JEAc

LOW COST CONNECTABLE ELECTRONIC TEMPERATURE CONTROLLER WITH BUILT-IN LED DISPLAY

DESCRIPTION

The JEAc provides accurate temperature control and advanced defrost for all commercial refrigeration, display cabinets and freezers. The JEAc optimises the operation of the cooler to match store opening times from the detection of store activity (through door opening) and adjusts the temperature and light operation accordingly.
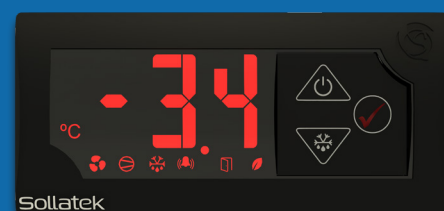
The JEAc delivers flexibility and complete control with up to 3 outputs, 3 input sensors, and nearly 100 configurable parameters via the PC software or built-in display, ensuring the cooler's operations match store requirements. The JEAc is HC compatible with Hydro-Carbon-rated materials.

The JEAc provides intricate operation whilst encapsulating simplicity for the user with simple installation and setup, an easy-to-read and user-friendly display panel and effortless integration with the cooler's branding.

The JEAc can be connected to the Sollatek GMC4 connectivity device to provide remote monitoring, configuration and asset location via the online portal and phone application. Data from the JEAc can be used for sales/customer insights as well as health monitoring and early fault detection to reduce cooler downtime. Service personnel can also remotely configure and update the JEAc to always ensure precise control and operation.

FEATURES

- Precise electronic temperature controller for commercial coolers, fridges, and freezers
- Energy saving via the door switch
- Time and/or temperature-controlled defrost
- Controls up to 3 outputs including compressor, fans, lights & heater
- Measurements from 2 temperature sensors and a door switch
- 3-digit display with 6 status icons and 2 temperature unit indicators
- 3 control buttons
- Display LEDs and front faceplates available in a range of colours
- Flexible, discreet installation via front screw or rear mounting clips
- IP65 front for washdown
- Intelligent time delays for compressor off periods including brownouts
- TIMESAVE™ Function - voltage sensing period before reconnecting supply after a bad voltage disconnection
- Zero voltage crossing switching for long relay life
- Hydrocarbon refrigerants compatible
- Cooler lockout after a prolonged high temperature to alert staff the cooler needs attention and contents may need to be checked
- Connects to the Sollatek GMC42 to provide remote monitoring and asset location
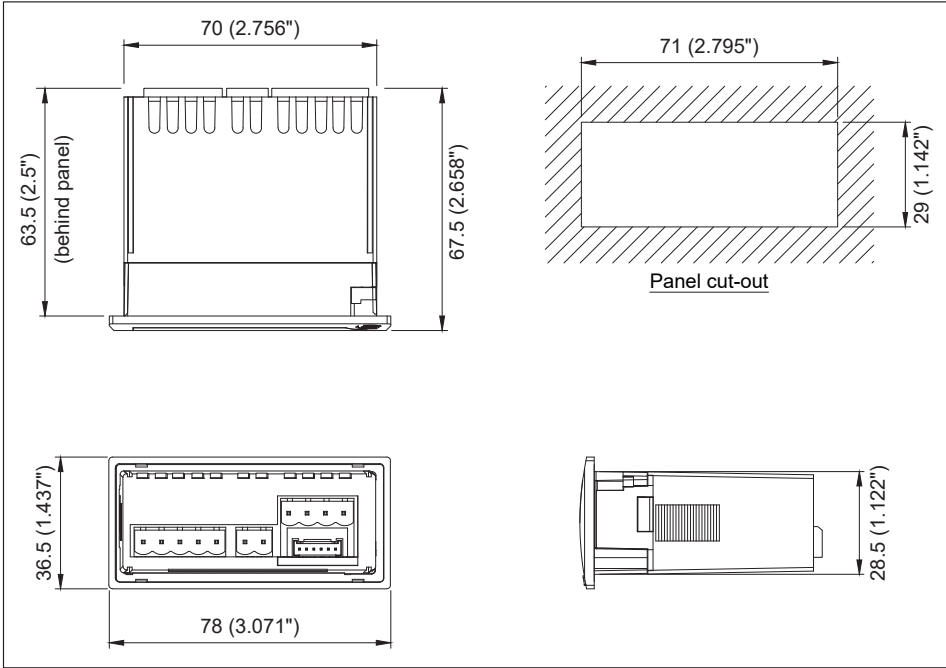
FEATURES

ENERGY E&S SAVING | DEFROST | 16 AMPS UP TO

LIGHT CONTROL | FAN CONTROL | DIGITAL DISPLAY

USER ADJUSTABLE | START UP DELAY | PROGRAMABLE

SPLASH PROOF | MICROPROCESSOR CONTROL

FEATURES WITH GMC42

4G | GSM | Bluetooth

WiFi | RECHARGEABLE
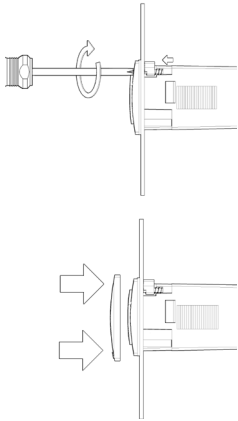
TECHNICAL SPECIFICATION

REFRIGERATION CONTROL

Temperature Control Method	2x Temperature sensor for Air and Evaporator/condenser/ambient
Temperature Probe Type	10 KΩ NTC ($\beta_{25/85}$: 3435 k)
Temperature Control Range	-50°C to +90°C (-58°F to +194°F)
Temperature Time Delay	1 - 255 s
Defrost Control	Timed (Real-time, accumulated, continuous), Temperature, Manual
Defrost Type	Active (Heater or Hot Gas), Natural, Disabled
Energy Saving	Temperature Set-back (Eco mode), Fan Cycling, Lights OFF
Other Input Type	1x Door Switch, PIR or Humidity Sensor
Output Control	Compressor, Evaporator Fan, Lights, Defrost/Winter Heater
Compressor Relay Rating	16 A, 250 V
Relay #2 Rating	5 A, 250 V
Relay #3 Rating	5 A, 250 V
Intelligent Time Delay	0 - 300 s
Refrigerant Compatibility	CO_2 & Hydrocarbon

USER INTERFACE

Display Type	3 x 7 Segment LED digits
Digit Height	16 mm
Colours	Red, Blue, White, Green & Yellow
Status Indicators	Fan, Compressor, Defrost, Alarm, Door, Eco Celsius, Fahrenheit
Buttons	3x Membrane Push Buttons

POWER & VOLTAGE PROTECTION

Nominal Voltage	230 VAC	115 VAC	12 VDC	24 VDC
Operating Voltage	185-260 VAC	90-140 VAC	11-18 VDC	18-30 VDC
Frequency Range	50/60 Hz			
Type of Protection	Undervoltage/Overvoltage & Frequency			
Disconnect / Reconnect Voltage	Configurable based on nominal voltage			
Voltage Protection Accuracy	±5 V (AC variants) ±1V (DC variants)			
High / Low Voltage Blind Time	0 - 25 s			
Over Voltage Category	Category II			

CONNECTORS

Power Connector	2-way pluggable screw terminal (cable CSA 1.5mm²)
Output Connector	5-way pluggable screw terminal (cable CSA 1.5mm²)
Input Connector	4-way screw pluggable terminal (cable CSA 1.5mm²)
Data Interface	7-way connector

ENVIRONMENTAL

Front IP Rating	IP65
Operating Temperature	-20°C to +60°C (4°F to +140°F)
Operating Humidity	<90% RH non-condensing

CERTIFICATION / STANDARDS

Product Certification	CE, IEC60730-1, IEC60730-2-9, EN60079-15
Flammability	UL94 5VA @ 3 mm, GWFI: 960 °C @ 2mm
Pollution Degree	2

MECHANICAL

Mounting	Front mounting with screws or rear mounting with clips (sold separately)
Unit Dimensions	78.0 x 36.5 x 67.5 mm
Unit Weight	Approx. 100 g

PACKING

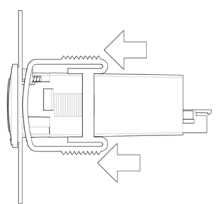|		
Carton Quantity	100 units	
Carton Dimensions (L x W x H)	511 x 560 x 243 mm	
Carton Gross Weight	Approx. 15.0 kg	
	Air Freight	Sea Freight
Cartons per Pallet	20 (2000 units per pallet)	28 (2800 units per pallet)
Pallet Dimensions (L x W x H)	1200 x 1020 x 1400 mm	1200 x 1020 x 1840 mm
Pallet Gross Weight	Approx. 315kg	Approx. 435 kg

DIMENSIONAL DRAWING

70 (2.756")

63.5 (2.5") (behind panel)

67.5 (2.658")

71 (2.795")

29 (1.142")

Panel cut-out

36.5 (1.437")

78 (3.071")

28.5 (1.122")

Front Screw Mounting

Rear Clip Mounting

WIRING DIAGRAM - REAR PLUGGABLE SCREW TERMINALS

| 8 | 9 | 10 | 11 |

| 1 | 2 | 3 | 4 | 5 | | 6 | 7 |

L
N

L   N

Connectivity /
Programming
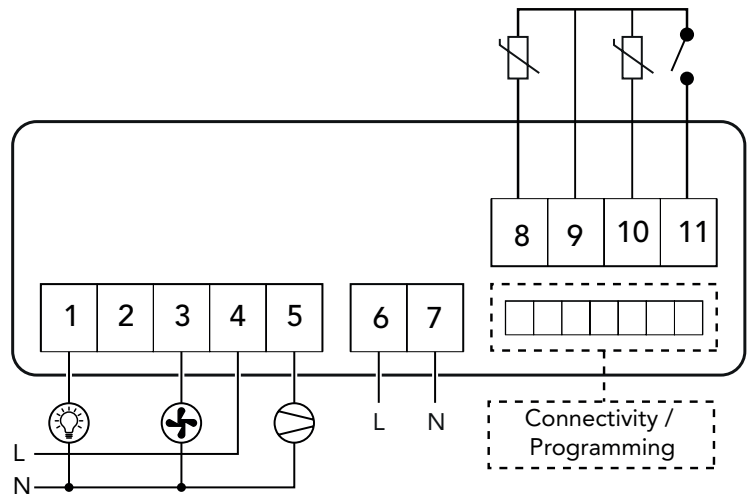
JEA Rear Panel - Terminal Connectors

JEA Rear Panel - Plug-In Screw Terminals
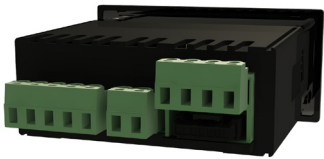
CONNECTIVITY & GEOLOCATION

The GMC42 is an advanced, all-in-one plug-in connectivity device which upgrades the JEAc with always-on and proximity connectivity (2G, LTE-M, NB-IoT & BLE) for complete fleet management and asset tracking. GSM and Bluetooth provide detailed technical and marketing analysis via the Sollatek smart device application and the online portal. Wi-Fi provides precise cooler location. A rechargeable battery allows GMC42 to transmit data and location without mains power.

- Asset Tracking
- Sales & Marketing Data
- Technical Diagnostics
- Consumer Engagement

MODEL SELECTION

| J | E | A | c | - | X | Y | Z | V |

X	Y	Z	V
LED Colour	Number of Relay	Button Type	Nominal Voltage
R = Red B = Blue G = Green W = White Y = Yellow	2 = (16 A + 5 A) 3 = (16 A + 2x5 A)	Blank = Domed F = Flat	1 = 230 VAC 2 = 115 VAC 1d = 12 VDC 2d = 24VDC

Stock No	Description
924CR210	JEAC-R2 RED 2XO/P 115V
924CR220	JEAC-R2 RED 2XO/P 230V
924CR310	JEAC-R3 RED 3XO/P 115V
924CR320	JEAC-R3 RED 3XO/P 230V
924CR3D1	JEAC-R3 RED 3XO/P 12VDC
924CR3D2	JEAC-R3 RED 3XO/P 24VDC