



Reliability You Trust

# EFFECTIVE

control in a touch



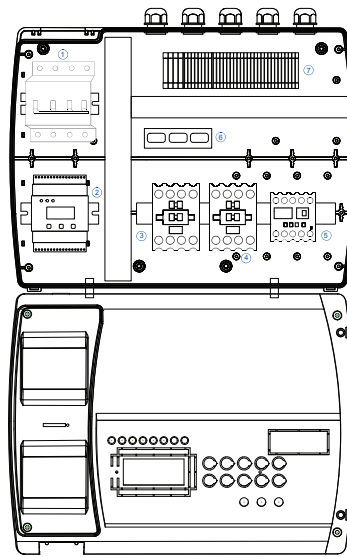






# CONTROL PANELS

The Smart Temperature Control Panel is an advanced solution designed specifically for commercial refrigeration systems, supporting compressors of up to 28 HP. This state-of-the-art control panel combines innovation, user accessibility, and unwavering reliability to ensure optimal performance in temperature regulation. Its user-friendly interface makes it accessible for operators, while robust components ensure long-lasting performance. Whether in supermarkets, cold storage facilities, or industrial kitchens, the Smart Temperature Control Panel provides seamless control, safeguarding your perishable goods with maximum efficiency.



HOUSING ENCLOSURE

## DESCRIPTION :

- 1 : INCOMER MCB 40 A - 1 NO
- 2 : LVM (VMRC-10/3) - 1 NO
- 3 : COMP. CONTACTOR 18A - 1 NO
- 4 : DEF. CONTACTOR 18A - 1 NO
- 5 : EVAP. CONTACTOR 9A - 1 NO
- 6 : CT BOARD WITH 20A CT - 1 NO
- 7 : CONNECTOR TERMINAL - 40 NOS



### INTEGRATED

Supportive and faithful to ethical values



### RESOLUTE

Always strive for improvement



### EFFICIENT

Surpass expectations every time



### CREATIVE

Innovate to shape technology



### SUSTAINABLE

Support both global and local ecosystems



### PASSIONATE

Stay motivated, pursue triumph



### QUALITATIVE

See. Understand. Adapt. Execute.



### CUSTOMER CENTRIC

Turn problems into solutions



Features	CRC-2070	CRC-2072
Display	"14 Segment Display 4 x 32mm (1.26") Amber + 7 Segment Display 4 x 13mm (0.51") Green"	"14 Segment Display 4 x 32mm (1.26") Amber + 7 Segment Display 4 x 13mm (0.51") Green"
Power Supply	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire
Load Type	Three Phase	Three Phase
Probe Input	2 NTC: Room, Evaporator	2 NTC: Room, Evap1, Evap2(Optional), HACCP, AUX
Analog Input	3 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase	5 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase, Evap1, Evap2 (Optional)
Digital Input	"HP, LP, SPPR, AUX1, AUX2, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"	"HP, LP, SPPR, AUX1, AUX2, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"
Temperature Range	-50.0°C to +50.0°C	-50.0°C to +50.0°C
Temperature Resolution	0.1°C / 1.0°C	0.1°C / 1.0°C
Current Resolution	0.1A	0.1A
Compressor Contractor	3 Pole + 1 Aux, 400 V, 18A (230V Coil)	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Defrost1 Contactor	3 Pole + 1 Aux, 400 V, 18A (230V Coil)	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Defrost2 Contactor	-	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Evap Fan1 Contactor	3 Pole + 1 Aux, 400 V, 9A (230V Coil)	3 Pole + 1 Aux, 400 V, 9A (230V Coil)
Evap Fan2 Contactor (Optional)	-	3 Pole + 1 Aux, 400 V, 9A (230V Coil)
Relay Output	LSV: 10A Condenser: 20(8)A Light: 5A"	LSV: 10A Condenser: 20(8)A Light: 5A"
Alam Output	Alarm 5A & Internal Buzzer	Alarm 5A & Internal Buzzer
Serial Output	RS-485 (for PC Connectivity)	RS-485 (2 Nos. for BMS & Remote Display)
WiFi	-	Parameter Setting via Web Server/IoT
Main Switch General Protection	4 Poles MCB	4 Poles MCB
LVM	4 Wire Voltage Monitoring & Protection	4 Wire Voltage Monitoring & Protection
Size	400 x 300 x 135mm	400 x 300 x 135mm
Mounting Type	Wall Mount	Wall Mount



Features	CRC-2020	CRC-2052
Display	4 Digit, 1" Dot Matrix Display + LED Indications	4 Digit, 1" Dot Matrix Display + LED Indications
Power Supply	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire
Load Type	Three Phase	Three Phase
Probe Input	2 NTC: Room	2 NTC: Room, Coil
Analog Input	3 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase	3 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase
Digital Input	"HP, LP, SPPR, AUX / CTH, OPS, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"	"HP, LP, SPPR, AUX / CTH, OPS, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"
Temperature Range	-50.0°C to +50.0°C	-50.0°C to +50.0°C
Temperature Resolution	0.1°C	0.1°C
Current Resolution	0.1A	0.1A
Compressor Contactor	3 Pole + 1 Aux, 400 V, 18A (230V Coil)	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Defrost Contactor	-	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Evaporator Fan Contactor	-	3 Pole + 1 Aux, 400 V, 9A (230V Coil)
Relay Output	Evaporator: 5A LSV: 10A Light: 5A"	Condenser: 10A LSV: 10A Light: 5A"
Alam Output	Alarm 5A & Internal Buzzer	Alarm 5A & Internal Buzzer
Serial Output	RS-485	RS-485
Main Switch General Protection	4 Poles MCB	4 Poles MCB
LVM	4 Wire Voltage Monitoring & Protection	4 Wire Voltage Monitoring & Protection
Size	400 x 300 x 135mm	400 x 300 x 135mm
Mounting Type	Wall Mount	Wall Mount
Application	Cold Room	Cold Room
Size	400 x 300 x 135mm	400 x 300 x 135mm
Mounting Type	Wall Mount	Wall Mount



Features	CRC-5022	CRC-5020
Display	Customized Display 3 Digit White Display	"2 x 17mm 7 Segment Display 1 x 11mm 7 Segment Display 8 LEDs for Indication"
Power Supply	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire	440V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire
Load Type	-	Three Phase
Probe Input	2 NTC: Control, Coil	1 NTC
Analog Input	1 x CT (Comp_CT_20A/50A)	-
Digital Input	"2 x Potential Free (Door Open & Auxiliary) 4 x 230V AC (Phase Sensing (HP, LP, SPPR, VPR))"	1 x Potential Free (Auxiliary)
Temperature Range	-50.0°C to +50.0°C	-45.0°C to +99.9°C
Temperature Resolution	0.1°C	0.1°C
Current Resolution	0.1A	-
Compressor Contractor	3 Pole + 1 Aux, 400 V, 18A (230V Coil)	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Relay Output	"Evaporator: 20 (8) A Condensor: 20 (8) A"	-
Alarm Output	"Alarm/Light: 10A Internal Buzzer"	"1 x 12V DC External Buzzer"
Serial Output	RS-485	-
Main Switch General Protection	4 Poles MCB	4 Poles MCB
Phase Protection	VPR	-
Size	330 x 230 x 121.5mm	330 x 230 x 121.5mm
Mounting Type	Wall Mount	Wall Mount
Application	Cold Room	Cold Room



Features	CRC-202000S	CRC-205200S
Display	4 Digit, 1" Dot Matrix Display + LED Indications	4 Digit, 1" Dot Matrix Display + LED Indications
Power Supply	415V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire	415V AC $\pm$ 10% 50-60Hz 3 Phase 4 wire
Load Type	Three Phase	Three Phase
Probe Input	2 NTC: Room	2 NTC: Room, Coil
Analog Input	3 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase	3 CTs (0.0 to 20.0A): Comp R Phase, Comp Y Phase, Comp B Phase
Digital Input	"HP, LP, SPPR, AUX / CTH, OPS, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"	"HP, LP, SPPR, AUX / CTH, OPS, R-Phase, Y-Phase, B-Phase (Potential) Door Input (Potential Free)"
Temperature Range	-50.0°C to +50.0°C	-50.0°C to +50.0°C
Temperature Resolution	0.1°C	0.1°C
Current Resolution	0.1A	0.1A
Compressor Contactor	3 Pole + 1 Aux, 400 V, 18A (230V Coil)	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Defrost Contactor	-	3 Pole + 1 Aux, 400 V, 18A (230V Coil)
Evaporator Fan Contactor	3 Pole + 1 Aux, 400 V, 9A (230V Coil)	3 Pole + 1 Aux, 400 V, 9A (230V Coil)
Relay Output	"Evaporator: 5A LSV: 10A Light: 5A"	"Condenser: 10A LSV: 10A Light: 5A"
Alam Output	Alarm 5A & Internal Buzzer	Alarm 5A & Internal Buzzer
Serial Output	RS-485	RS-485
Main Switch General Protection	4 Poles MCB	4 Poles MCB
LVM	4 Wire Voltage Monitoring & Protection	4 Wire Voltage Monitoring & Protection
Size	450 x 400 x 200mm	450 x 400 x 200mm
Mounting Type	Wall Mount	Wall Mount
Application	Cold Room	Cold Room



Features	ECB-2030W(4G/WiFi)
Controlled Load	Compressor, defroster, air cooler
supply voltage	Three phase five/four wire 380VAC $\pm$ 10% 50/60
Applicable compressor types	Piston engine, vortex engine
Compressor power	5HP, 10HP, 15HP
Compressor contactor size	18A(5HP), 25A(10HP), 32A(15HP)
Compressor start-up mode	Direct Start
Condenser type	forced air cooling
Cold storage type	Wind turbine hangar
Defrosting method	Electrochemical Frost
Temperature Control Range	-40°C ~ 85°C
Temperature control accurac	$\pm$ 1°C
display resolution	0.1°C
Temperature sensor type	NTC(10K $\Omega$ /25°C, B 3435K)(Sensor length 5 meters)
Compressor protection output	Adjustable from 1 to 120 minutes
Frost initiation method	Periodic defrosting and clock defrosting modes are optional
External signal protection	2 external signal inputs
motor protector	Yes
Current measuring range	0~80A ,Equipment with instantaneous current exceeding 230A is not
Accuracy of current measure	$\pm$ 3% (Within the nominal range of the transformer)and $\pm$ 2A(0 ~ 30A)
Current display resolution:	0.1A
5-15HPsize (W*H*D)	520*329*140mm
Box color	white
Usage environment	Temperature: -10°C ~ 60°C; humidity: 20% ~ 90%RH





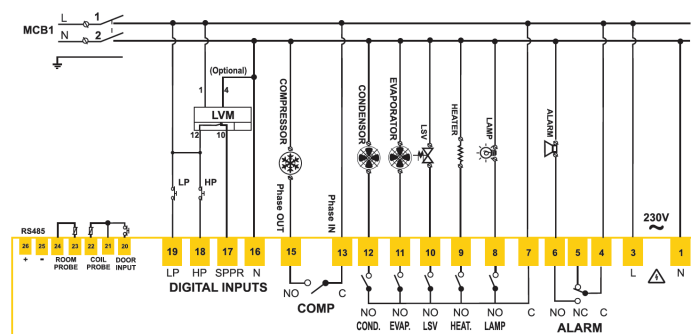
Features		ECB-1000PLUS CLOUD
Measuring range		-49 - 119°C
Temperature Control Range		-40 - 99°C
Temperature measurement accuracy		"±1°C (-20 - 50°C), ±1.5°C
temperature resolution		0.1°C, 1°C, 1F
Voltage range		100 - 256VAC 50/60Hz
Overall Power Consumption		12W
Circuit breaker capacity		25A
Analog input	Temperature probe	●
	Frost probe	●
Digital Output	compressor	3Hp
	DEFROST	30A
	fans	16A
	light	16A
	alarm	10A
Defrosttype	Electrochemical Frost	●
	Thermal defrosting	●
Defrosting method	periodicity	●
	Real Time Clock	●
Other features	Clock function	●
	Buzzer alarm	●
	High and low temperature alarm	●
	Temperature unit CF	●
	Energy saving mode	●
	Display decimals	●
	Menu password	●
mmunication interfa	RS-485	●
	Upper computer software	●
Networking function	WiFi (2.4GHz)	●
	4G	●
	4Glength of antenna	3*
Ambient Temperature		-10 - 65°C
storage temperature		-20 - 75°C
size (mm)		261x167.5x95

"Note: (1) Can be set as door switch, light control, high and low voltage alarm, external alarm;  
 (2) Can be set as unit protection and human in cold storage."



Features	CRC-1200
Display	7 Segment LED Display, 2 x 25.4mm (1") + 16 x 2 LCD
Power Supply	230V
Probe Input	NTC
Digital Input	"HP, LP, SPPR (Potential) Door Input (Potential Free)"
Temperature Range	-50°C to +35°C
Temperature Resolution	1°C
Relay Output	"Compressor: 8(3)A Defrost : 8(3)A Condenser: 8(3)A Evaporator: 8(3)A LSV: 8(3)A Light: 8(3)A"
Alarm Output	Alarm 8(3)A & Internal Buzzer
Serial Output	RS-485
Size	220 x 227mm
Mounting Type	Wall Mount
Panel Cutout	-
Application	Cold Room

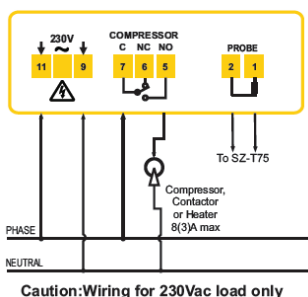
### CRC-1200



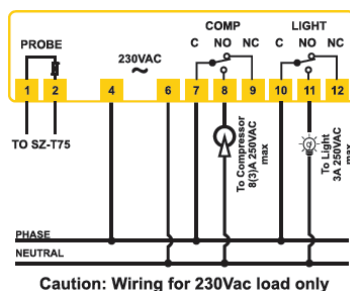


Features	SZ-7510-WV	SZ-7511-WV	SZ-7529-WV	SZ-7524-WV
Display	7 Segment LED Display, 3 x 14.2mm (0.56")	7 Segment LED Display, 3 x 14.2mm (0.56")	7 Segment LED Display, 3 x 14.2mm (0.56")	7 Segment LED Display, 3 x 14.2mm (0.56")
Power Supply	230V	230V	230V	230V
Probe Input	NTC	NTC	NTC	NTC
Digital Input	-	-	-	-
Temperature Range	"40°C to +99°C -40°C to +50°C"	"40°C to +99°C -40°C to +50°C"	-40°C to +50°C	-40°C to +50°C
Temperature Resolution	0.1°C/1.0°C	0.1°C/1.0°C	0.1°C	0.1°C/1.0°C
Relay Output	Compressor: 8(3)A	"Compressor: 8(3)A Light: 5A"	Compressor: 20A	"Compressor: 8(3)A Defrost: 8(3)A Light: 5A"
Alam Output	-	-	-	External Buzzer
Serial Output	-	-	-	-
Size	80 x 126mm	80 x 126mm	80 x 126mm	80 x 126mm
Mounting Type	Wall Mount	Wall Mount	Wall Mount	Wall Mount
Panel Cutout	-	-	-	-
Application	Cold Room	Cold Room	Cold Room	Freezer, Cold Room

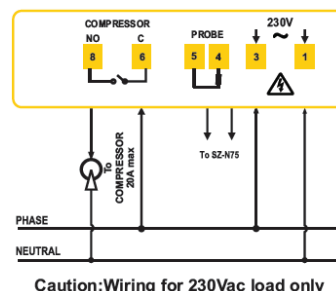
#### SZ-7510-WV



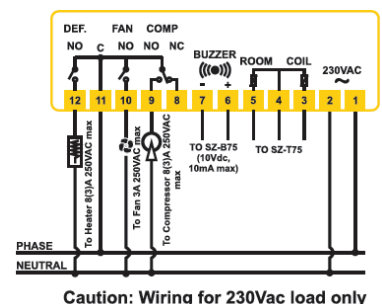
#### SZ-7511-WV



#### SZ-7529-WV

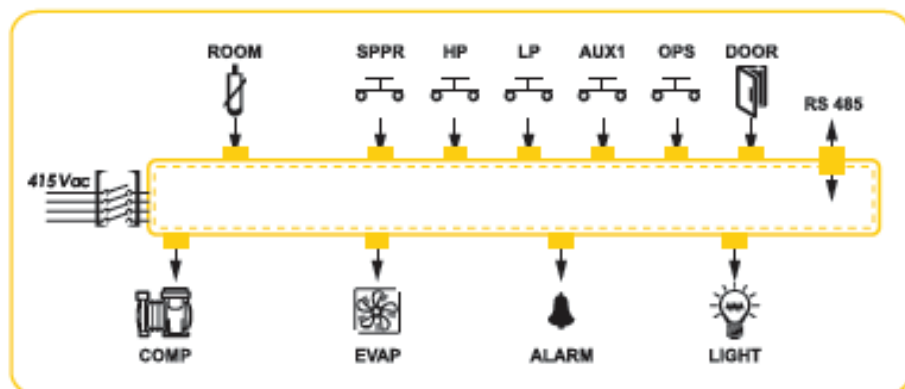


#### SZ-7524-WV

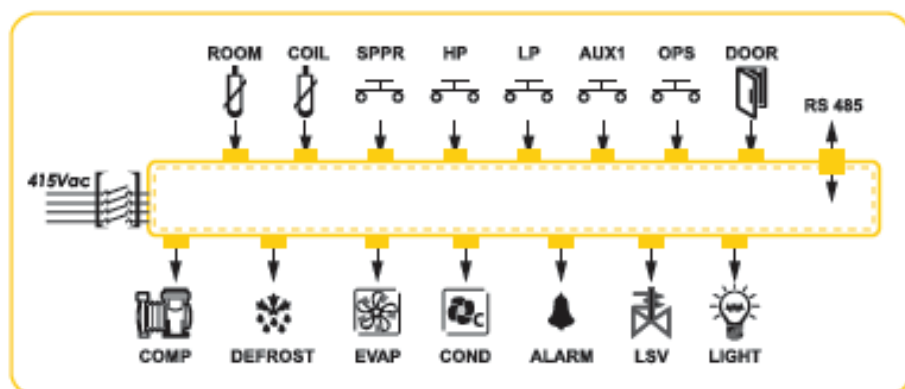




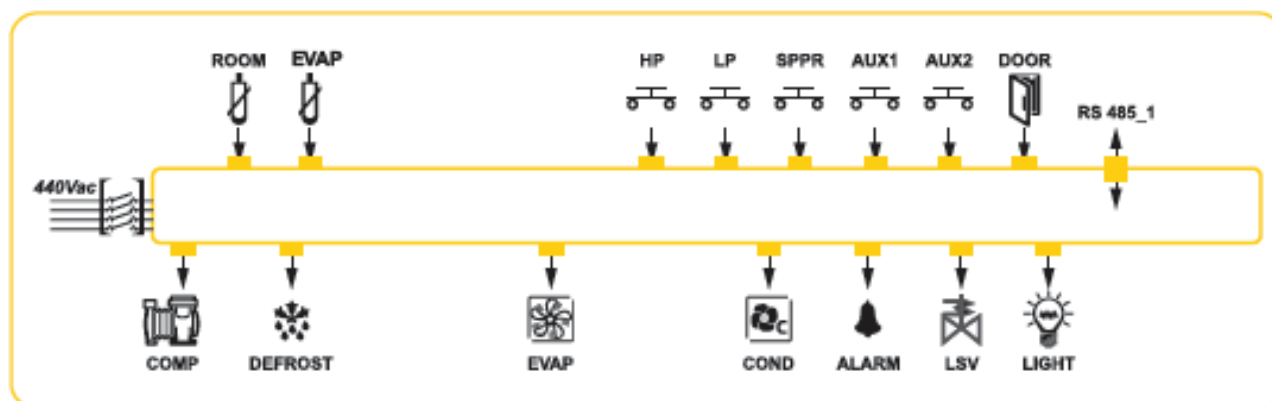
## CRC-2020 / CRC-202000S



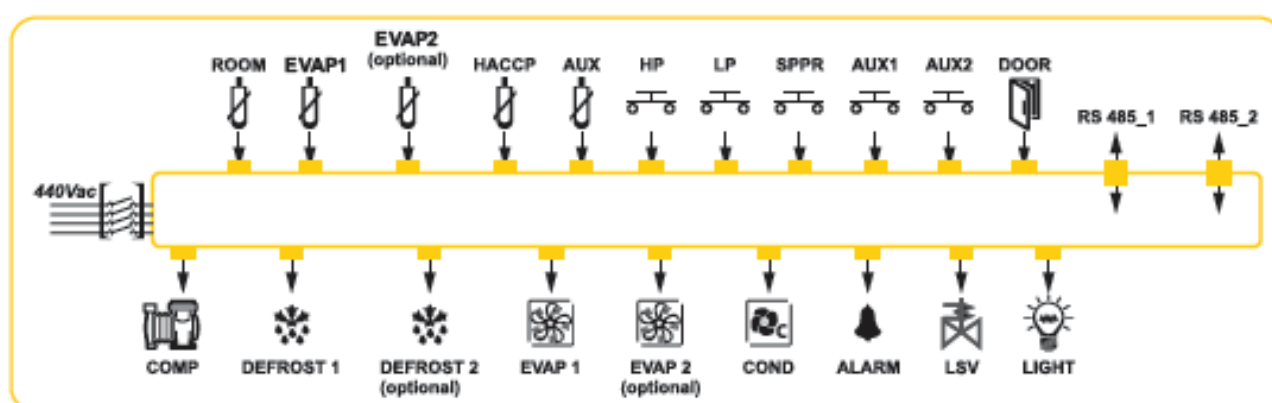
## CRC-2052 / CRC-205200S



## CRC-2070



## CRC-2072





## HUMIDIFIER

ColdTech's industrial humidifiers are engineered to maintain precise humidity levels in cold storage and climate-controlled environments. Designed for durability and efficiency, these humidifiers help preserve the quality of perishable goods by minimizing moisture loss and preventing dehydration. With robust construction and easy-to-maintain components, ColdTech humidifiers deliver consistent performance in demanding conditions such as food processing units, pharmaceutical storage, and refrigerated warehousing. Their advanced misting technology ensures uniform humidity distribution, supporting optimal storage conditions while enhancing energy efficiency.

Features	Humidifier
Particle Size	5 ~ 10 Microns
Power Supply	Single Phase: 230V AC / 50Hz
Operating Temperature	1 ~ 50°C
Humidification Capacity	6 ~ 8 Ltrs/hr
Power Input	90W
Water Connection	0.5 Inch (<5 Kg/CM2)
Area Coverage	600 ~ 800 sqft
Dimensions	370 x 370 x 690mm
Weight	9 kgs (dry)
Application	Food / Medical Packaging Houses, Warehouses, Timber Industries, Tea / Tobacco Industries, Curing Processes, Horticulture etc., Textile Industries, Propagation Rooms, Cold Storage Rooms, Nurseries, Greenhouses, Mushroom Cultivations Rooms



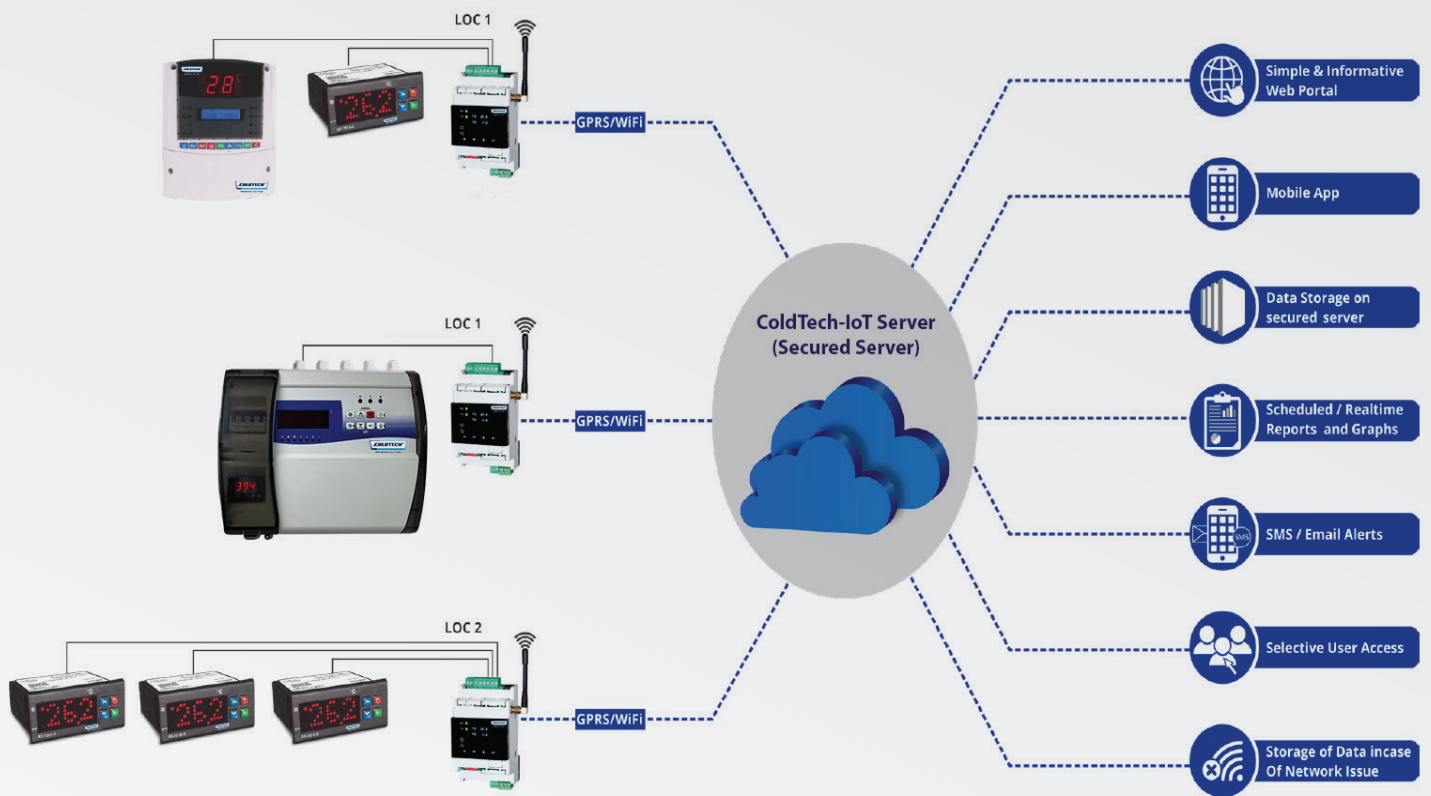
ColdTech-IoT is designed to read and exchange desired monitoring Data of Connected Devices and Systems over Communication Networks.

The connection to the ColdTech cloud ([iot.coldtechgroup.com](http://iot.coldtechgroup.com)) is via GPRS network / Wi-Fi allows the user to always stay in contact with the Communicating Devices by receiving real-time data and having immediate notifications directly on the Smartphone.

It makes user possible to have Real time status, manage alarms, print reports, modify operating parameters so able to monitor and whole system very easily.

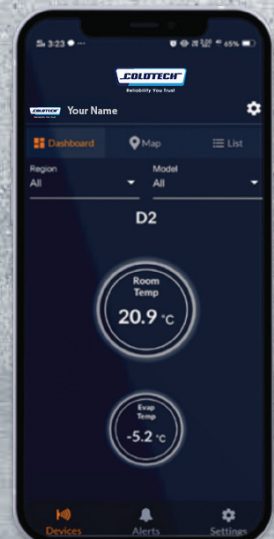
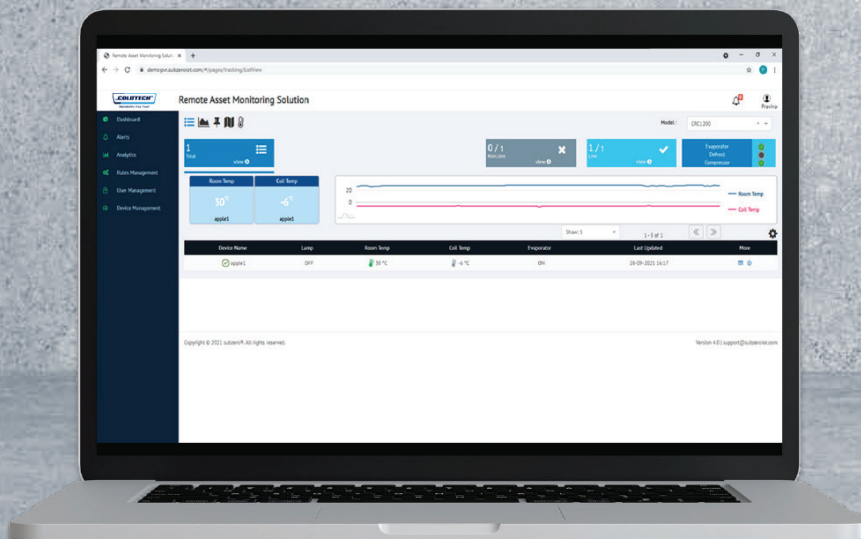
- ❖ **Accessibility:** 24 x 7 Access over web portal and mobile app to view real-time status.
- ❖ **Dashboard:** List view and 24 Hrs. Graph gives easy summarized display of connected devices.
- ❖ **Notifications:** Alert notifications through SMS (In India) and Email.
- ❖ **Data Downloading:** Reports in .pdf or .csv format are available. User can create Scheduled Email Reports.
- ❖ **Historical data:** For analysis and audit purposes with given selection of time/date interval.
- ❖ **Analytics:** Possible with Graphs for selected parameter for given devices.
- ❖ **Data security:** The system will be protected with User ID and Password and hence only the authorized users will be able to access the system.



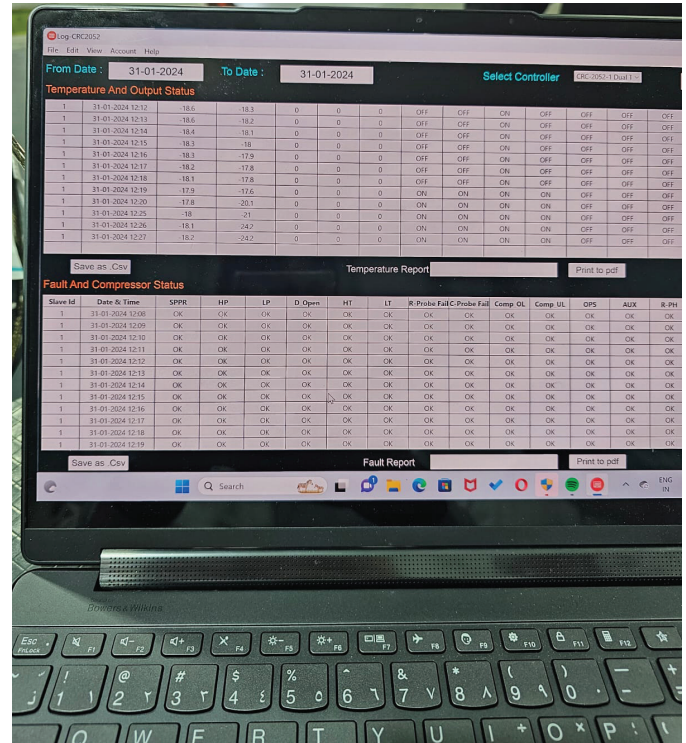


	RS-485 +
	RS-485 -

## Dashboard

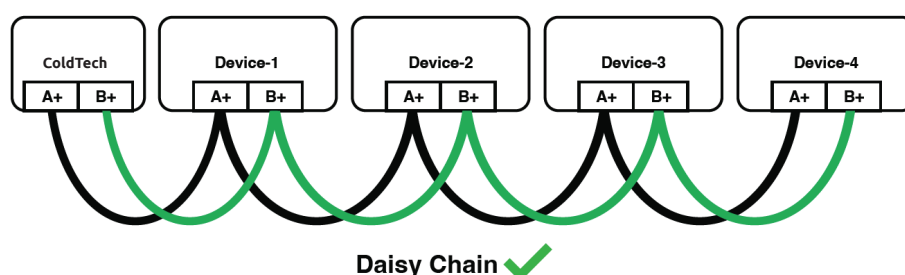


# OFFLINE TEMPERATURE MONITORING, DATA LOGGING REVERSE CONTROLLING



## RS-485 Connection

RS-485 has two terminal connection A+ and B-. ColdTech-IoT modem can be connected with any ColdTech Controller which has RS-485 Modbus. Maximum of 10 numbers of Devices can be connected in daisy chain only.





# CUSTOMIZED MULTI COLDROOM ELECTRICAL PANEL



- ❖ COLD ROOM CONTROL PANEL (with MCC)
- ❖ COLD ROOM CONTROL PANEL
- ❖ MULTI COLD ROOM PANEL (with Datalogging)
- ❖ AMMONIA COLD STORAGE
- ❖ THYRISTOR PANEL
- ❖ 2 Working (with Star Delta)
- ❖ HEAT RECOVERY SYSTEM
- ❖ PROCESS CHILLER ELECTRICAL PANEL





Reliability You Trust

#### Corporate Office:

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**Qatar:** Al Rayyan, Doha, Qatar

**Oman:** Ruwi, Sultanate of Oman

**Kuwait:** xxxxx