NANO L NANO7,5 U VD | NANO15 U VD NANO19.5 U VD

A line of power and electronic control boards for control of the three-phase evaporating unit only where devices are served by a compressor rack. Cold room light and system stand-by switches incorporated on front of panel. Integrated thermo-regulator controls cold, ventilation and defrosting calls. The unit also controls the door switch, which automatically turns on the room light, fan shutdown and cold call shutdown.



APPLICATIONS

• Control of evaporating unit only with electrical defrost up to 19,5 kW.

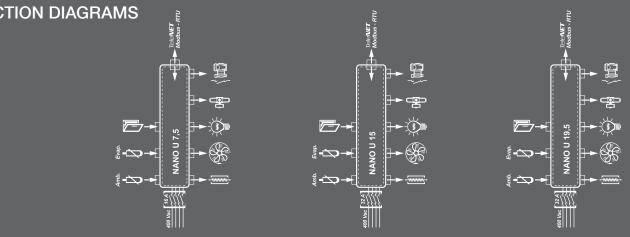
OPTIONS

• Installation of magnetothermic circuit breakers instead of fuses.

MAIN CHARACTERISTICS

- Designed to provide an immediate start-up and easy maintenance.
- Enabling for motor condenser unit, defrosting elements, evaporator fans, solenoid valve, room light, door element and all standard-compliant electrical safeguards.
- Compact, self-extinguishing ABS housing with IP55 protection rating and circuit breaker on front of panel.

- Integrated PEGO thermo-regulator (Expert Nano) 4CK).
- System status indicated by display.
- Key operated ON/OFF.
- Cold room light ON/OFF switch with key or by means of door switch.
- Key operated manual START/STOP defrosting.
- Clock for programmed defrost (RTC).
- Configurable multifunction output, alternative to the light output.
- RS485 serial connection with Modbus-RTU or Telenet protocol.



CONNECTION DIAGRAMS

THREE-PHASE SYSTEMS WITH THERMO-REGULATOR

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TECHNICAL CHARACTERISTICS	NANO7,5 U VD	NANO15 U VD	NANO19,5 U VD
BOX DIMENSIONS	290 x 340 x 145 mm	350 x 450 x 160 mm	350 x 450 x 160 mm
WEIGHT	5 kg	6 kg	7 kg
PROTECTION RATING	IP 55	IP 55	IP 55
POWER SUPPLY	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz	400 V AC ±10% 50-60 Hz
LOAD TYPE	THREE-PHASE	THREE-PHASE	THREE-PHASE
WORKING TEMPERATURE	-5 ÷ +50 °C	-5 ÷ +50 °C	-5 ÷ +50 °C
STORAGE TEMPERATURE	-10 ÷ +70 °C	-10 ÷ +70 °C	-10 ÷ +70 °C
RELATIVE AMBIENT HUMIDITY	< 90% RH	< 90% RH	< 90% RH
MAIN SWITCH	16 A	32 A	32 A
GENERAL PROTECTION	FUSES	FUSES	FUSES
CONTROL	THERMOREGULATOR PEGO (EXPERT NANO 4CK)	THERMOREGULATOR PEGO (EXPERT NANO 4CK)	THERMOREGULATOR PEGO (EXPERT NANO 4CK)
DEFROSTING	ELECTRICAL	ELECTRICAL	ELECTRICAL
INSULATION TRANSFORMER		PRESENT	PRESENT
STATUS INDICATORS	DISPLAY	DISPLAY	DISPLAY
ALARM SIGNALS	DISPLAY + BUZZER	DISPLAY + BUZZER	DISPLAY + BUZZER
CLOCK (RTC)	PRESENT	PRESENT	PRESENT
INPUTS			
AMBIENT PROBE	NTC 10 kΩ	NTC 10 kΩ	NTC 10 kΩ
EVAPORATOR PROBE	NTC 10 kΩ	NTC 10 kΩ	NTC 10 kΩ
DOOR SWITCH	PRESENT	PRESENT	PRESENT
OUTPUTS			
EVAPORATOR FANS	2000 W (3PH) 800 W (1PH)	2000 W x 2 (3PH)	2000 W x 3 (3PH)
DEFROSTING HEATERS	7500 W (2500 W x 3, AC1)	15000 W (5000 W x 3, AC1)	19500 W (6500 W x 3, AC1)
ROOM LIGHT	PRESENT	PRESENT	PRESENT
SOLENOID VALVE	PRESENT	PRESENT	PRESENT
ENABLE CONDENSING UNIT	PRESENT	PRESENT	PRESENT
SUPERVISION SYSTEM	TELENET / MODBUS-RTU	TELENET / MODBUS-RTU	TELENET / MODBUS-RTU