

## Electronic Refrigeration Control - Refrigeration Controller, 3 NTC/PTC Sensors, 1 Digital Input,, 100-240 VAC, Screw Terminals, RS485

Item BD1-28C1S5W-BI



### PRODUCT DESCRIPTION

Split Controllers are designed to excel in more demanding applications and provide additional control options for more complex equipment. These controllers can be mounted to a wiring chase or with the refrigeration equipment, eliminating the need for long runs of control wiring. \*Controller, cable and display must each be ordered separately

### FEATURES

- ▶ Multivoltage
- ▶ Remote mounting
- ▶ Remote connectivity
- ▶ Manage multiple alarms
- ▶ Heating or cooling

### APPLICATIONS

- ▶ Ice Refrigeration Machine
- ▶ Reach-In Refrigeration Cooler

### TECHNICAL DATA

#### General

Model Number	BD1-28C1S5W-BI
Description	Refrigeration Controller, 3 NTC/PTC Sensors, 1 Digital Input,, 100-240 VAC, Screw Terminals, RS485
UPC Code	078275150942
Brand	LAE
Country of Origin (Intermatic)	ITALY
Warranty Period	5-Year limited

#### Control Specifications

Minimum Cycle Time	1 min
Mechanism Type	Electrical
Defrost LED Indicator	Red
Has Real-time Clock Face	No
Application Compatibilities	Commercial Refrigeration; Walk-in Cooler; Walk-in Freezer

#### Mechanical Specifications

Mounting Options	DIN
Enclosure Type	IP55 Front

#### Dimensions

Product Dimensions (H x W x D) in	1.81 x 4.13 x 2.76 in
Panel Opening Height (in)	1.14
Panel Opening Height (mm)	29
Panel Opening Width (in)	2.80
Panel Opening Width (mm)	71
Cut-Out Width (in)	2.80

Cut-Out Width (mm)	71
Cut-Out Height (in)	1.14
Cut-Out Height (mm)	29
Wire Size Max	#10 AWG

### Load Ratings

Resistive Load Ratings Ranges Compressor	16 (8) A @ 240 VAC
Resistive Load Ratings Ranges Defrost	16 (4) A @ 240 VAC
Resistive Load Ratings Ranges Fan	16 (4) A @ 240 VAC
Resistive Load Ratings Ranges AUX1	7 (2) A @ 240 VAC
Resistive Load Ratings Ranges AUX2	7 (2) A @ 240 VAC

### Electrical Specifications

Voltage Selection Type	Auto Voltage
Wiring Option	Screw terminal block
Input Voltage Range(s)	100-240 VAC $\pm$ 10%, 50/60 Hz
Number of Circuits Controlled	5
Electrical Life	100,000 operations at full load
Relay Type Compressor	SPST
Relay Type Defrost	SPST
Relay Type Fan	SPST
Relay Type AUX1	SPST
Relay Type AUX2	SPST

### Display and Format

Clock Display Types	LED
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### Packaging

Shipping Weight (lbs)	0.62
Unit Carton Dimensions (H x W x L) in	2.8 x 3.6 x 4.8 in
Product Weight (kg)	0.26
Product Weight (lbs)	0.57

### Environmental Specifications

Storage Temperature Min (°F)	14
Storage Temperature Max (°F)	122
Storage Temperature Min (°C)	-10
Storage Temperature Max (°C)	50
Operating Humidity	0-80% RH, Non-condensing
Temperature (operation)	14 °F to 122 °F / (-10 °C to 50 °C)

### Standards and Certifications

RoHS Directive	2011/65/EU.
UL Certification	UL60730-1
Other Certifications and Compatibilities	Title 24 LAE; NSF
UL File Number	#SA32385

California Proposition 65

Lead; DEHP; Nickel

RoHS Certification

Yes

**ACCESSORIES**



SN4B50P1  
Temperature Probe, NTC 10k probe, 5.0 m,  
Gray



SN4B30P1  
Temperature Probe, NTC 10k probe, 3.0 m,  
Gray



SN4B20P1  
Temperature Probe, NTC 10k probe, 2.0 m,  
Gray



SN4B20P2-B  
Temperature Probe, NTC 10k probe, 2.0 m,  
Blue



SN4B20P3-Y  
Temperature Probe, NTC 10k probe, 2.0 m,  
Yellow



SN4B30P2-B  
Temperature Probe, NTC 10k probe, 3.0 m,  
Blue



SN4B30P3-Y  
Temperature Probe, NTC 10k probe, 3.0 m,  
Yellow



SN4B50P2-B  
Temperature Probe, NTC 10k probe, 5.0 m,  
Blue



SN4B50P3-Y  
Temperature Probe, NTC 10k probe, 5.0 m,  
Yellow



DU5S-11  
Display, BD1-28, BR1-28



LCD-5S-11  
Display, BIT25