

PLUSR300 EXPERT VD DATALOGGER

PLUSR300 Expert VD 4 | PLUSR300 Expert VD 7

Control board for complete control of cold rooms with three-phase compressor up to 7,5 HP and Datalogger function. A large backlit LCD allows for simultaneous display of ambient temperature, evaporator temperature, calendar and all other refrigeration system information. The temperature recorder is independent from the controller used to manage the refrigeration system and can record (for up to year) ambient temperature and relative alarms through an electronic circuit equipped with autonomous temperature sensor (as per EN 12830). Moreover, defrosts can be carried out in real time clock mode and it is possible to connect up to the TeleNET or Modbus-RTU supervision system. Magnetothermic protection and motor circuit breaker for the compressor accessible from the front panel linked to an innovative form makes it a perfect and functional choice.



APPLICATIONS

- Control of three-phase refrigeration plant up to 7.5 HP, static or ventilated, with off-cycle or electrical defrosting.

OPTIONS

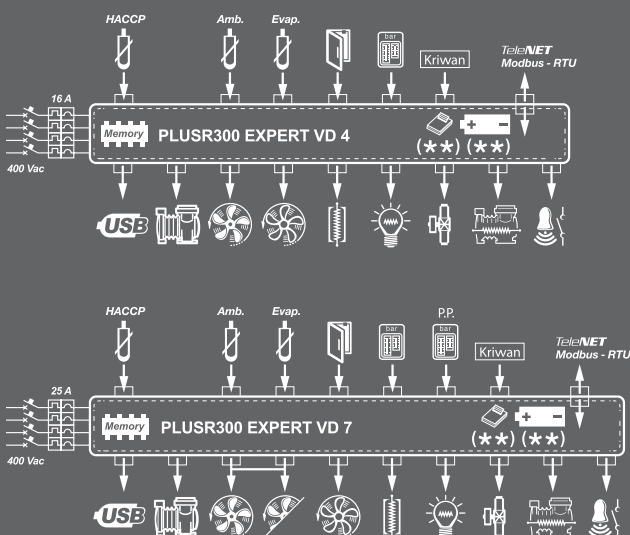
- Module for communication with printer Custom MY Printer A or smartphone (Android).
- Battery backup (Datalogger) up to 40 hours.
- RS version with thermostat door heater and discharge heater.

MAIN CHARACTERISTICS

- Direct control of the compressor, condenser fans, compressor oil heater, defrosting heaters, evaporator fans, solenoid valve, room light and all standard-compliant electrical safeguards.
- General magnetothermic circuit breaker accessible from the front panel, which cuts the general power supply.
- Adjustable motor circuit breaker for compressor protection accessible from the front panel.
- Easy wiring on the internal terminal block.
- Selection of functioning mode for the compressor (pump-down / thermostat).
- Auxiliary relay with activation configurable by parameter.
- Transparent cover for access to magnetothermic circuit breaker, all with Ip65 protection rating.
- Control electronics with large backlit LCD and user-friendly keypad.
- Simultaneous display on LCD of ambient temperature, evaporator temperature, calendar and system status.
- Recording of ambient temperature and relative alarms (up to 1 year).
- USB slot built into controller for data downloads.
- Software updating from USB.
- Defrosts can be carried out in real time clock mode.
- RS485 for connection to Modbus-RTU or TeleNET industrial supervision network.
- TeleNET software to download data on personal computer (provided free of charge with product).

CONNECTION DIAGRAMS

(**) = Optional





| TECHNICAL CHARACTERISTICS | PLUSR 300 EXPERT VD 4 | PLUSR 300 EXPERT VD 7 |
|--|---------------------------------|---------------------------------|
| BOX DIMENSIONS | 400 x 300 x 135 mm | 400 x 300 x 135 mm |
| WEIGHT | 9 kg | 10 kg |
| PROTECTION RATING | IP65 | IP65 |
| POWER SUPPLY | 400 V AC ±10% 50-60 Hz | 400 V AC ±10% 50-60 Hz |
| LOAD TYPE | THREE-PHASE | THREE-PHASE |
| WORKING TEMPERATURE | -5 ÷ +40 °C | -5 ÷ +40 °C |
| STORAGE TEMPERATURE | -25 ÷ +55 °C | -25 ÷ +55 °C |
| RELATIVE AMBIENT HUMIDITY | 30% - 90% RH W/OUT CONDENSATE | 30% - 90% RH W/OUT CONDENSATE |
| MAIN SWITCH / GENERAL PROTECTION | 4 POLES MAGNETOTHERMIC 16 A | 4 POLES MAGNETOTHERMIC 25 A |
| COMPRESSOR PROTECTION | MOTOR CIRCUIT BREAKER | MOTOR CIRCUIT BREAKER |
| CONTROL | PEGO | PEGO |
| DEFROSTING | ELECTRICAL | ELECTRICAL |
| STATUS INDICATORS | DISPLAY LCD WITH BACKLIGHT | DISPLAY LCD WITH BACKLIGHT |
| ALARM SIGNALS | DISPLAY LCD + BUZZER | DISPLAY LCD + BUZZER |
| INPUTS | | |
| AMBIENT PROBE | NTC 10 kΩ | NTC 10 kΩ |
| EVAPORATOR PROBE | NTC 10 kΩ | NTC 10 kΩ |
| DATALOGGER PROBE | NTC 10 kΩ | NTC 10 kΩ |
| DOOR SWITCH | PRESENT | PRESENT |
| HIGH/LOW PRESSURE SWITCH | PRESENT | PRESENT |
| KRIWAN® CONNECTION | PRESENT | PRESENT |
| COMPRESSOR FUNCTIONING MODE SELECTION | PUMP-DOWN / THERMOSTAT | PUMP-DOWN / THERMOSTAT |
| OUTPUTS | | |
| COMPRESSOR | 370W ÷ 3000W (0,5-4 HP) | 3000 W ÷ 5500 W (4 ÷ 7,5 HP) |
| CONDENSER FANS OUTPUT 1 | 800 W (1PH) | 800 W (1PH) (1PH) |
| CONDENSER FANS OUTPUT 2 (SEPARATED) | | TOTAL (1PH) |
| EVAPORATOR FANS | 500 W (1PH) | 2000 W (3PH) OR 1500 W (1PH) |
| DEFROSTING HEATERS | 6000 W (AC1) EQ. RESISTIVE LOAD | 9000 W (AC1) EQ. RESISTIVE LOAD |
| ROOM LIGHT | 800 W (AC1) RESISTIVE LOAD | 800 W (AC1) RESISTIVE LOAD |
| SOLENOID VALVE | PRESENT | PRESENT |
| COMPRESSOR OIL HEATER | PRESENT | PRESENT |
| ALARM RELAY | PRESENT | PRESENT |
| SUPERVISION SYSTEM | TELENET / MODBUS-RTU | TELENET / MODBUS-RTU |
| DATALOGGER | | |
| DATALOGGER | INDEPENDENT PROBE | INDEPENDENT PROBE |
| MAX. NUMBER OF READINGS WITHOUT OVERWRITE | 1 YEAR (CYCLIC MEMORY) | 1 YEAR (CYCLIC MEMORY) |
| DESIGNATION | | |
| STANDARD REFERENCE | EN 12830 | EN 12830 |
| SUITABILITY | S (STORAGE) | S (STORAGE) |
| LOCATION | A | A |
| ACCURACY CLASS | 1 | 1 |
| OPTIONS | | |
| BATTERY BACKUP | OPTIONAL | OPTIONAL |
| COMMUNICATION WITH PRINTER/SMARTPHONE (ANDROID) | OPTIONAL | OPTIONAL |