

XC600D Series 2013



**Controllers for Small Medium Compressor Racks
with Digital™ Compressors**

XC600D Series - Features Overview

Controllers for small and medium advance compressor racks

- ✓ DIN rail or 32x74 format
- ✓ Designed for modulating compressor racks
- ✓ Designed for frequency or digital compressors
- ✓ Rack types
 - Only compressors or fans – with or without inverters
 - Compressors and fans – with or without inverters
 - 2 suctions and 1 condensers
- ✓ Thanks to wider dual display with icons, complete information about:
 - suction and discharge pressure/temperature
 - loads status
 - alarms
- ✓ Software update via HK



XC600D Series - Features Overview

New Features - compared to the actual XC600C series

- ✓ Easier pressure transducers setting
- ✓ For DIN rail models: disconnect able terminals block for a faster and easier connections
- ✓ Absolute pressure alarms (independent from the set points)
- ✓ 2 suctions and 1 condenser management
- ✓ High condensing pressure alarm with compressor unloading
- ✓ Electronic low pressure-switch
- ✓ Analog output (0-10V) for condenser fan speed (linear inverter)
- ✓ Analog output (0-10V or PWM) for frequency compressor (inverter)



XC600D New Features

- ✓ More flexibility for a **wider range of racks** such as:
 1. Only compressors or fans (with or w/out inverter **NEW**)
 2. Standard compressors and modulating fans **NEW**
 3. Frequency compressor + fans **NEW**
 4. Frequency compressor and modulating fans
- ✓ **Capability of managing INVERTER **NEW**** in both suction and delivery sections, thanks to the 2 0-10V or 4-20mA analogue outputs.
- ✓ **Dynamic set point for fans** : it allows to optimize the condensing temperature according to the external temperature, reducing the energy consumption. Increment the seasonal efficiency. **NEW**
- ✓ Each **relay has its own common line** to simplify the external wiring connection.
- ✓ Specific inputs **for low and high pressure switches**, operating at line voltage. It reduces the cost of external contactors to decouple voltages



XC600D New Features

- ✓ Two additional configurable digital inputs with new functions:
 - **silence mode**: it reduces the fan speed during the night
 - **external alarm**: can be connect to phase monitor to signal problems on the line
- ✓ Connection for **external keyboard VC660**: it allows to mount the controller XC660D on the electrical panel, while the keyboard is mounted on the external door. This makes the connections simpler.
- ✓ **Built in RS-485 line**: controller can be connected to monitoring system without externa serial converter.
- ✓ **XC645D**: completely new model design for racks with Scroll Digital or Stream Digital, designed to operate with 4D or 6D.
- ✓ **XC645D**: possibility to chose the voltage for the solenoid valve of the digital 24V or 110/230V without changing the part number
- ✓ Added **refrigerant R407C and R407F**: to include the new low Environmental Impact Assessment refrigerants



XC600D Series - Model Overview

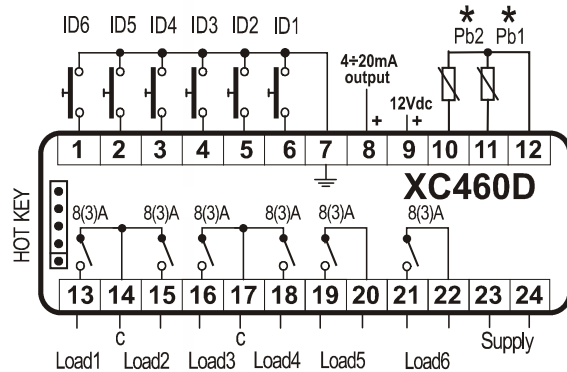
	XC645D	XC640D	XC660D
SUPPLY			
115 Vac (±10%)	•	•	•
230 Vac (±10%)	•	•	•
DISPLAY			
Dual display with 17 icons	•	•	•
TERMINAL BLOCKS			
Disconnectable screw type	•	•	•
PROBE INPUTS			
Suction (ntc/4÷20mA/0-5V)	•	•	•
Delivery (ntc/4÷20mA/0-5V)	•	•	•
Third Probe configurable	•	•	•
DIGITAL INPUTS			
LP (Main voltage)	•	•	•
HP (Main voltage)	•	•	•
Safety load alarm (Free voltage)	4	4	6
Configurable dig. input (E.S.; on/off; Liquid Level, External alarm, Silence funct.)	•	•	•

XC600D Series - Model Overview

	XC645D	XC640D	XC660D
RELAY OUTPUTS			
Loads	4 (5A)	4 (5A)	6 (5A)
OTHER OUTPUTS			
Triac output for digital compressor	24V or 230V	-	-
0-10V output for frequency-compressor	-	Opt	Opt
0-10V output for inverter-fan or ECI fan	Opt	Opt	Opt
LAST 10 ALARMS LOG			
Alarms	•	•	•
BUZZER			
Presence	•	•	•
OTHER FEATURES			
RS485 serial output	•	•	•
Remote Display connection	•	•	•
Hot Key connector	•	•	•

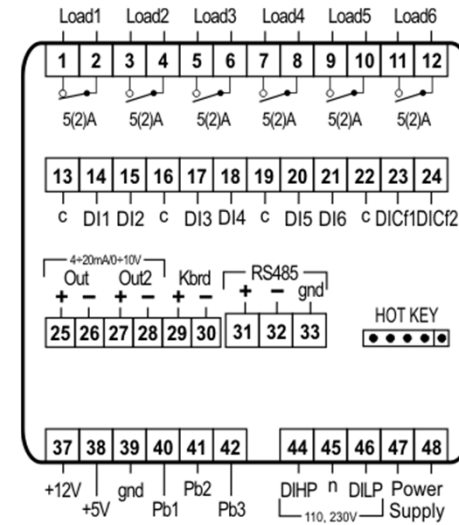
XC640D XC660D Wiring diagram

XC460D

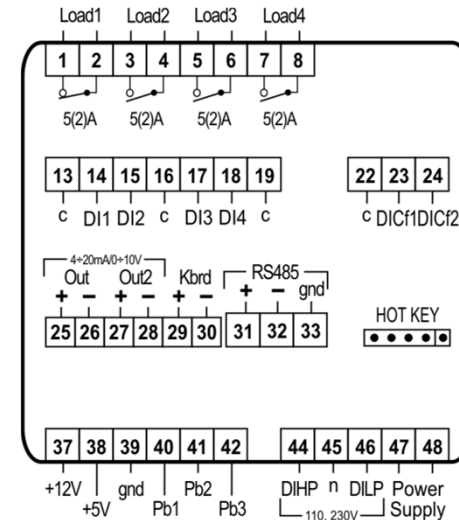


- * PTC/NTC= 10 (In); 11(In); 12(gnd)
- * 4÷20mA= 10 (In); 11(In); 12(gnd); 9(+)

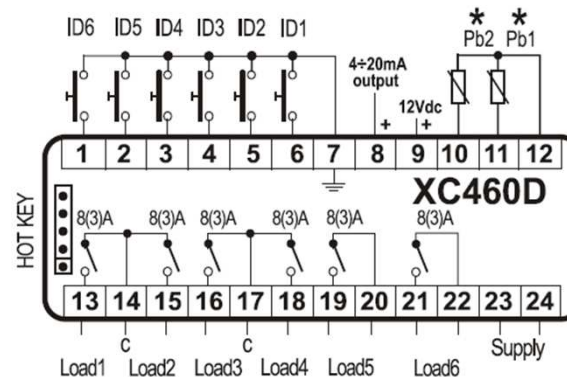
XC660D NEW



XC640D NEW



XC440D



- * PTC/NTC= 10 (In); 11(In); 12(gnd)
- * 4÷20mA= 10 (In); 11(In); 12(gnd); 9(+)

XC645D Wiring diagram

