Frequency converter TW-3K

■ Features
- One touch mounting to the DIN rail
- Possible to change the setup value by communication

SPECIFICATIONS

■Input type code

Code No.	Input signal
A	TTL(5V)
B	Voltage pulse (Zero crossing of the input voltage)
C	Voltage pulse (Not Zero crossing of the input voltage)
D	Open collector (Detected voltage :5VDC/1mA)
E	Open collector (Detected voltage :12VDC/1mA)
F	Contact switch (Detected voltage:5VDC/1mA)
G	Contact switch (Detected voltage:12VDC/1mA)

■Measurement range code

Code No.	Output type	Minimum Span
1	0 to 0..1Hz	More than 0.01Hz
2	0 to 1Hz	More than 0.2Hz
3	0 to 10Hz	More than 2Hz
4	0 to 100Hz	More than 20Hz
5	0 to 1kHz	More than 100Hz
6	0 to 10kHz	More than 1kHz
7	0 to 100kHz	More than 10kHz
Y	other than the above	Note

Note: The minimum span for Y is the same as that for the code covering the desired measuring range.

■Output type code

Code NO	Output signal	Load resistance
0	0 to 5VDC	More than 2kΩ
1	1 to 5VDC	
2	0 to 10VDC	More than 4kΩ
A	4 to 20mADC	Less than 550Ω
Y	Other than the above	

※When the input frequency exceeds 100 percent of the full scale, signals ranging from 105 to 110 percent full scale are output.

For code No. Y limit of specifications.
Voltage output : 0 to 10VDC per 1V span
Current output : 0 to 20mADC per 1mA span
※Possible to change input and output signal by customer using the communication function.

■Ordering code

TW-3K-□□□-C

Output type Code No.
- 0 0～5V
- 1 1～5V
- 2 0～10V
- A 4～20mA
- Y Except the above

Measurement range code NO.
- 1 0～0.1Hz
- 2 0～1Hz
- 3 0～10Hz
- 4 0～100Hz
- 5 0～1kHz
- 6 0～10kHz
- 7 0～100kHz
- Y Except for the above

Input type code
- A TTL(5V)
- B Voltage pulse(waveform less than wave height about DC offset)
- C Voltage pulse (waveform more than wave height value about DC offset)
- D Open collector (Detection voltage : DC12V/1mA)
- E Open collector (Detection voltage : DC5V/1mA)
- F Contact switch (Detection voltage : DC12V/1mA)
- G Contact switch (Detection voltage : DC5V1mA)

Note)There are things limitting the measurement range by input type.

■General specifications

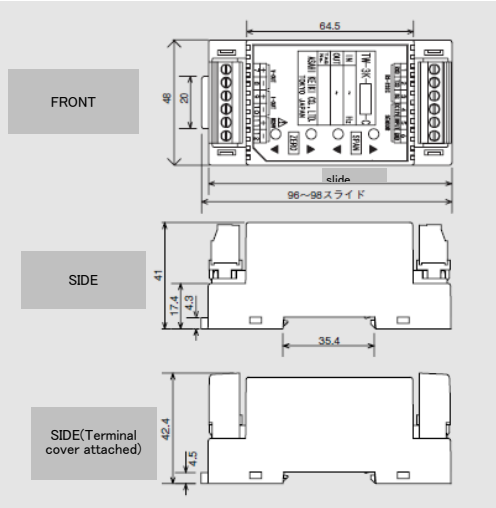
Accuracy	:Less than 0.20%F.S.(At 25℃±2℃)
Temperature characteristic	:±0.02%F.S./℃
Response spped	:1.5sec + input pulse 1 cycle (0%～90%)
Insulated resistance	:Between inputs-outputs-power supplies More than 100MΩ (DC500V)
Dielectric voltage	:Between inputs-putputs-power supplies AC1500V per minute
Consuming current	:Less than 110mA (At sensor power supply 30mA)
Power supply voltage	:DC24V±10%
Operating tmperature and humidity	:-5～50℃･Less than 90%RH (No condensing)
Storage temperature and humidity	:-10～70℃･Less than 90% (No condensing)

Weight	Less than 150g
Accessory	Instruction manual, Removal type 6P connector, terminal cover
Power supply for sensor	DC12V±1%, 30mA With short circuit protection function (Approx.360mA at short circuit time)
Cut point	0.00 to 99.99%(setting by communication method) ※ In case no communication function. Please specify at purc Ship the product with 0% setup in case no specification.
Zero adjustment range	±5%FS(By the front side tact switch)
Span adjustment range	±5%FS(By the front side tact switch)

■Communication setup

Setup section	Communication specification
Input number of frequency setup	Baud rate 9600bps
Output range, output type setup	Character 8 bit
Output adjustment setup	Parity No parity
Cut point value setup	Stop bit 1 bit

■External dimension diagram



■Input and output connection diagram