

XC600 controllers for compressor racks

New functions in 3.5 version

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ENVIRONMENTALLY FRIENDLY

The new version of the XC600 series for compact compressor rack control features even more advanced, efficient and flexible performance to cover all market needs. Flexibility and a high security level of compressor management are the strengths of this new version.

We've focused attention on environmentally friendly solutions with the introduction of new, low GWP refrigerants and, starting now, the 3.5 series can be updated directly in the field by adding new refrigerants or updating the firmware with new functions.

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1. New functions

The 3.5 version introduces important functions that improve XC600 family performance and comply with new environmental protection rules.

1.1 Quick update

Today all XM600 controllers can be easily reprogrammed directly in the field in order to align with market trends; the update is always available for your controllers even if already installed.

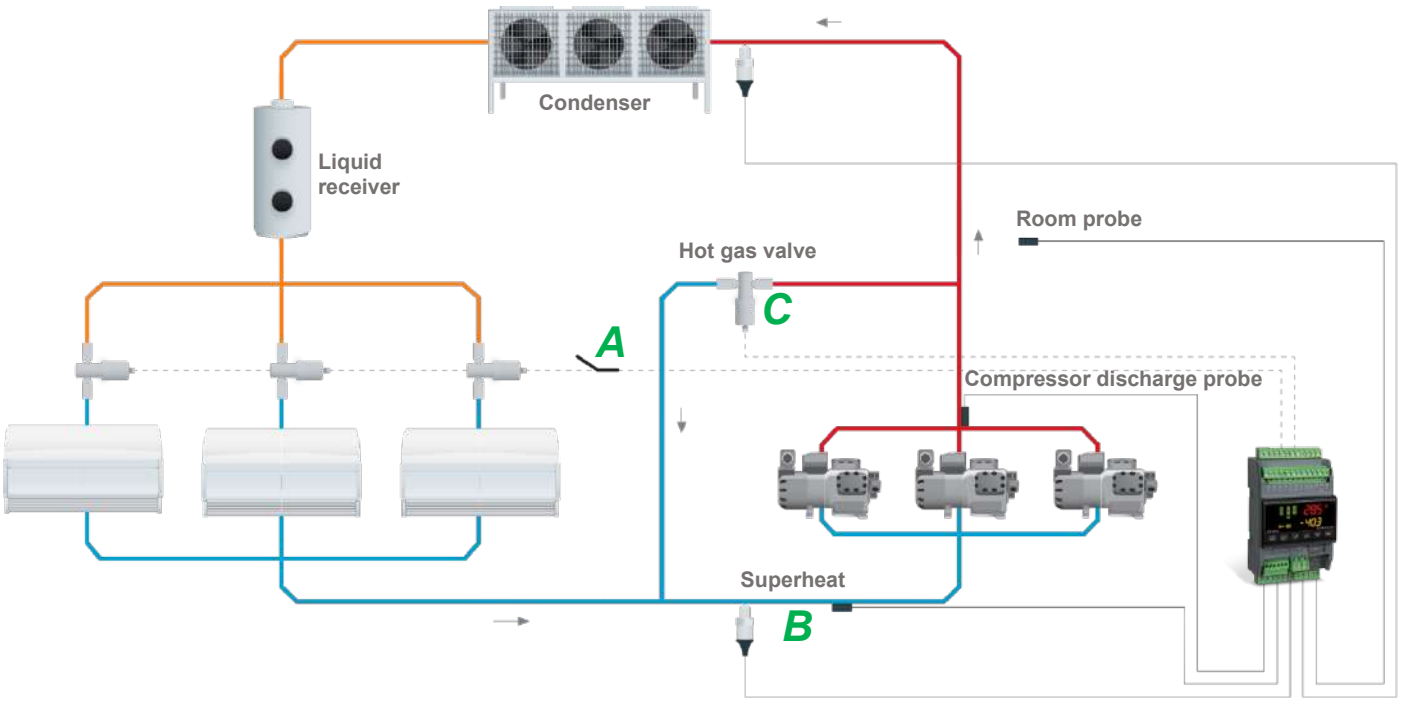
1.2 Compressor Guard function

In order to guarantee plant safety, one relay is switched ON if the compressors cannot be activated because of safety times blockage, or for other problems. This output can be used to block the liquid injection to the cabinets against suction line flood. The relay will be deactivated when compressors are ready to restart *(ref. **A**)*.

1.3 Suction superheat management with hot gas injection valve

The regulator can detect suction superheat *(ref. **B**)*. Possible low superheat conditions are promptly reported with the possibility to stop compressors to ensure maximum plant safety. It is also possible to use a hot gas injection valve to increase superheat to avoid critical situations *(ref. **C**)*.

Below is an example of a refrigeration circuit.



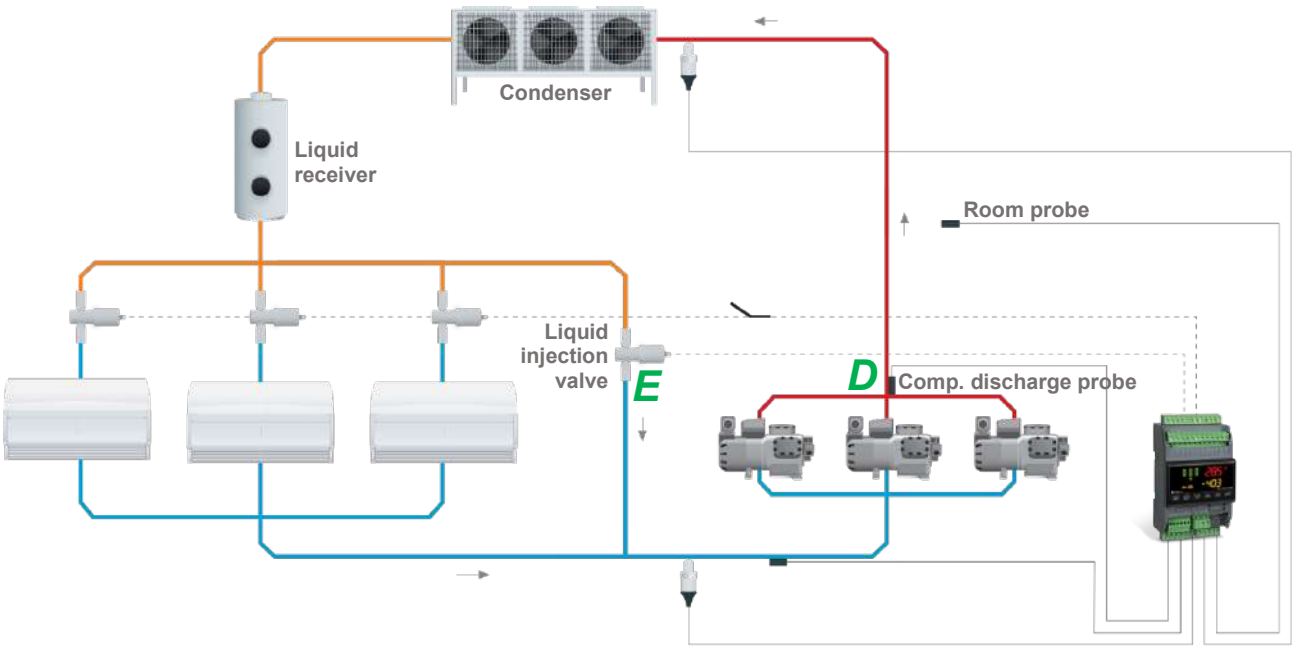
1.4 Probe management

In order to improve rack and plant control, it is possible to configure one of the digital inputs as a probe to detect the compressor discharge temperature (only for DIN format). The temperature range has been increased up to 150°C, to ensure possible discharge alarm management.

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1.5 Compressor discharge temperature monitoring and liquid injection valve management

The regulator can detect the compressor discharge temperature *(ref. **D**)*. Possible high temperature conditions are promptly reported with the possibility to stop compressors to ensure maximum plant safety. It is also possible to use an injection valve *(ref. **E**)* to decrease the discharge temperature, avoiding critical situations as represented in the scheme below.



1.6 Compressor stand-by

The new version of the XC600 family allows compressors to stand-by in case of malfunctioning or for maintenance. This function can be activated whether local from the keyboard or remote through the XWEB supervisor system to which the controller is connected to.

2. Refrigerant update

The XC600 family is now compatible with an additional new refrigerant; furthermore, it is possible to update the list of new gases directly from the field and via software in order to keep aligning with market trends and current regulations. Below is the complete list of compatible refrigerants selectable from **FtyP** parameter.



FtyP PARAMETER	REFRIGERANT	OPERATING TEMPERATURE
r22	r22	-50T60°C/-58T120°F
r134	r134A	-70T60°C/-94T120°F
404A	r404A	-50T60°C/-58T120°F
407A	r407A	-50T60°C/-58T120°F
407C	r407C	-50T60°C/-58T120°F
407F	r407F	-50T60°C/-58T120°F
r410	r410	-50T60°C/-58T120°F
r507	r507	-70T60°C/-94T120°F
CO2	r744 - CO2	-50T30°C/-58T86°F
r32	r32	-70T60°C/-94T120°F
r290	r290 - Propane	-50T60°C/-58T120°F
r448	r448A	-45T60°C/-69T120°F
r449	r449A	-45T60°C/-69T120°F
r450	r450A	-45T60°C/-69T120°F
r513	r513	-45T60°C/-69T120°F
1234	r1234ze	-18T50°C/0T122°F
r452 new	r452A	-50T60°C/-58T120°F

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3. New codification

Below is the list of new codes that replace the current ones:

	CURRENT CODE	NEW CODE v. 3.5
XC650CX-0C05F	X0SFSPCMC110-S00	X0SFSPCMC1N1-S00
XC650CX-0C15F	X0SFTPCMC110-S00	X0SFTPCMC1N1-S00
XC645CX-0C01F	X0SFYMCMC110-S00	X0SFYMCMC1N0-S00
XC645CX-1C01F	X0SFYMCMC315-S00	X0SFYMCMC3N0-S00
XC645CX-1C03F	X0SFYNCMC310-S00	X0SFYNCMC3N0-S00
XC645CX-0C11F	X0SFZMCMC110-S00	X0SFZMCMC1N0-S00
XC645D -5C11F	X0SIJQAMC510-S00	X0SIJQAMC520-S0A
XC660D -5C11F	X0SINSAMC510-S00	X0SINSAMC520-S0A
XC660D -7C21F	X0SINSAMG610-S00	X0SINSAMG620-S0A
XC645CX-1C11F	X0SFZMCMC310-S00	X0SFZMCMC3N0-S00
XC645CX-0C11F	X0SFZMCMC110-S00	X0SFZMCMC1N0-S00

4. Pricing

Please contact our sales department for prices and further information.

5. Availability and orders

The XC600 series 3.5 version is available. Previous versions are automatically replaced with new codes.
Please contact our sales department for delivery time.

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