ARIELTECH®
MANUFACTURER OF ENCLOSURE CLIMATE CONTROL SOLUTIONS

HUMIDITY CONTROL
MECHANICAL HYGROSTAT

Specification/Sell sheet

HYTEC

Certificates

- CSA and CSAus Listed, File Number 80012071
- UL and cUL Recognized, File Number E484831
- CE Compliant

Application

The HYTEC-100 is designed to control the relative humidity inside of enclosures and electrical panels. The HYTEC-100 starts the heater in order to avoid formation of condensation in enclosures. Designed to protect electronic circuits, preventing the absorption of moisture by electrical and electronic components inside of the enclosure.

Features

- Controls a wide range of enclosure relative humidity from 10% to 90%
- Operating Temperature: 0 °C to +60 °C / 32 °F to 140 °F
- Can be used for both applications; Humidifiers and Dehumidifiers
- Mechanical Hygrostat
- Mountable on 35 mm DIN Rail
- Flame retardant housing, UL 94-V0

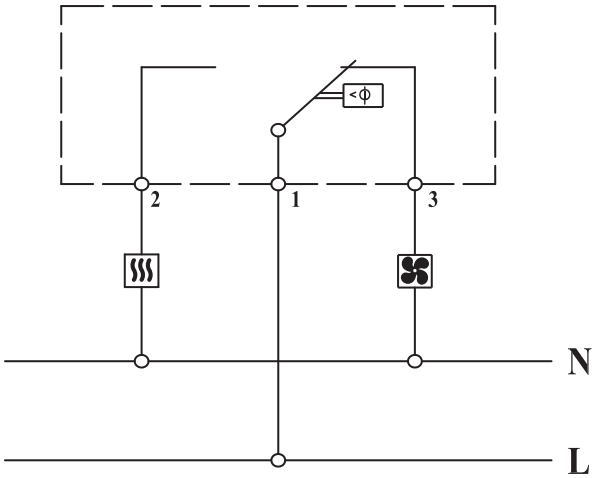
Color

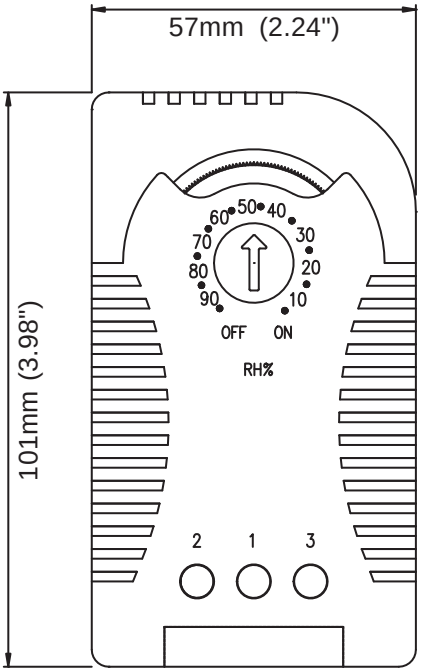
- RAL 7035 - Light Gray

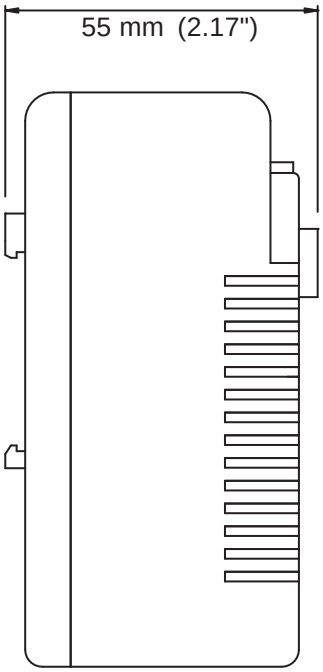
E484831

09-21

Terminal Operated	Between 1 & 2		Between 1 & 3	
Voltage	240 VAC	120 VAC	240 VAC	120 VAC
Full Load	5 A	10 A	2.2 A	4.4 A
Locked Load	22.5 A	45 A	13.2 A	26.5 A
Resistive Load	6 A	12 A	3 A	6 A
Application	Dehumidifier		Humidifier	
	Normally Closed		Normally Open	
	Heater		Fan	
Design and Test Standard	UL 60730-1			
	UL 60730-2-9			
	UL 60730-2-13			
	CAN/CSA-E60730-1:15			
	CAN/CSA-E60730-2-9:15			
Withstanding Voltage	AC 1500 V 1 min or AC 1800 V 1 sec			
Insulation Resistance	Min 100 mΩ at DC 500 V			
Calibration Point	42% RH at room temperature 23 °C ± 2 °C / 74 °F ± 2 °F			
Mounting	Rail 35 mm according to EN 50 022			
Weight	170 gram / 0.375 lb			
Dimensions	101 mm x 57 mm x 55 mm / 3.98" x 2.24" x 2.17"			
Color	RAL 7035			
Electrical Connections	3-Pole screw terminal for wires section of .75/4 mm² - AWG 18/12			
Housing Material	PA 6 UL 94-V0			
Environmental	Indoor			
Control Type	Operating Control, Type 1			
Rated Impulse Voltage	2500			
Hysteresis	Approx. 5% RH			
Sensing Element	Synthetic Fiber			
Operating Temperature	0 °C to +60 °C / 32 °F to 140 °F			
Shipping and Storage Temperature	-40 °C to 60 °C / -40 °F to 140 °F			







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Newmarket, Ontario
Canada L3Y 8X8

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English Version

Hygrostat
HYTEC-100
Installation Instructions

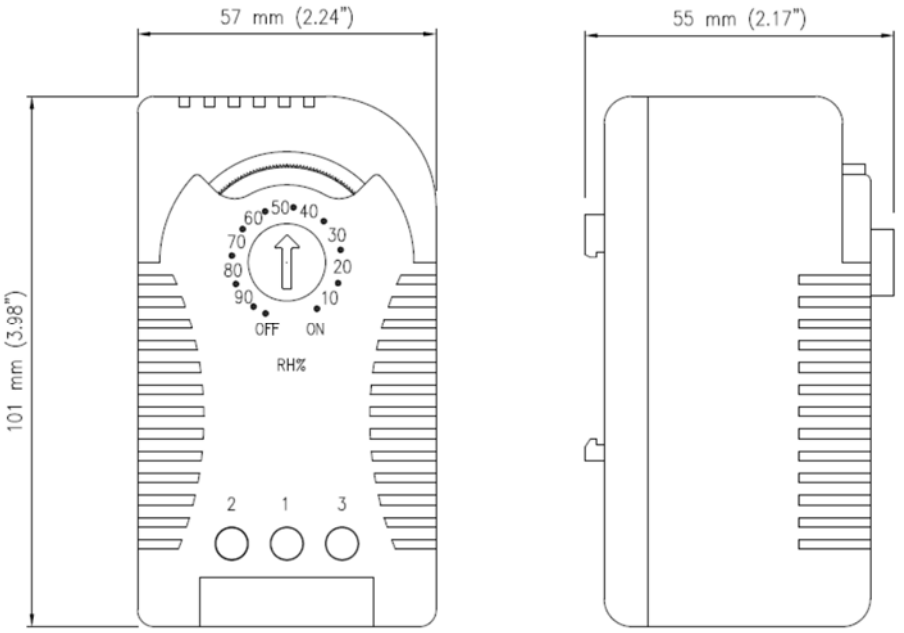
CAUTION:

- HYTEC-100 must only be installed by qualified specialists using power−supply guidelines.
- All safety measures and electrical contact protection in the connection area is to be ensured through proper installation.
- The technical specifications on the name plate must be observed.
- HYTEC-100 must not be repaired.

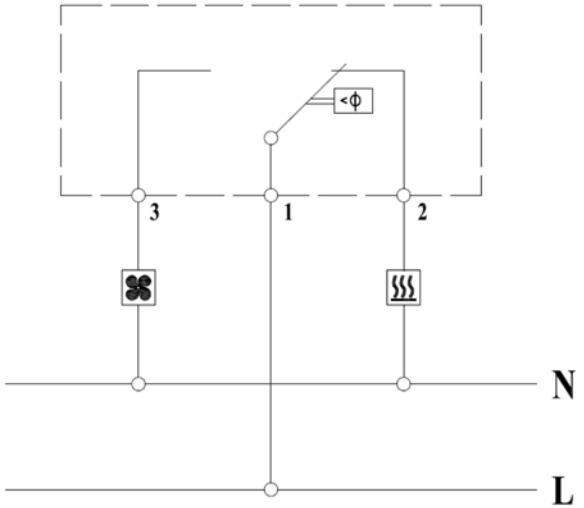
HYTEC-100 is used in order to switch on heaters or signal devices if an adjustable or preset humidity value is exceeded. HYTEC-100 must only be used in stationary, closed electric cabinets.

- HYTEC-100 should be installed as far as possible from heaters or other heat generating components.
- HYTEC-100 must not be covered.
- HYTEC-100 must not be operated in environments with aggressive atmospheres.
- HYTEC-100 is snap−mounted onto a 35 mm mounting rail according to EN50022.
- HYTEC-100 is to be installed vertically, i.e. with the connection terminals at the bottom.
- Operating temperature from 10 to +40 °C (+50 to 104 °F)
- Storage temperature from −40 to +60 °C (−40 to 140 °F)
- 3-Pole screw terminal for wires section of 0.75/4 mm² - AWG 18/12.

Dimensional Drawing



Wiring Diagram



Ariel Technology Inc.
www.arieltech.ca **info@arieltech.ca**

CERTIFICATE OF COMPLIANCE

Certificate Number	20170504-E484831
Report Reference	E484831-20170503
Issue Date	2017-MAY-04
Issued to:	Ariel Technology Inc 1111 Gorham Street, Unit 9 Newmarket ON L3Y 8X8 CANADA
This is to certify that representative samples of	COMPONENT - TEMPERATURE-INDICATING AND - REGULATING EQUIPMENT See addendum page
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	See addendum page
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

CERTIFICATE OF COMPLIANCE

Certificate Number	20170504-E484831
Report Reference	E484831-20170503
Issue Date	2017-MAY-04

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Operating Control, Thermostat: Models TTEC-100 and TTEC-200
Hygrostat: Model HYTEC-100

Standard(s) for Safety:
UL 60730-1, Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements

UL 60730-2-9, Automatic Electrical Controls for Household and Similar Use, Part 2-9: Particular Requirements for Temperature Sensing Controls

UL 60730-2-13, Automatic Electrical Controls for Household and Similar Use, Part 2-9: Particular Requirements for Humidity Sensing Controls

CAN/CSA-E60730-1:15, Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements

CAN/CSA-E60730-2-9:15, Automatic Electrical Controls for Household and Similar Use, Part 2-9: Particular Requirements for Temperature Sensing Controls

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Certificate of Compliance

Certificate: 80012071 **Master Contract:** 300557

Project: 80012071 **Date Issued:** 2019-08-22

Issued To: **Ariel Technology Inc.**
9- 1111 Gorham Street
Newmarket, Ontario, L3Y 8X8
Canada

Attention: Ali Malekpour

The products listed below are eligible to bear the CSA Mark shown

Issued by: Grace Gao
Grace Gao

PRODUCTS

CLASS - C482351 - TEMPERATURE INDICATING AND REGULATING EQUIPMENT Appliance Type Controls - Temperature Controls
CLASS - C482387 - TEMPERATURE-INDICATING AND REGULATING EQUIP.-Appliance Type Temperature Controls-Cert to US Stds

Operation control, thermostat, models TTEC-100 and TTEC-200, 125Vac, 60Hz, 15A; 30,000 cycles; Operation ambient temperature: -20ºC to 80ºC

Hygrostat, model HYTEC-100, 120/240Vac, 12 /6A resistive; 10/5 FLA, 45/22.5 LRA, inductive; 30,000 cycles; Operation ambient temperature: 10ºC to 40ºC

Note:

1. The controls above have not been evaluated for safety or limiting applications or to provide protection for the connected loads.
2. The controls above are evaluated as component only which shall be installed in compliance with the enclosure, mounting, spacing, and segregation requirements of the ultimate application.

APPLICABLE REQUIREMENTS

CSA requirements:
CAN/CSA-E60730-1:15 - Automatic Electrical Controls for Household and Similar Use - Part 1: General Requirements - Third Edition
CAN/CSA-E60730-2-9:15 - Automatic Electrical Controls for Household and Similar Use - Part 2-9: Particular Requirements for Temperature Sensing Controls - Second Edition

UL requirements:
UL 60730-1 - Automatic Electrical Controls for Household and Similar Use; Part 1: General Requirements - Fifth Edition
UL 60730-2-9 - Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Temperature Sensing Controls - Fourth Edition
UL 60730-2-13 - Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Humidity Sensing Controls - Third Edition

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EC Declaration of Conformity

Ariel Technology Inc. declares that their Thermostats (**TTEC-100** and **TTEC-200** series) and Hygrostat (**HYTEC-100**) are designed and constructed according to the Essential Health & Safety requirements of the following European directives:

Low-Voltage Directive 2014/35/EU
Electromagnetic Compatibility 2014/30/EU

The following European harmonized standards have been applied:

EN 60730-1, Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements

EN 60730-2-9, Automatic Electrical Controls for Household and Similar Use, Part 2-9: Particular Requirements for Temperature Sensing Controls

EN 60730-2-13, Automatic Electrical Controls for Household and Similar Use, Part 2-9: Particular Requirements for Humidity Sensing Controls

R&D Department
Ariel Technology Inc.
Feb 09, 2018

Subject to change without notice

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