [Input-B to Output-1,2]

8 : Normal(Input-A and B) [Input-A to Output-1] and [Input-B to Output-2]

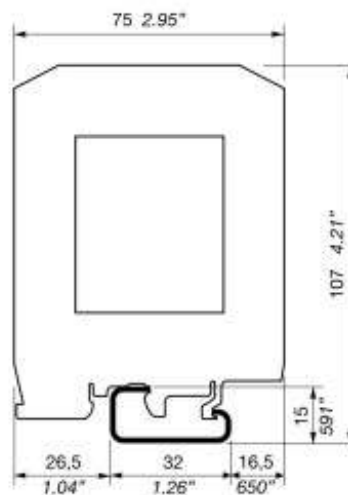
R : Specify function

**DIMENSION & MOUNTING METHOD**

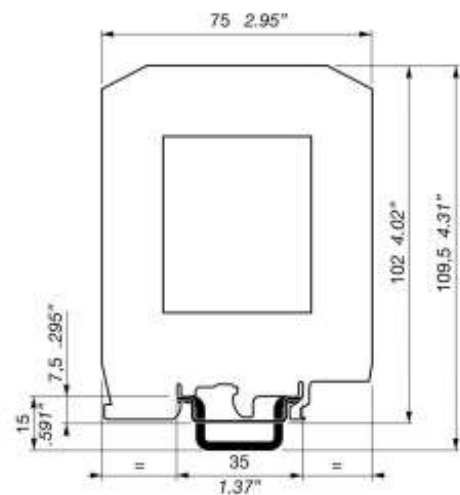
\* : Max. height of components



on rail EN 50035  
35 x 7,5



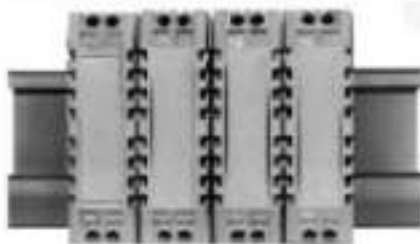
on rail EN 50022



quick-connect tab  
terminal dimensions

**horizontal assembly**

**A**



**vertical assembly**

**B**

