NECTOR 200 P20

iCastel
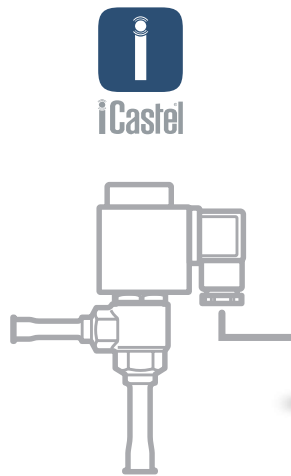
Control panel for the complete management of refrigerated cells with single-phase compressor up to 2 HP with Datalogger function and integrated connectivity; manages the most common ON/OFF electronic expansion valves for controlling evaporator over heating.
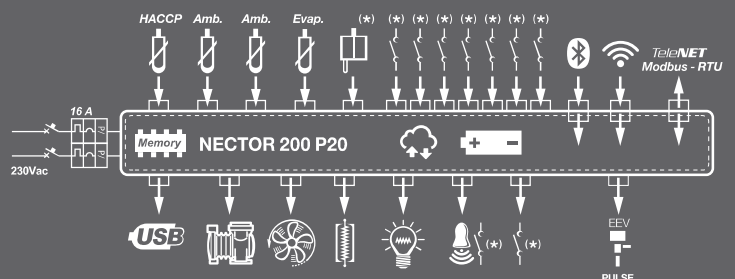
APPLICATIONS

- Complete management of static or ventilated single-phase refrigeration systems up to 2HP with management of the ON/OFF electronic expansion valve (at 24/110/230 Vac or 24 Vdc), off cycle or electric defrost with direct compressor stop or pump-down, in combination with the Datalogger / remote control function.
- Management of the single-phase evaporating unit only with ON/OFF electronic expansion valve control (at 24/110/230 Vac or 24 Vdc) and remote condensing unit consent in combination with the Datalogger / remote control function.

MAIN CHARACTERISTICS

- Control of the ON / OFF electronic expansion valve with 24/110/230 Vac or 24V dc coil
- Management of valve parameters from the Nector display or via MyPego app.
- Compatible with 22 types of refrigerant gas.
- Direct management of compressor, defrost heaters, evaporator fans and cold room light.
- Wi-Fi, Ethernet and Bluetooth (BLE) connectivity.
- Bluetooth functions with MyPego app: complete remote control of the instrument, configuration of connectivity settings, display of daily history and system status.
- Cloud functions with MyPego app (function can be activated by subscription): real-time system control; daily history; real-time alarm messaging notification.
- Integrated local webserver.
- Datalogger function with up to 2 years' history.
- Humidification / dehumidification function with dedicated 4-20mA humidity probe.

- Condenser or evaporator fan speed management with 0-10V analogue output and dedicated pressure probe (probe not included).
- Off cycle, electric, hot gas and thermostat-controlled defrosting, also with real-time clock.
- Direct management of the solenoid valve for hot gas defrosting.
- Double evaporator management with double end defrost probe.
- Emergency operation (in case of faulty ambient probe).
- Pump-down operation.
- Configurable cold/hot/neutral zone mode.
- Energy saving (day / night setpoint management, intelligent defrosts)
- Integrated USB port for datalogger / parameter download and software update.
- Backup battery for data logging in the absence of the main power supply.
- 7 configurable digital inputs.
- 2 configurable digital outputs.
- RS485 for connection to the TeleNET or ModBUS supervision network.

CONNECTION DIAGRAMS

(✱) = Configurable function

TECHNICAL CHARACTERISTICS	NECTOR 200
DIMENSIONS	300 x 200 x 100 mm
WEIGHT	2,6 kg
BOX PROTECTION RATING	IP65
BOX MATERIAL	SELF-EXTINGUISHING PC
INSULATION TYPE	CLASS II
AMBIENT CONDITIONS	
WORKING TEMPERATURE	0 +50 °C
STORAGE TEMPERATURE	-20 +60 °C
RELATIVE HUMIDITY	LOWER THAN 90 RH% (Non condensing)
ELECTRICAL SPECIFICATIONS	
SUPPLY VOLTAGE	110 – 240 V~ (± 10%)
POWER FREQUENCY	50 / 60 Hz
MAX ABSORBED POWER (electronic control)	10W
BATTERY	12 V, NI-MH 1300 mAh, autonomy 40h
GENERAL ELECTRICAL PROTECTION (depending on the model)	BIPOLAR DIFFERENTIAL MAGNETOTHERMAL SWITCH 16A, CURVE C, ID=300mA
INPUT SPECIFICATIONS	
CONNECTABLE PROBE TYPES	5 NTC 10KΩ TEMPERATURE PROBES 2 4-20 mA PROBES configurable as 0-100RH% humidity or pressure
PROBE READ PRECISION	TEMPERATURE: 0.1 °C HUMIDITY / PRESSURE: 1 RH% / 0.1 Bar
READ RANGE	TEMPERATURE: -45 +99 °C HUMIDITY / PRESSURE: 0T100 RH% / 0.1 Bar
CONFIGURABLE DIGITAL INPUTS	7
DESIGNATION	
NORMATIVE REFERENCE	EN 12830
ADEQUACY	S (conservation)
TYPE OF CLIMATE ENVIRONMENT	A
ACCURACY CLASS	1
OUTPUT SPECIFICATIONS (voltage-free contacts)	
COMPRESSOR	1500 W (AC3) 30A
DEFROST	3000 W (AC1) (** depending on the model) 30A
FANS	500 W (AC3) 16A
COLD ROOM LIGHT	800 W (AC1) or 100W for LED lights 16A
CONFIGURABLE OUTPUT 1	100 W (AC1) 10A
CONFIGURABLE OUTPUT 2	100 W (AC1) 10A
ANALOGUE OUTPUT	0 – 10 V
ELECTRONIC EXPANSION VALVE	ON/OFF WITH COIL 24/110/230 VAC or 24 V DC
CONNECTIVITY	
RS485 SERIAL	MODBUS-RTU / TELENET
BLUETOOTH	BLE LOW ENERGY
WIFI	802.11 B/G/N (2.4 GHZ) UP TO 150 Mbps
ETHERNET	10/100 Mbps