

AC TACHOGENERATOR REVOLUTION SPEED DETECTOR

COMMON SPECIFICATION



■ **USE**

This product receives output voltage signal or output frequency signal of AC tachogenerator and detects starting operation signal, control signal, over speed stop signal and outputs contact signal. As this product is all electronized, detection with high sensitivity, high speed is possible. No influence of various factors such as external noise.

■ **FEATURES**

- ▶ High quality, high reliability and noise resistance design.
- ▶ 3-step detection level equipped.
- ▶ Easy setting adjust from exterior by screwdriver adjustor.

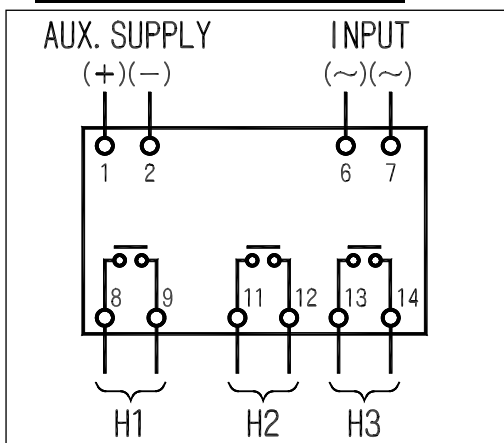
■ **COMMON STANDARD SPECIFICATION**

Item	Specification
Setting stability	Operation value: % against max. input value.
Error of operating value setting	% against max. input value
Temperature influence	at 23 ± 20 (Permissible limit is same as setting stability counterpart)
Waveform influence	Error against waveform including 3 rd harmonics 15% (except SFTG)
Contact system	1a contact for each
Contact capacity	AC220V, 0.5A, DC100V 0.5A, resistance load
Relay type	NTI relay (manufactured by Panasonic Electric Works Co., Ltd.)
Overvoltage strength	2 times (10 sec.), 1.2 times (continuation) of rating voltage.
Control power voltage strength	STG 1.3 times (continuation) of rating voltage.
	SFTG DC: 1.3 times (continuation) of rating voltage. AC single phase full wave rectifier waveform: 1.1 times (continuation) of rating voltage.
Influence of noise	Error when noise is applied (800ms, 1000V), % against max. input value (normal mode noise/common mode noise)
Operation time	0.3sec. or less against setting value 90 ~ 110% input.
Insulation resistance	DC500V 50M or more between electric circuit and outer case.
	DC500V 20M or more between input, power supply and contact
Withstand voltage	AC2, 000V (50/60Hz) 1 min. between electric circuit and outer case.
	AC1, 500V (50/60Hz) 1 min. between input, power supply and contact.
Vibration (false operation)	Frequency: 16.7Hz, peak to peak: 1mm, 10 min. each for X, Y and Z directions.
Shock	False operation: 98m/s ² , endurance: 294m/s ² , 2 times each for X, Y and Z directions.
External color	Black (Munsell N 1.5)
Operating temperature/humidity range	-10 ~ +50 , 40 ~ 85% RH
Storage temperature range	-30 ~ +60

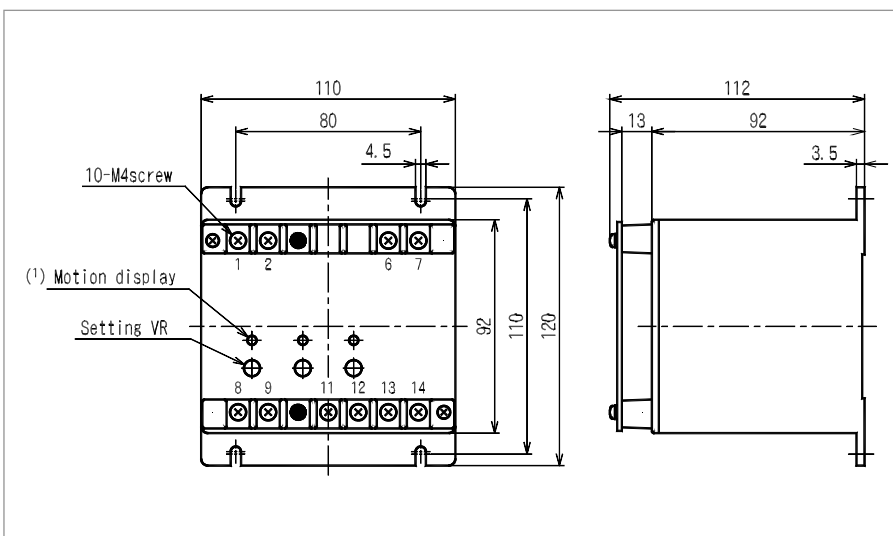
■ CONTROL OUTPUT CONDITION

Input state	Input :	Contact state		
		H1	H2	H3
Auxiliary supplyr OFF Not based on input				
Auxiliary supplyr ON input < H1				
Auxiliary supplyr ON H1 ≤ input < H2				
Auxiliary supplyr ON H2 ≤ input < H3				
Auxiliary supplyr ON H3 ≤ input				

■ CONNECTION DIAGRAM



■ DIMENSIONS (Unit: mm)



AC TACHOGENERATOR REVOLUTION SPEED (FREQUENCY) DETECTOR

SFTG-HHH-63



SFTG-HHH-63
(120 × 110 × 112mm/0.7kg)

■ STANDARD SPECIFICATION

Item	Description
Type name	SFTG- □ - 63
Setting method	H, HH, HHH
Input voltage	Refer to kinds of input voltage
Max. input frequency	Refer to setting range example.
Control supply	Refer to kinds of control power.
Setting range	H1 □Hz ~ □Hz H2 □Hz ~ □Hz H3 □Hz ~ □Hz (Refer to setting range example)

Kinds of input voltage

Input voltage	Input impedance
AC50V	Approx. 60k
AC75V	Approx. 80k
AC100V	Approx. 100k
AC150V	Approx. 150k
AC200V	Approx. 200k
AC300V	Approx. 300k

Kinds of control supply power

Control power voltage	Fluctuation range
DC24V	DC24V ± 20% 3.5W Single phase full wave rectifier waveform of AC24V ± 15% 5VA
DC100V	DC80V-140V 5W Single phase full wave rectifier waveform of AC100/110V (85V-121V) 7VA

■ FUNCTION

Item	characteristics
Setting stability	± 1%
Error of operating value setting	± 5%
Dead band	3% or less
Waveform influence	± 1%
Temperature influence	± 1%
Control power voltage influence	± 1%
Noise influence	± 2%
Mass	0.7kg

Setting range example

H1 (LOW)	H2 (RATED)	H3 (OVER)	Max. input
30-150Hz	240-330Hz	330-430Hz	430Hz
20-100Hz	160-220Hz	220-290Hz	290Hz
15-75Hz	120-170Hz	160-220Hz	220Hz

■ BLOCK DIAGRAM

