Cella Range 3PH
Three-phase stand-alone & modular
cold room solutions

Three-phase solutions selection guide

	Type of solution	Main control	Compressor ⊟	Condenser fans ✖	Defrost ❄	Evaporator fans ✖	Solenoid valve ⧓	Light ☀	AUX1 (configurable) 1 AUX	AUX2 (configurable) 2 AUX
SmartCella 3PH	Stand-alone	-	3~	1~	3~	1~ or 3~	1~	1~	-	-
Power 3PH module	Modular	SmartCella	1~	-	3~	1~	-	1~	-	-
Power 3PH module	Modular	UltraCella	1~	-	3~	1~	-	1~	1~	1~
Ultra 3PH evaporator module	Modular	UltraCella	1~	-	3~	3~	1~	1~	1~	1~
Ultra 3PH full module	Modular	UltraCella	3~	1~	3~	3~	1~	1~	1~	1~

SmartCella 3PH

Stand-alone solution

- Full three-phase cold room management (3 three-phase loads, including compressor)
- SmartCella parameters, logic and user interface
- Main switch (disconnect) on panel door
- Additional LED indicator for load (contactor) status
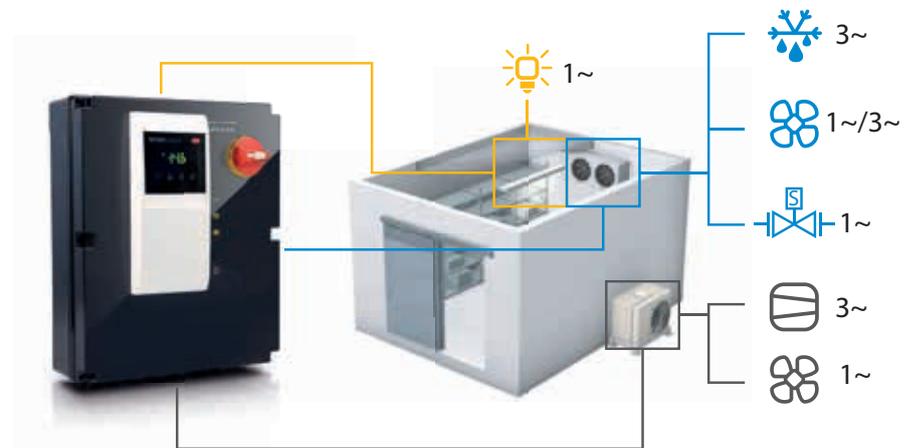
Easy to install/use

SmartCella 3PH is a stand-alone, all-in-one controller for three phase cold room management.
It uses **the same interface and control logic as the standard SmartCella (IR33+)**.

Cold room status can be monitored by the **additional load LED indicators** on the front door of the panel, providing immediate feedback on load (contactor) status and a clear overview, even from a distance, about alarm events on the panel.

Complete **terminal box** with ample space for easy and quick wiring.

Flexible solution

Compressor protection is provided by a safety switch with adjustable current threshold from 1.6 A to 16 A (for 5.5 to 7.5 HP compressors).

Input signals
- 2 NTC probes, for **room** and **defrost** temperature
- Door switch
- 1 additional NTC probe or digital input that **can be configured**

Safety inputs
- LP pressure switch (pump down)
- Fan thermal protection
- Defrost heater thermal protection
- HP/LP pressure switch
- Kriwan protection

Load outputs
- **Compressor** and **condenser fan**
- Evaporator fans
- Defrost heaters
- Cold room **lights**

Functional outputs
- Solenoid valve
- Compressor crankcase heater
- Kriwan power supply

Safety and protection

All SmartCella 3PH models also include a **main disconnect switch** accessible from the front door of the panel, in addition to the circuit breakers for the loads managed.

P/N	Safety switch	Compressor	Defrost	Evaporator fans	Condenser fans	Light	Solenoid valve
WP00B14A10	1.6 – 2.5 A	3~400 Vac AC3	3~400 Vac, 6 kW 9 A AC1	1~230 Vac, 500 W* 2.5 A AC3	1~230 Vac, 800 W* 3.9 A AC3	1~230 Vac, 800 W 3.9 A	1~230 Vac, 2 A
WP00B24A10	2.5 - 4 A						
WP00B34A10	4 – 6.3 A						
WP00B44A10	6.3 - 10 A						
WP00B47B20	6.3 - 10 A		3~400 Vac, 9 kW 13 A AC1	3~400 Vac, 2 kW* 3.3 A AC3			
WP00B57B20	10 - 16 A						

* cos phi = 0.9

Power 3PH module

Modular solution (SmartCella / UltraCella)

- Three-phase defrost management
- Protection by 4-pole circuit breaker
- Pre-wired with contactor coil wires
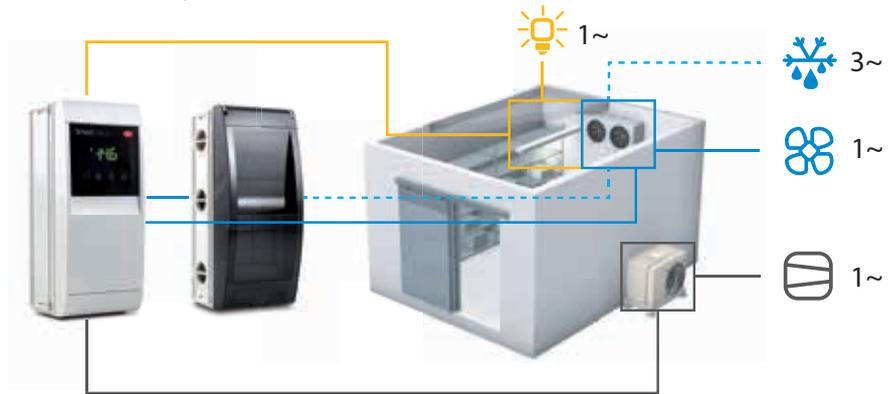
Plug&Play solution

Power 3PH module is an add-on module for **SmartCella** and **UltraCella** that allows the management of one three-phase load, typically defrost heaters.

Easy access to the circuit breaker through the module's door.
No more need to build a custom panel with three-phase contactor, Power

3PH module is pre-wired, ready to be assembled and connected to the main controller, saving installation time.

P/N	Max current @ 3~400 Vac	Max power @ 3~400 Vac
WT00SB00N0	6 A AC1	4 kW AC1
WT00SC00N0	10 A AC1	7 kW AC1
WT00SD00N0	16 A AC1	11 kW AC1

Ultra 3PH evaporator module

Modular solution (UltraCella)

- Three-phase evaporator fan and defrost management
- RS485 serial connection split solution
- Reduces installation time and cost compared to standard solutions
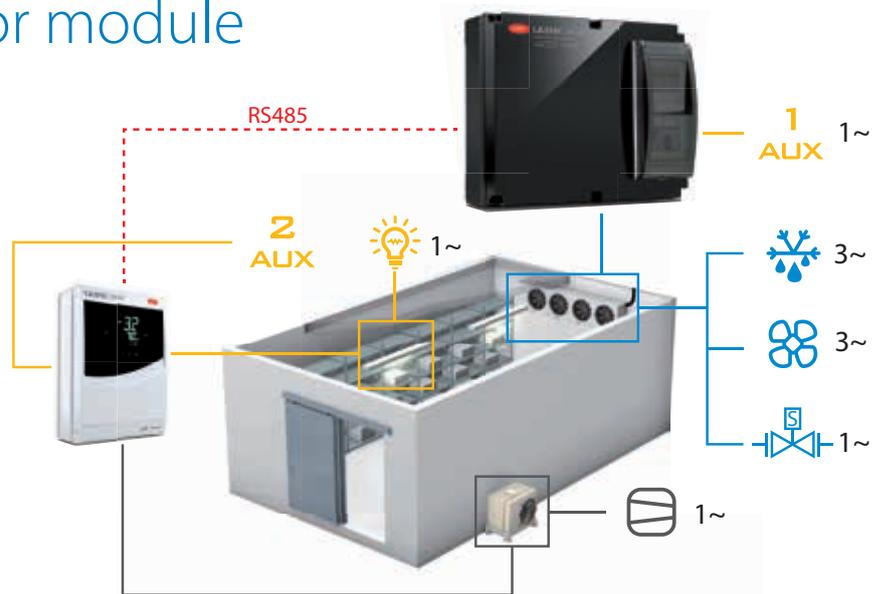
Complete evaporator management

Split solution for **UltraCella** that allows management of three-phase fans and defrost heaters. Remote installation, connection to UltraCella via RS485 serial line.
Lower total cost of ownership thanks to reduced cable length: even the temperature probes (such as the

evaporator probe) can be connected directly to the remote module.

Inputs
- 2 NTC probes, for **defrost temperature**
- **Fan thermal protection**
- **Defrost heater thermal protection**

Outputs
- Solenoid valve
- Evaporator fans (also 0-10 V)
- Defrost heaters
- AUX output

P/N	Defrost @ 3~400 Vac	Evaporator fans @ 3~400 Vac	Solenoid valve 1~230 Vac	AUX1 @ 1~230 Vac
WT00E600N0	6 kW 9 A, AC1	550 W 1.5 A AC23	2 A	16 A, AC1
WT00E900N0	9 kW 13 A, AC1	2 kW 5.7 A AC23	2 A	16 A, AC1
WT00EA00N0	20 kW 29 A, AC1	4 kW 11.5 A AC23	2 A	16 A, AC1

Ultra 3PH FULL module

Modular solution (UltraCella)

- Full three-phase cold room management (3 three-phase loads, including compressor)
- RS485 serial connection split solution
- Reduces installation time and cost compared to standard solutions
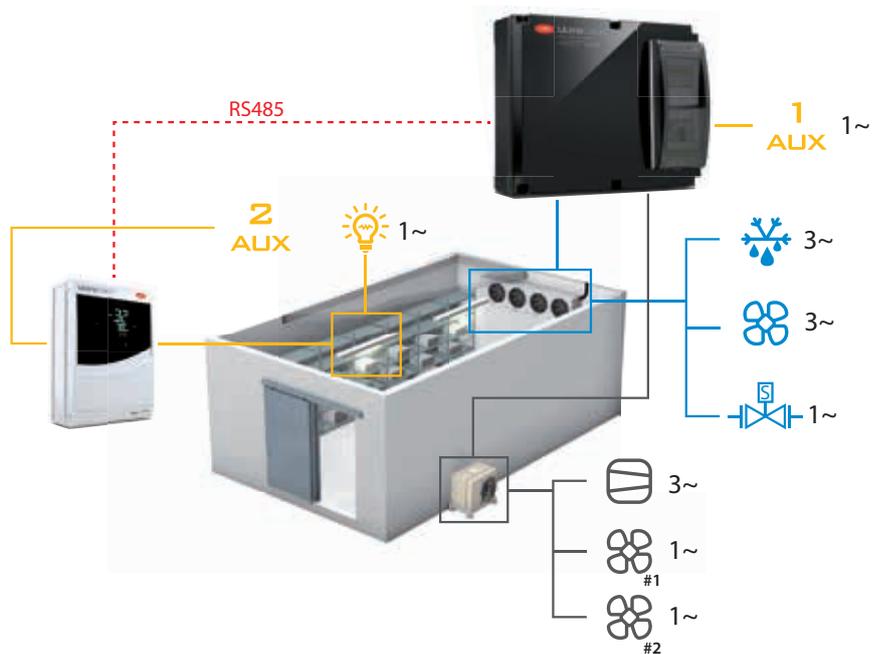
Complete cold room management

Split solution for **UltraCella** that allows to manage three-phase cold room, compressor included. Remote installation, connection to UltraCella through RS485 serial connection.

Lower total cost of ownership thanks to reduced cable length: even the temperature probes (such as the evaporator probe) can be connected directly to the remote module. Compressor protection is provided by a safety switch with adjustable current

threshold from 10 A to 20 A (for 4 HP to 7.5 HP compressors).

Inputs
- 3 NTC probes, **condenser** and **defrost** temperature
- LP pressure switch (pump down)
- Fan thermal protection
- Defrost heater thermal protection
- HP/LP pressure switch
- Kriwan protection

Outputs
- Compressor
- Condenser fans (#1 and #2)
- Evaporator fans (also 0-10 V)
- Defrost heaters
- Solenoid valve
- Compressor crankcase heater
- Kriwan power supply
- AUX output

P/N	Safety switch	Compressor	Defrost @ 3~400 Vac	Evaporator fans @ 3~400 Vac	Condenser fans @1~230 Vac	AUX1 @ 1~230 Vac	Solenoid valve @ 1~230 Vac
WT00F4B0N0	10 - 16 A	3~400 Vac AC3	6 kW 9 A AC1	550 W 1.5 A AC23	800 W 4 A AC15	16 A, AC1	2 A
WT00F7C0N0	16 - 20 A		9 kW 13 A AC1	2 kW 5.7 A AC23			