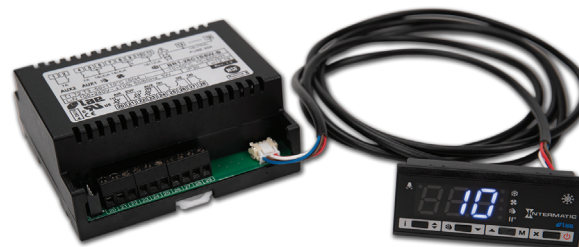


BD1-28

107 mm x 95 mm x 47 mm D

Split Comprehensive Refrigeration Controller



Main Features

- Refrigeration controller with cyclic defrosts
- Enhanced ECO energy saving management
- Optional compressor variable speed control
- Suitable for R290
- Up to 2 auxiliary configurable outputs (light, switched loads, second evaporator etc.)
- Universal mains power supply
- Connectivity to hard-wired supervisory systems
- Many display options: coloured LED's with DU5S, capacitive touch TU5S or high contrast LCD, fully customised
- UL approved

Applications

Upright refrigerators, plug-in and supermarket display cases, cold stores, control panels.

BD1-28 Series

Functions		B0Q3W-AI	C1S4WH-BI	C1S5W-BI
Temperature Inputs	Thermostat	✓	✓	✓
	Evaporator	✓	✓	✓
	Auxiliary		✓	✓
Di1, Di2 Digital Inputs	Voltage Free Contact	✓	✓	✓
Di3 Aux. Digital Input	Voltage Free Contact/ Defrost Synchronization		✓	✓
Outputs	Thermostat	✓	✓	✓
	Evaporator Fans	✓	✓	✓
	Defrost	✓	✓	✓
	Auxiliary 1		✓	✓
	Auxiliary 2			✓
Connections	Quick with M/F Connectors	✓		
	Screw Terminals		✓	✓
Power Supply	100÷240 Vac	✓	✓	✓
R290 Option			✓	
Aux Functions	TTL Serial Port	✓		
	RS485 Serial Port		✓	✓

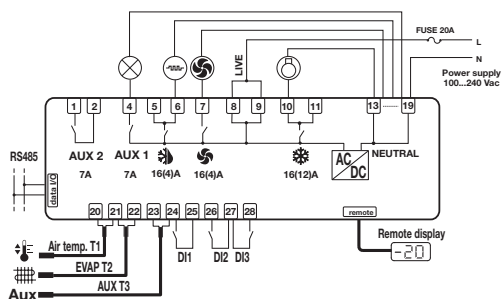
Notes

All models come with an alarm buzzer.

For more available options, please contact Intermatic customer service: +1 815 675 7000

Technical Data

Range	-50÷110° C, -58÷180° F
Resolution	0.1 / 1 ° C; ° F
Precision	<±0.5° C within the measurement range
Sensor Type	Mod. standard SN4B20P1/P2/P3
Power Supply	100÷240 Vac, ±10%, 50÷60 Hz, 3 W
Ambient Temperature	-10÷50° C



BD1-28C1S5W-B

Standard Models

Standard Models	Description	Sensor Inputs	Digital Inputs	Terminal Connection	Outputs	Power Supply	Communications	Overlay	Relays
BD1-28C1S5W-BI	REF Controller, 3 NTC/PTC, 1 BI, 5 rly, 100-230 Vac, Screw Terminals, RS485	3	1	Screw	Compressor (16(12)A) Defrost (16(4)A) FANS (16(4)A) AUX Relay (7(2)A) AUX Relay (7(2)A)	100-230 Vac	RS485	Standard	Standard



Unique Applications

In addition to our standard models, LAE by Intermatic offers a wide range of configuration options that allow customers to customize controls to fit their unique needs and applications. The table below highlights all of the available customization options.

Product Matrix

Model Prefix	Code Letter / Number	Description	BD1-28	C	1	S	5	W	H	B
Inputs	B	Thermostat Evaporator Probe								
	C	Thermostat Evaporator Probe AUX Probe								
Digital Aux Inputs	0	None								
	1	Present								
Connectors	Q	Quick Connect Terminals								
	S	Screw Terminals								
Outputs	2	Compressor (16(12)A) FANS (16(4)A)								
	3	Compressor (16(12)A) Defrost (16(4)A) FANS (16(4)A)								
	4	Compressor (16(12)A) Defrost (16(4)A) FANS (16(4)A) AUX Relay (7(2)A)								
	5	Compressor (16(12)A) Defrost (16(4)A) FANS (16(4)A) AUX Relay (7(2)A) AUX Relay (7(2)A)								
Power Supply	E	230 Vac								
	L	7 to 30 Vdc								
	W	100 to 230 Vac								
Relay Type		Standard Relays								
	H	Sealed Relays (Propane)								
Communications	-	None								
	-A	TTL Serial Port								
	-B	RS485 Serial Port								
	-C	Zigbee Module								

* Note: Not all configurations are available for each model.