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.

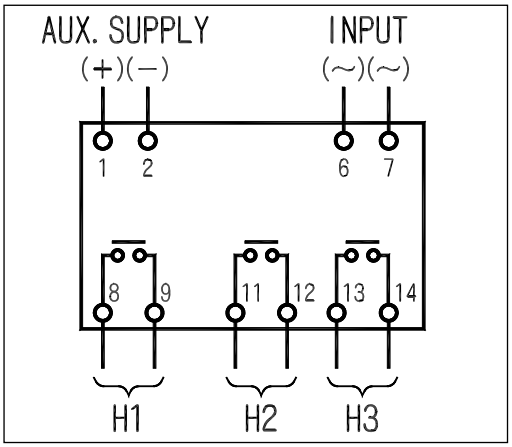
■ COMMON STANDARD SPECIFICATION

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 3rd 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 50MΩ or more between electric circuit and outer case. DC500V 20MΩ 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/s², endurance: 294m/s², 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℃	

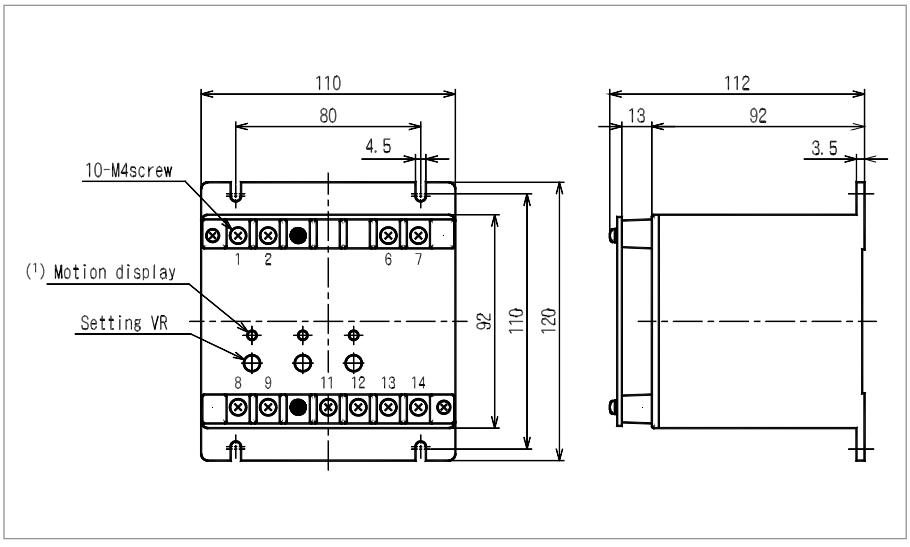
■ CONTROL OUTPUT CONDITION

Input state　Input : ▨		Contact state H1	Contact state H2	Contact state H3
Auxiliary supplyr OFF Not based on input	0 F·S H1 H2 H3	8 9	11 12	13 14
Auxiliary supplyr ON input ＜ H1	0 INPUT F·S H1 H2 H3 (SET)	8 9	11 12	13 14
Auxiliary supplyr ON H1 ≦ input ＜ H2	0 INPUT F·S H1 H2 H3 (SET)	8 9	11 12	13 14
Auxiliary supplyr ON H2 ≦ input ＜ H3	0 INPUT F·S H1 H2 H3 (SET)	8 9	11 12	13 14
Auxiliary supplyr ON H3 ≦ input	0 INPUT F·S H1 H2 H3 (SET)	8 9	11 12	13 14

■ CONNECTION DIAGRAM

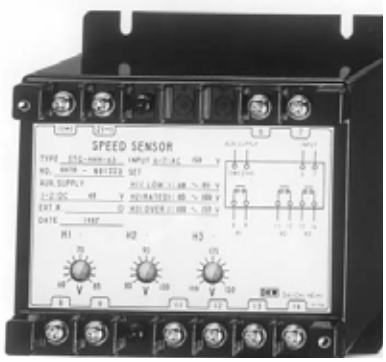


■ DIMENSIONS (Unit: mm)



AC TACHOGENERATOR REVOLUTION SPEED (VOLTAGE) DETECTOR

STG-HHH-63



STG-HHH-63
(120×110×112mm/0.7kg)

■ STANDARD SPECIFICATION

Item	Description	
Type name	STG- □ - 63	
Setting method	H, HH, HHH	
Input voltage	Refer to kinds of input voltage	
Control supply	DC24V/48V/100V 5W or less Specify, please.	
Setting range	H1 □V ～□V H2 □V ～□V H3 □V ～□V	(Refer to setting range example)

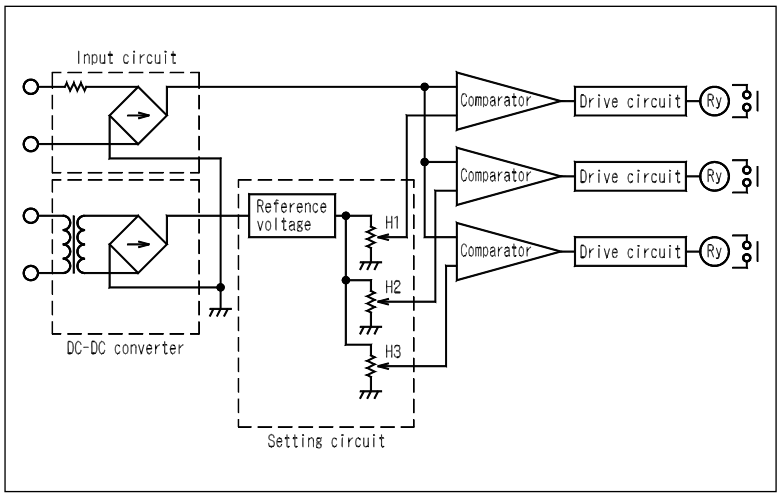
■ FUNCTION

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

●Setting range example

Max.input voltage	Setting range example	Input impedance
AC50V	10-20V, 20-30V, 20-40V, 30-50V	Approx.50kΩ
AC75V	10-60V, 20-40V, 30-50V, 55-75V	Approx.100kΩ
AC100V	10-30V, 50-70V, 40-90V, 75-95V	Approx.100kΩ
AC150V	35-55V, 60-80V, 80-100V, 100-150V	Approx.160kΩ
AC200V	40-60V, 95-115V, 70-120V, 150-200V	Approx.160kΩ
AC300V	80-130V, 120-170V, 200-250V, 250-300V	Approx.210kΩ

■ BLOCK DIAGRAM



Items for specifying

1, type name	2, rating	3, setting range
4, control supply power	5, quantity	6, others