

To FARNELL

Specification Sheet

1. Scope : This specification is applied to thermostat model 23EN
2. Structure
 - 2.1 Type : Single pole single throw manual reset type thermostat with bimetallic disc.
 - 2.2 Type of action : Contacts open on temperature rise. Not automatic reset.
(To be called "A" operation at NGT)
 - 2.3 Insulation distance : To satisfy the DIN EN standard.
 - 2.4 Splash proof : Equivalent to IP50
3. Initial characteristics
 - 3.1 Electrical Rating : Resistive load AC125V/15A, AC250V/10A
DIN EN 60730-1, -2-9 VDE Licence No. 40012267
Resistive load AC250V/16A 3,000 Cycles 150°C
 - 3.2 Operating temperature : (**°C±**K) Open
Testing device = Hot air circulation system of NGT manufacture.
Temperature changing rate = 1°C/1min. Measured by LED loaded 20mA or less.
Maximum ambient temperature = 150°C
 - 3.3 Resistance between terminals : Initial value shall be 30 m ohms or less measured by Micro Current Ohm Meter.
 - 3.4 Insulation resistance : 1,000 M ohms or more measured by DC500V Megger between live part and dead metal part.
 - 3.5 Dielectric strength : Shall stand AC2,000V for 2 seconds without a breakdown between live part and dead metal part. (leakage current : 5 mA)
4. Test
 - 4.1 Heat test : 24 hours at (150°C±3K).
 - 4.2 Cold test : 24 hours at (-30°C±2K).
 - 4.3 Thermal cycle test : When subjected to 10 cycles, 30 minutes at (-30°C±2K)~ 30 minutes at (150°C±3K).
 - 4.4 Humidity test : At relative humidity of (93±2)%, (40°C±3K)×24 hours, thereafter 10 minutes at the room temperature.
The insulation resistance shall be 10M ohms or more.
 - 4.5 Vibration test : When subjected to the vertical vibration for 60 minutes under no load, 50 Hz total amplitude of 2 mm gravity acceleration of 98 m/s².
 - 4.6 Drop shock test : Fixed to a steel plate of 10 sq cm × 1 cm thick and when subjected to the drop from 1 meter high to a wooden floor.
 - 4.7 Endurance test : When subjected to 3,000 cycles, thermal operation at approved voltage and current.
 - 4.8 Terminal strength : When subjected to 78.4 N. tension to the direction of terminal and 39.2 N. static load to the vertical direction of terminal for 1 minute, the insulator shall show no abnormalities.

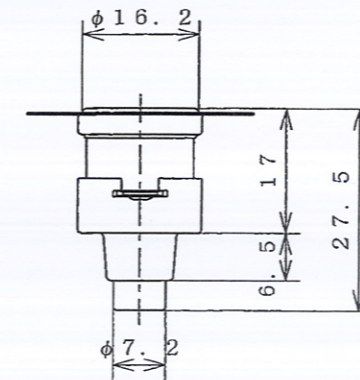
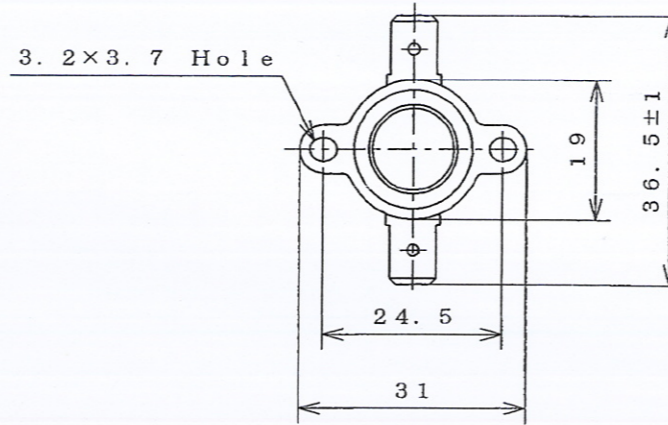
The sample shall satisfy the clauses 3.3~3.5 and the change of the operating temperature shall be within ±3K compared with the initial ones after finishing the tests of 4.1~4.6 & 4.8.

The sample shall satisfy the clauses 3.4~3.5 and resistance between terminals shall be 100 m ohms or less, and the change of the operating temperatures shall be within ±5* compared with the initial ones after finishing the test of 4.7.

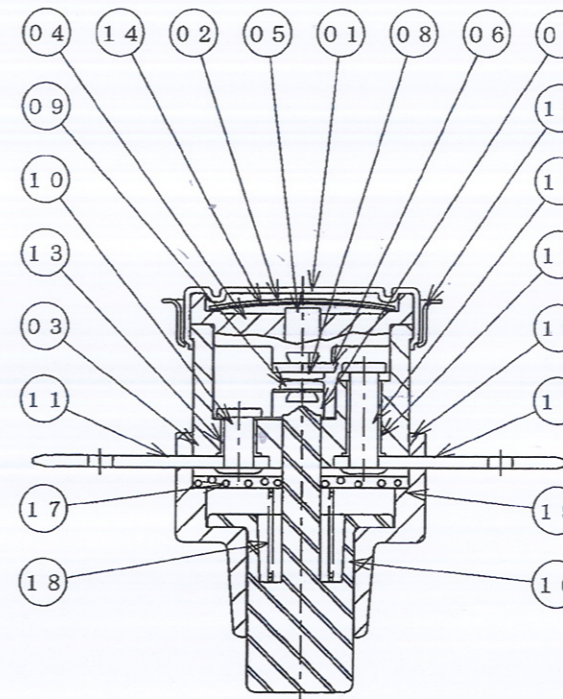
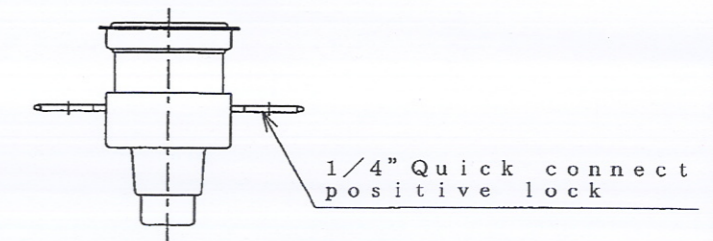
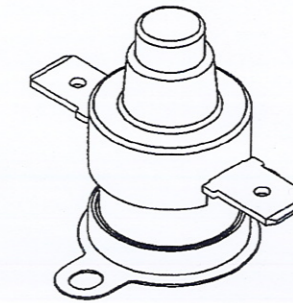
5. Marking : Stamping on Cap
 example Type of action → A*** ← Open temperature
 Type → 23EN**** ← Style No.
 Lot No. → 7A09
 Factory → □ ⊕ ← VDE mark

☆ None : Yamagata
 ☆ W : Wuxi

* The data contained in this specification is based on our standard tests.
 The user must determine the suitability of the product for the application and assumes all risk and liability associated therewith.



REFERENCE DRAWING



19	Bond	Epoxy
18	Spring	Stainless steel
17	Insulator	Phenol
16	Button	Phenol
15	Cover	Phenol
14	Metal disc	Copper alloy
13	Sleeve	Copper
12	Bracket	Stainless steel
11	Terminal	Copper alloy
10	Rivet	Copper
09	Contact	Silver-Nickel alloy
08	Contact	Silver-Nickel alloy
07	Movable arm	Copper alloy
06	Stationary arm	Copper alloy
05	Pin	Ceramic
04	Retainer	Phenol
03	Case	Phenol
02	Bimetal	
01	Cap	Aluminum
No.	Name	Material

P	Customer	<input type="radio"/>
	Represent	<input type="radio"/>
1	Return	<input type="radio"/>
1	Selling	<input type="radio"/>
1	Manufacturing	<input type="radio"/>
1	Engineering	Revision
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Check	Drawing	Indication	Alias in NGT
2 July '09	2 July 09		23EN-T234R
		Tolerance	Project
		±0.5	3rd
		Scale	1:1
		Name	
		Specification	
		Drawing No.	
		NIPPON GT CORP.	