

STANDARD OTI / WTI

General Features

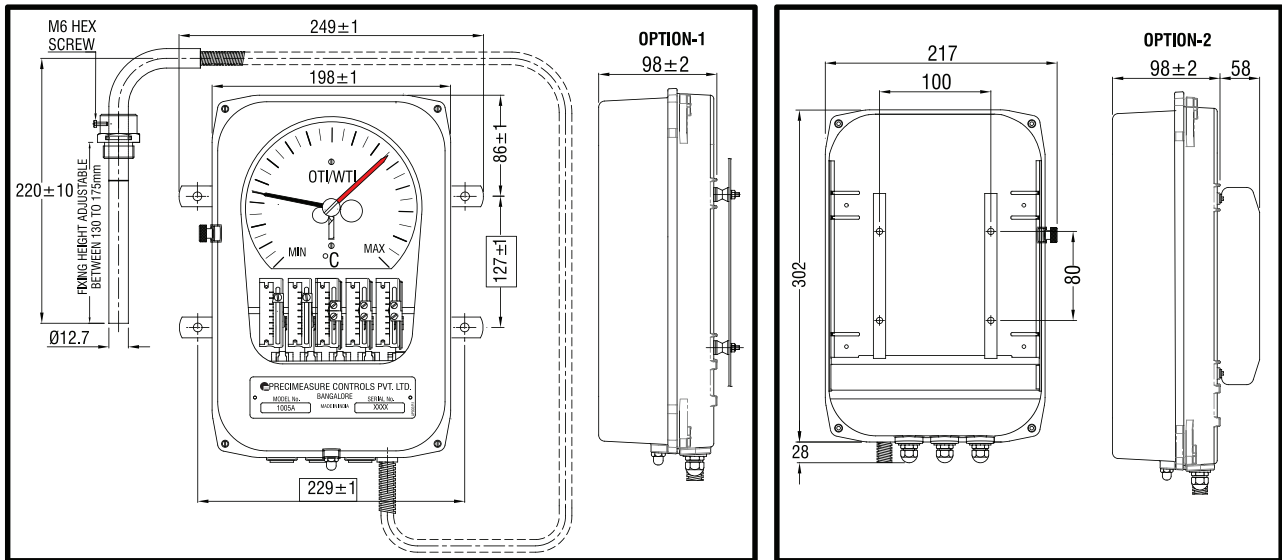
- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches

1005/1005A


SPECIFICATIONS	Model : 1005	Model : 1005A
Temperature Range	0 -150°C, 0 -160°C, 30 -150°C, -20 to 140°C	0 -150°C, 0 -160°C, 30 -150°C, -20 to 140°C
Dial Size	150mm (6") Round	150mm (6") Round
Dial angular Sweep	270°	270°
Dial Graduation	1°C	1°C
Accuracy Class	± 1% of FSD	± 1% of FSD
Max. No. of Switches	5	5
Switching Range	15% - 85%	15% - 85%
Contact Rating	3A @ 250V AC/DC Magnetic Blowout Micro switch	15A @ 250V AC 0.5A @ 220V DC Standard Micro switch
Switch Differential	S1 & S2: 3°C to 9°C (6±3°C)Fixed S3 to S5: 8°C to 40°C Adjustable.	S1 & S2: 3°C to 9°C (6±3°C)Fixed S3 to S5: 8°C to 40°C Adjustable.
Switching Accuracy	±2.5 °C of Set Value	± 2.5°C of Set Value
Remote Repeater	Available (Potentiometer Output)	Available (Potentiometer Output)
Max. Capillary Length	Up to 25 Mtrs	Up to 25 Mtrs
Switch Test Knob	Available	Available
Electrical Connection	Press Fit Wago Type	Press Fit Wago Type
Degree of Protection	IP – 55(IEC - 60529)	IP – 55(IEC - 60529)
High Voltage Test	2.5 KV AC, 50Hz/60Hz for 1 minute; all Terminals to ground	2.5 KV AC, 50Hz/60Hz for 1 minute; all Terminals to ground
Electrical entry	M20 - 3Nos	M20 - 3Nos
Cable Gland	Optional	Optional
Thermometer Pocket	Optional	Optional

Remote Repeater 96 Sq


SPECIFICATIONS	
Type	4 digits, 0.5" Seven Segments LED's
Auxillary Supply	90 – 260V AC/DC
Resolution	0.1°C
Degree of protection of enclosure	IP 20
Operating Temperature Range	0°C to 60°C
Signal output	4 sets of 4 - 20mA DC Optional RS 485
Cutout dimension	92 Sq. mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Cold and Dry Test :
-40°C to +70°C
3. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
4. Salt Spray Test :
For polyester powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
5. Micro Switch rating Test :
 - a) ML - 1005:
3A @ 250V AC &
3A @ 250V DC
 - b) ML - 1005A:
15A @250V AC &
0.5A @220V DC

Ordering Information

Model	1005 /1005A
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C R2. 0 - 160°C R3. 30 - 150°C R4. -20 to 140°C (other ranges on request)
No. of Switches	S2 - 2switches S3 - 3switches S4 - 4switches S5 - 5switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C25 - 25mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
Repeater	Y - Required N - Not Required
If WTI please specify	Transformer CT Secondary output.....(1A to 5A) Simulated Temperature rise over top oil..... (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1005\WTI\R3\S2\L2\C2\U1\Y\..... Amps°C



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Hybrid OTI / WTI

General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- **Embedded PT-100 sensors in the sensing bulb of the local OTI/ WTI provide for a master indication.**
- Current Converter Unit (CCU) is mounted inside the Local OTI/WTI, The output from which can be connected to remote indicator or SCADA are a combination of both.
- For the WTIs additional Winding temperature simulator is provided
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches

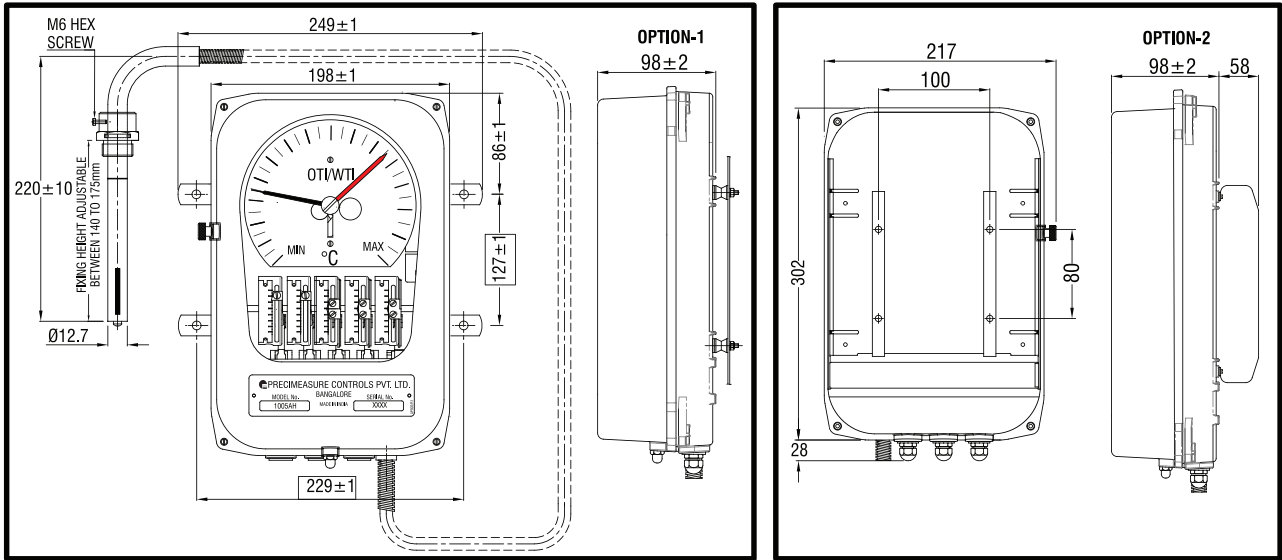
ML : 1005H/1005AH

Remote indicator 96 Sq


SPECIFICATIONS	Model : 1005H	Model : 1005AH
Temperature Range	0-150°C, 0-160°C, 30-150°C, -20 to 140°C	0-150°C, 0-160°C, 30-150°C, -20 to 140°C
Dial Size	150mm (6") Round	150mm (6") Round
Dial angular Sweep	270°	270°
Dial Graduation	1°C	1°C
Accuracy Class	±1% of FSD	±1% of FSD
Max.No. of Switches	5	5
Switching Range	15% - 85%	15% - 85%
Contact Rating	3A @ 250V AC/DC Magnetic Blowout Micro switch	15A @ 250V AC 0.5A @ 220V DC Standard Micro switch
Switch Differential	S1 & S2: 3°C to 9°C (6±3°C) Fixed S3 to S5: 8°C to 40°C Adjustable.	S1 & S2: 3°C to 9°C (6±3°C) Fixed S3 to S5: 8°C to 40°C Adjustable.
Switching Accuracy	±2.5 °C of Set Value	±2.5°C of Set Value
Remote indicator	Available / 4 - 20mA / RS - 485	Available / 4-20mA / RS - 485
Max. Capillary Length	Up to 25 Mtrs.	Up to 25 Mtrs.
Switch Test Knob	Available	Available
Electrical Connection	Press Fit Wago Type	Press Fit Wago Type
Degree of Protection	IP - 55(IEC-60529)	IP - 55(IEC-60529)
High Voltage Test	2.5 KV AC, 50Hz/60Hz for 1 minute; Switch connection & C.T. Terminal to ground. CCU output 0.5 KV AC 50Hz / 60Hz for 1 minute	2.5 KV AC, 50Hz/60Hz for 1 minute; Switch connection & C.T. Terminal to ground. CCU output 0.5 KV AC 50Hz / 60Hz for 1 minute
Electrical entry	M20 - 3Nos	M20 - 3Nos
Cable Gland	Optional	Optional
Thermometer Pocket	Optional	Optional

SPECIFICATIONS

Type	4 digits, 0.5" Seven Segments LED's
Auxillary Supply	90 - 260V AC/DC
Resolution	0.1°C
Degree of protection of enclosure	IP 20
Operating Temperature Range	0°C to 60°C
Signal output	4 sets of 4 - 20mA DC Optional RS 485
Cutout dimension	92 Sq.mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Cold and Dry Test :
-40°C to +70°C
3. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
4. Salt Spray Test :
For polyester powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
5. Micro Switch rating Test :
a) ML - 1005H:
3A @ 250V AC &
3A @ 250V DC
b) ML - 1005AH:
15A @250V AC &
0.5A @220V DC

Ordering Information

MODEL	1005H/1005AH
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C R2. 0 - 160°C R3. 30 - 150°C R4. -20 to 140°C (other ranges on request)
No. of Switches	S2 - 2switches S3 - 3switches S4 - 4switches S5 - 5switches
Switch Configura- tion	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C25 - 25mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
CCU Output for indication / Scada	RI - Remote indicator - T1/T2/T3/T4 (for types, Refer Drawing) PSU - External power supply with 2 Nos. of 4-20mA output
If WTI please specify	Transformer CT Secondary output.....(1A to 5A) Simulated Temperature rise over top oil..... (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1005AH\OTI\R4\S4\L\C6\U4\RI-T2 Amps°C



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Duplex Hybrid OTI / WTI
General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- **Embedded Duplex PT-100 sensors in the sensing bulb of the local OTI/ WTI provide for a master indication.**
- Current Converter Units (CCUs) are mounted inside the Local OTI/WTI, The output from which can be connected to remote indicator and SCADA through external power supply units (PSUs).
- For the WTIs additional Winding temperature simulator is provided
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches

ML: 1005 HX/1005 AHX

PSU

Remote Indicator 96 Sq

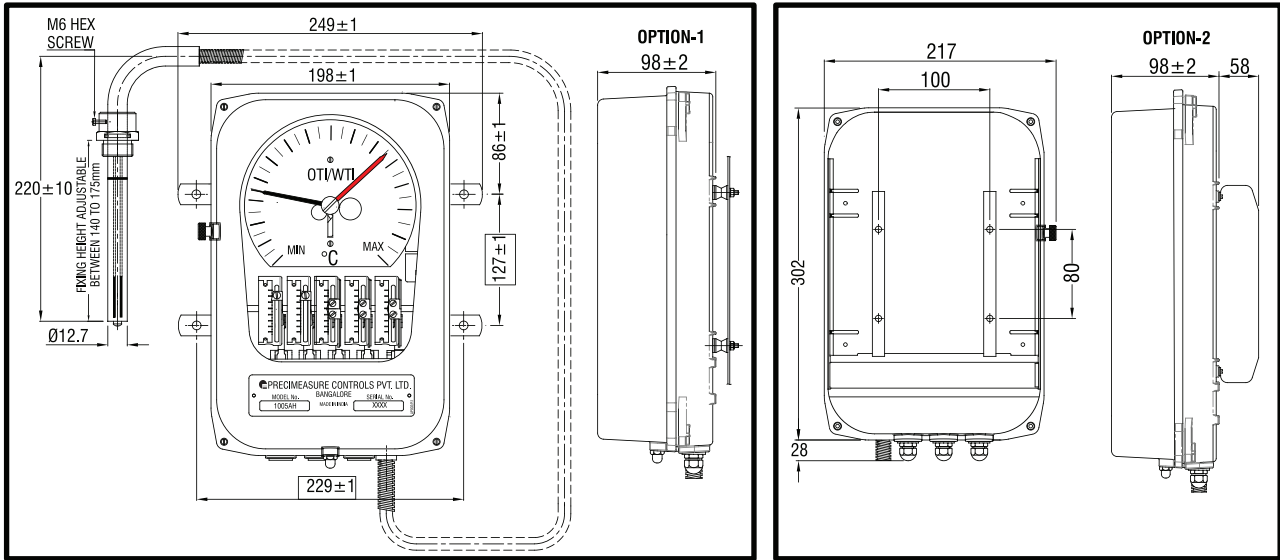

SPECIFICATIONS	MODEL : 1005HX	MODEL : 1005AHX
Temperature Range	0-150°C, 0-160°C, 30-150°C, -20 to 140°C	0-150°C, 0-160°C, 30-150°C, -20 to 140°C
Dial Size	150mm (6") Round	150mm (6") Round
Dial angular Sweep	270°	270°
Dial Graduation	1°C	1°C
Accuracy Class	± 1% of FSD	± 1% of FSD
Max.No. of Switches	5	5
Switching Range	15% - 85%	15% - 85%
Contact Rating	3A @ 250V AC/DC Magnetic Blowout Micro switch	15A @ 250V AC 0.5A @ 220V DC Standard Micro switch
Switch Differential	S1 & S2: 3°C to 9°C (6±3°C) Fixed S3 to S5: 8°C to 40°C Adjustable.	S1 & S2: 3°C to 9°C (6±3°C) Fixed S3 to S5: 8°C to 40°C Adjustable.
Switching Accuracy	± 2.5 °C of Set Value	± 2.5°C of Set Value
Remote indicator	Available / 4-20mA / RS - 485	Available / 4-20mA / RS - 485
Max. Capillary Length	Up to 25 Mtrs.	Up to 25 Mtrs.
Switch Test Knob	Available	Available
Electrical Connection	Press Fit Wago Type	Press Fit Wago Type
Degree of Protection	IP – 55(IEC-60529)	IP – 55(IEC-60529)
High Voltage Test	2.5 KV AC, 50Hz/60Hz for 1 minute; Switch connection & C.T. Terminal to ground. CCU output 0.5 KV AC 50Hz / 60Hz for 1 minute	2.5 KV AC, 50Hz/60Hz for 1 minute; Switch connection & C.T. Terminal to ground. CCU output 0.5 KV AC 50Hz / 60Hz for 1 minute
Electrical entry	M20 - 3Nos	M20 - 3Nos
Cable Gland	Optional	Optional
Thermometer pocket	Optional	Optional

POWER SUPPLY UNIT - (PSU)

a.	Output Voltage: 24V
b.	Output Signal: Analogue output 2nos. 4-20mA DC (Output - 1, Burden 250 Ohms) (Output- 2, Burden 600 Ohms)
c.	Auxiliary supply: 90-260V AC/DC

REMOTE INDICATOR

a	Type : 4 digits, 0.5" Seven Segment LED's
b	Auxiliary Supply : 90 – 260V AC/DC
d	Resolution : 0.1°C
e	Degree of protection of enclosure : IP-20
f	Operating Temperature Range : 0°C to 60°C
g	Signal output: 4sets of 4-20mA DC, Optional RS 485
h	Cutout Dimension: 92Sq.mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Cold and Dry Test :
-40°C to +70°C
3. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
4. Salt Spray Test :
For polyester powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
5. Micro Switchrating Test :
 - a) ML - 1005HX:
3A @ 250V AC &
3A @ 250V DC
 - b) ML - 1005AHX:
15A @250V AC &
0.5A @220V DC

Ordering Information

MODEL	1005HX/1005AHX
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C R2. 0 - 160°C R3. 30 - 150°C R4. -20 to 140°C (other ranges on request)
No. of Switches	S2 - 2switches S3 - 3switches S4 - 4switches S5 - 5switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C25 - 25mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
CCU Output for indication / Scada	RI - Remote indicator - T1/T2/T3/T4 (For Types, Refer Drawing) (Connected through external powersupply PSUs)
If WTI please specify	Transformer CT Secondary output.....(1A to 5A) Simulated Temperature rise over top oil..... (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1005AHX\OTI\R4\S4\L\C6\U4\RI-T1 Amps.....°C



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Standard OTI / WTI

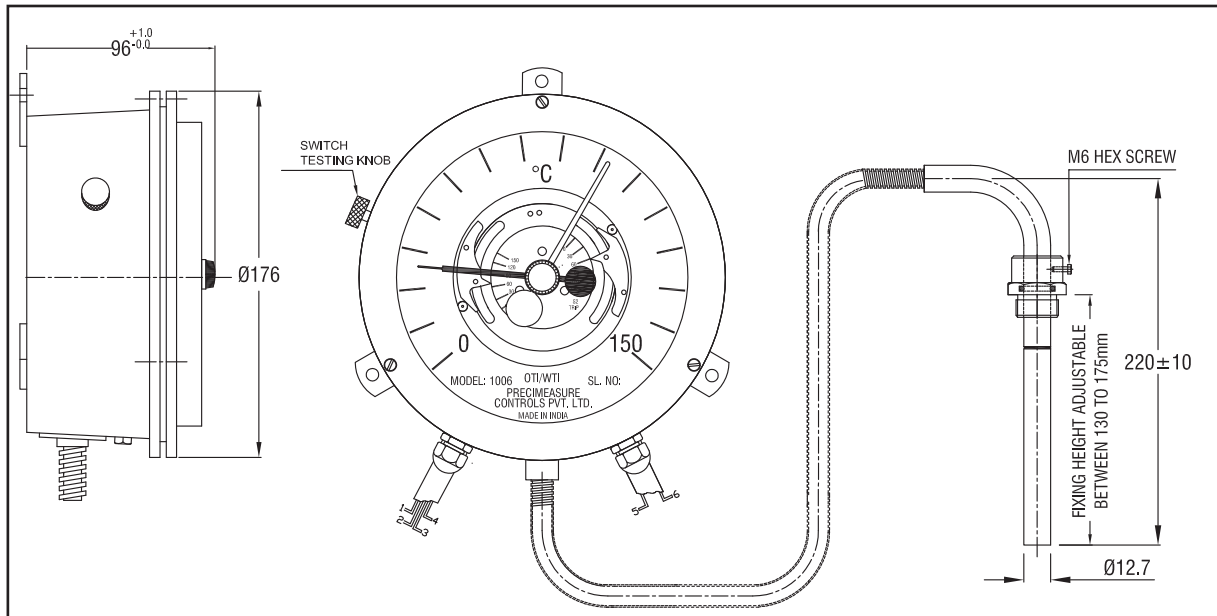
General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches.

ML : 1006



SPECIFICATIONS	MODEL : 1006
Temperature Range	0-150°C, 0-240°C
Dial angular Sweep	270°
Dial Graduation	2°C
Accuracy Class	±1.5% of FSD
Max.No. of Switches	2
Switching Range	15% - 85%
Contact Rating	5A @ 250V AC, 0.5A @ 220V DC
Switch Differential	1°C to 5°C (3°C±2°C) Fixed
Switching Accuracy	±2.5°C of Set Value
Max. Capillary Length	Up to 6 Mtrs.
Switch Test Knob	Available
Electrical Connection	1Sq mm. Copper Cable, 1mtr Length
Degree of Protection	IP – 55(IEC-60529)
High Voltage Test	2.5 KV AC, 50Hz / 60Hz for 1 minute ; all Terminal to ground



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Vibration Test :
Amplitude 1mm,
frequency 50Hz, 1Hr / X,Y,Z axis
3. Salt Spray Test :
For polyster powder coating
and SS 304 Armour for 500 Hrs
as per DIN 50021Standard
4. Micro Switch rating Test :
5A @ 250V AC,
0.5A @ 220V DC

Ordering Information

Model	1006
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C. R2. 0 - 240°C
No. of Switches	S2 - 2switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C6 - 6mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
If WTI please specify	Transformer CT Secondary output(1A to 5A) Simulated Temperature rise over top oil (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1006\WTI\R1\S2\L2\C5\U5 Amps°C



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MODEL - 1006DH

DIAL TYPE THERMOMETER for DRY TYPE TRANSFORMER

Winding temperatures Indicator & Controller for Dry Type Transformers / Cast-Resin Transformers with built-in RTD scheme for Independent Remote indication and 4-20mA DC output for SCADA connection.

Hybrid Instrument

This is a high performance temperature Monitoring instrument with built-in PT-100 Sensor (RTD) & Current Converter Unit and external Remote indicator with built-in power supply unit

General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches

ML : 1006DH



Specifications	Model : 1006DH
Temperature Range	0-240°C
Dial angular Sweep	270°
Dial Graduation	2°C
Accuracy Class	± 1.5% of FSD
Max.No. of Switches	2
Switching Range	15% - 85%
Contact Rating	5A @ 250V AC, 0.5A @ 220V DC
Switch Differential	1°C to 5°C (3°C ± 2°C) Fixed
Switching Accuracy	± 4°C of Set Value
Remote Indicator	Availbale
Max. Capillary Length	Up to 6 mtrs
Electrical Connection	1Sq mm. Copper Cable, 1mtr Length
Degree of Protection	IP – 55 (IEC-60529)
High Voltage Test	Switch Contact - 2.5KV AC,50Hz/60Hz for 1 Minute between Switch Terminals to ground CCU- 500V AC,50Hz/60Hz for 1 Minute between CCU Terminals to ground

PSU



Power Supply Unit

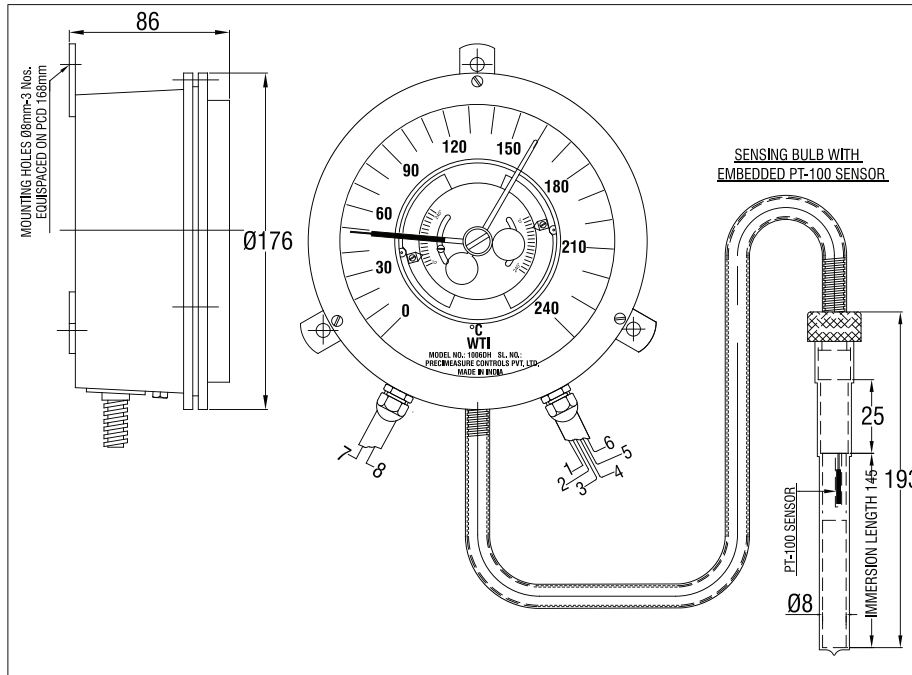
Signal out put	2 nos 4-20 mA DC
Aux Supply voltage	90-260V AC/DC
Burden on signal output	600Ω max including loop resistance
Temperature range	0-240°C
Degree of protection	IP-40

Remote Indicator 96 Sq



Digital Remote indicator

Temperature range	0-240°C
Signal input	4-20 mA DC
Aux Supply voltage	90-260V AC/DC
Communication	RS-485MODBUS RTU Communication (Optional)
Degree of protection	IP 20
Cutout Dimension	92 sq.mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
3. Salt Spray Test :
For polyster powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
4. Micro Switch rating Test :
5A @ 250V AC,
0.5A @ 220V DC

Ordering Information

Model	1006DH
Type of Instrument	WTI
Range	R1. 0 - 240°C
No. of Switches	S2 - 2switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C6 - 6mts

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1006DH\WTI\R1\S2\L\C4



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Hybrid OTI / WTI

General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- **Embedded PT-100 sensors in the sensing bulb of the local OTI/ WTI provide for a master indication.**
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches.

ML : 1006H



ML : 2220-R2 (CCU)

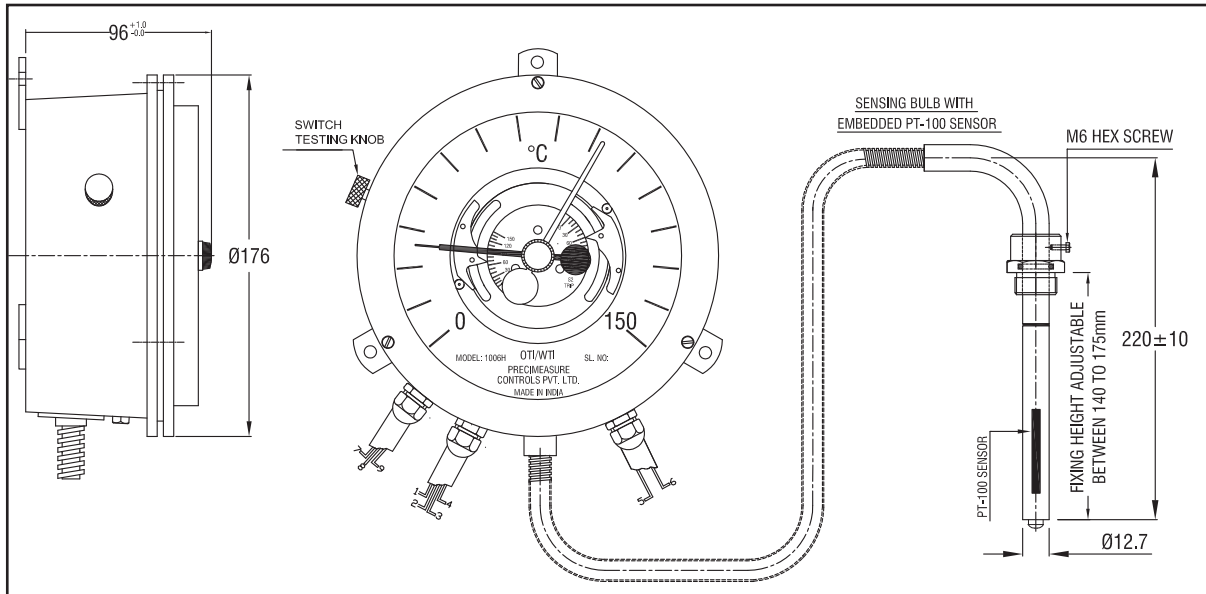


Remote Indicator 96 Sq



SPECIFICATIONS		MODEL : 1006H
Temperature Range	0-150°C, 0-240°C	
Dial angular Sweep	270°	
Dial Graduation	2°C	
Accuracy Class	± 1.5% of FSD	
Max.No. of Switches	2	
Switching Range	15% - 85%	
Contact Rating	5A @ 250V AC, 0.5A @ 220V DC	
Switch Differential	1°C to 5°C (3°C±2°C) Fixed	
Switching Accuracy	±2.5°C of Set Value	
Remote Indicator	Availbale	
Max. Capillary Length	Up to 6 Mtrs.	
Switch Test Knob	Available	
Electrical Connection	1Sq mm. Copper Cable, 1mtr Length	
Degree of Protection	IP – 55(IEC-60529)	
High Voltage Test	Test Voltage	Terminals Details
(a) Local OTI / WTI	2.5 KV AC, 50Hz / 60Hz	Switch connection / CT Connection
(b) Local OTI / WTI	500 V AC, 50Hz / 60Hz	Pt 100 sensor output
(c) CCU	500 V AC, 50Hz / 60Hz	Pt 100 sensor input +4-20mA Output
(d) CCU	2.5 KV AC, 50Hz / 60Hz	CT connection with power supply

SPECIFICATION	
Type	4 digits, 0.5" Seven Segments LED's
Auxillary Supply	90 – 260V AC/DC
Resolution	0.1°C
Degree of protection of enclosure	IP 20
Operating Temperature Range	0°C to 60°C
Signal output	4 sets of 4 - 20mA DC, Optional RS 485
Cutout dimension	92 Sq.mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
3. Salt Spray Test :
For polyester powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
4. Micro Switch rating Test :
5A @ 250V AC,
0.5A @ 220V DC

Ordering Information

Model	1006H
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C. R2. 0 - 240°C
No. of Switches	S2 - 2switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C6 - 6mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
If WTI please specify	Transformer CT Secondary output.....(1A to 5A) Simulated Temperature rise over top oil..... (5°C to 30°C)

Note: 1) WTI Gradient is factory set. If required customer can adjust as per requirement.
2) External CCU and Remote Indicator is Part of the scheme.

Sample Ordering Information : 1006H\WTI\R1\S2\L\C3\U2 Amps°C



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Standard OTI / WTI

General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches

ML : 1007

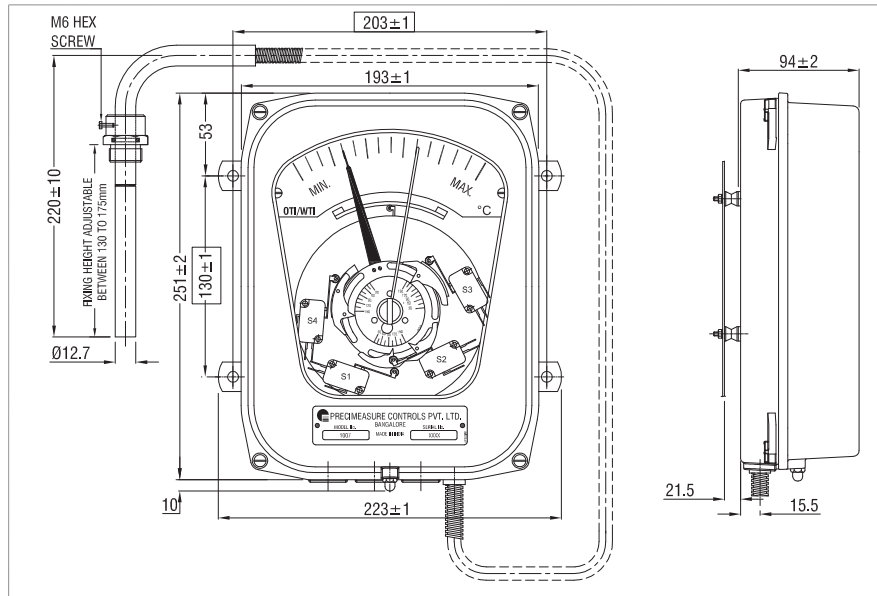


SPECIFICATIONS	MODEL : 1007
Temperature Range	0-150°C, 0-160°C, 30-150°C, -20 to 140°C
Dial Size	115mm, Segment Dial
Dial angular Sweep	60°
Dial Graduation	2°C
Accuracy Class	± 1.5% of FSD
Max.No. of Switches	4
Switching Range	15% - 85%
Contact Rating	15A @ 250V AC 0.5A @ 220V DC Standard Micro switch
Switch Differential	S1 & S2: 3°C to 9°C (6±3°C) Fixed S3 & S4: 8°C to 40°C Adjustable.
Switching Accuracy	± 2.5 °C of Set Value
Remote Repeater	Available (Potentiometer Output)
Max. Capillary Length	Up to 25 Mtrs.
Electrical Connection	Press Fit Wago Type
Degree of Protection	IP – 55 (IEC-60529)
High Voltage Test	2.5 KV AC, 50Hz/60Hz for 1 minute; all Terminals to ground
Electrical entry	M20 - 3Nos
Cable Gland	Optional
Thermometer Pocket	Optional

Remote Repeater 96 Sq



SPECIFICATIONS	
Type	4 digits, 0.5" Seven Segments LED's
Auxillary Supply	90 – 260V AC/DC
Resolution	0.1°C
Degree of protection of enclosure	IP 20
Operating Temperature Range	0°C to 60°C
Signal output	4 sets of 4 - 20mA DC Optional RS 485
Cutout dimension	92 Sq.mm



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Cold and Dry Test :
-40°C to +70°C
3. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
4. Salt Spray Test :
For polyester powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
5. Micro Switch rating Test :
15A @250V AC &
0.5A @220V DC

Ordering Information

Model	1007
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C R2. 0 - 160°C R3. 30 - 150°C R4. -20 to 140°C (other ranges on request)
No. of Switches	S2 - 2switches S3 - 3switches S4 - 4switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C25 - 25mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
Repeater	Y - Required, N - Not Required
If WTI please specify	Transformer CT Secondary output.....(1A to 5A) Simulated Temperature rise over top oil..... (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information : 1007\OTI\R3\S2\L2\C8\U5\Y\..... Amps°C



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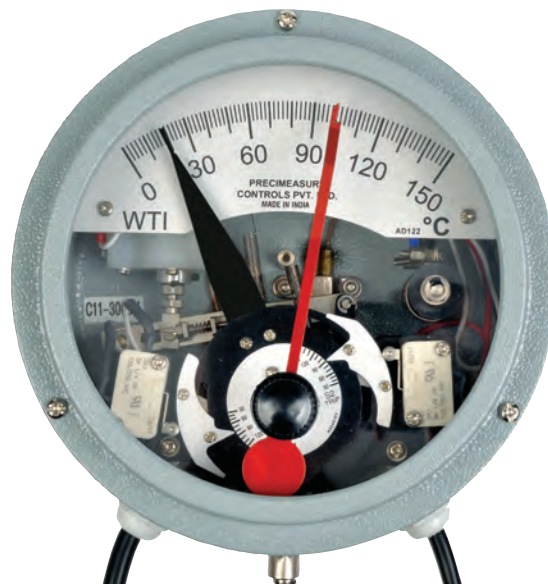
E-Mail : sanjay@precimeasure.com

Standard OTI / WTI

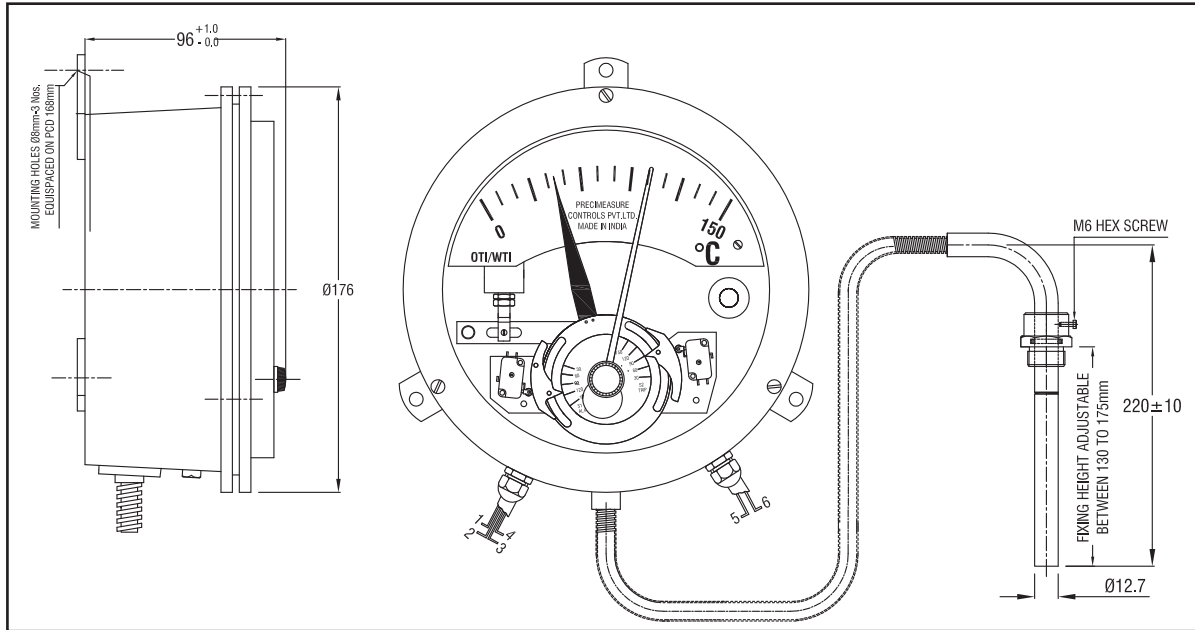
General Features

- The fully sealed liquid expansion in the system provides a self powered indication and operation to the instruments, and does not require any trimming or other periodic adjustments.
- Instruments are fully compensated for ambient temperature.
- The WTI instruments have a built in Thermal imaging system for transformer's hot spot indication.
- The WTIs are provided with gradient adjustment through a shunt for CT secondary input (1A to 5A).
- Instrument cases are aluminium die casted and polyester powder coated. Each instrument has anti vibration mountings and are provided with projection mounting clamps.
- A maximum pointer facility is provided, can be reset from outside.
- All switch contacts are potential free micro switches.

ML : 1031



SPECIFICATIONS	Model : 1031
Temperature Range	0-150°C
Dial size	115mm, Segment Dial
Dial angular Sweep	60°
Dial Graduation	2°C
Accuracy Class	± 1.5% of FSD
Max.No. of Switches	2
Switching Range	15% - 85%
Contact Rating	5A @ 250V AC 0.5A @ 220V DC
Switch Differential	1°C to 5°C (3°C±2°C) Fixed
Switching Accuracy	±2.5°C of Set Value
Max. Capillary Length	Up to 6 Mtrs.
Electrical Connection	1Sq mm. Copper Cable, 1mtr Length
Degree of Protection	IP – 55(IEC-60529)
High Voltage Test	2.5KV AC, 50Hz/60Hz for 1 minute; All terminal to ground



Type Tested For

1. Protection class :
IP55 as per IEC 60529 CAT 2.
2. Vibration Test :
Amplitude 1mm, frequency 50Hz,
1Hr / X,Y,Z axis
3. Salt Spray Test :
For polyster powder coating and
SS 304 Armour for 500 Hrs as per
DIN 50021 Standard
4. Micro Switch rating Test :
5A @ 250V AC,
0.5A @ 220V DC

Ordering Information

Model	1031
Type of Instrument	OTI / WTI
Range	R1. 0 - 150°C.
No. of Switches	S2 - 2switches
Switch Configuration	L - Normally open contact L2 - Changeover contact
Capillary Length	C1 - 1mts C2 - 2mts..... upto C6 - 6mts
Union Type	U1 - 1/2" BSP Male U2 - 3/4" BSP Male U3 - 1" BSP Male U4 - 1/2" BSP Female U5 - 3/4" BSP Female
If WTI please specify	Transformer CT Secondary output(1A to 5A) Simulated Temperature rise over top oil (5°C to 30°C)

Note: WTI Gradient is factory set. If required customer can adjust as per requirement.

Sample Ordering Information :1031\OTI\R1\S2\L2\C6\U2 Amps°C



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