

# New product launch

05/05/2021

**Parametric Controls Platform** 

**Refrigeration Sales & Marketing** 



# Extension of the "easy" product range

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### 1. Market context

In a global market with continuously evolving regulations for the sector, Carel is focusing its efforts increasingly on global certifications and marks that can meet the growing needs of our customers.

More and more customers are having their units certified not only in accordance with the established marks required for marketing them in certain regions, but also by independent third parties to highlight the quality of their units.

In recent years, **application of the CB scheme through the "CB report"** has become increasingly common. The CB report can be considered a sort of "international product passport". This document in fact makes it easier to obtain certification of units in non-EU countries. The report is based on the principle of mutual recognition of test results by certification bodies. It is therefore recognised internationally by the different certification bodies for the safety of electrical equipment.

The **electronic controller** is the heart of these units, and being provided with a CB report ensures it will be accepted much more readily by the certification bodies, thus speeding up the test and certification process through global recognition.

In light of the above, we are pleased to inform you of the **availability of a new range of models in the "easy" product family supplied with a CB report drafted by an independent third party**. This CB report also certifies the full compatibility of the controller for the use in units compliant with IEC 60335-2-xx and using flammable refrigerants.

# 2. Main strengths of the business proposal. Models and options

Full compatibility with IEC 60335 and certification by an independent outside body for compatibility with flammable refrigerants has required a redesign of the "easy" electronic controllers.

To ensure continuity of the current "easy" products, the new models have been added to the range. The existing models, identified by the prefix PJ\*\*, have been joined by models with the prefix PQ\*\*.

The PQ\*\* models are manufactured with a controlled chain of certification, ensured by:

- The use of new components with higher performance
- Product certification provided by leading international independent bodies.

The new PQ\*\* models complement the current PJ\*\* models.

The following product families are involved in the extension to the range:

- Easy Standard
- Easy 30A

The following are not included:

- Easy compact
- Easy XL
- Easy SPLIT
- Easy WIDE

## 3. Part numbers

P/N	_	1	Compressor relay (nominal rating)	Description
PQEZS0H000	easy standard	1		PQEZ 230VAC 2HP 2NTC 1DI BUZ REMOVABLE TERM. RED DISPL
PQEZS0P000	easy standard	1	1	PQEZ 230VAC 16A 2NTC 1DI BUZ REMOVABLE TERM. RED DISPL
PQEZC0H000	easy standard	3		PQEZ 230VAC 2HP 8A 8A 2NTC 1DI BUZ REMOVABLE TERM RED DISPL
PQEZC0P000	easy standard	3		PQEZ 230VAC 16A 8A 8A 2NTC 1DI BUZ REMOVABLE TERM. RED DISPL
PQEZS0E010	easy 30A	1		PQEZ 230VAC 30A 2NTC 1DI BUZ SCREW TERM. RED DISPL
PQEZC0E000	easy 30A	3		PQEZ 230VAC 30A 8A 5A 2NTC 1DI BUZ REMOVABLE TERM. RED DISPL

At the time of the product launch. **only a few PQ\*\*** models are available, equivalent to the PJ\*\* easy standard and PJ\*\* easy 30A models. Further requests for the creation of new part numbers is managed as usual, by contacting your reference person in CAREL CSE.

#### Certification 4.

CERTIFICA	TIONS AND CONFORMITY MARKS	PJ** model	PQ** model
CE	CE mark - Conformité Européene / European Conformity (Europa) EN/UL 60730 compliance	ок	ок
c <b>'71</b> 2° us	UL mark (Nord America & Canada)	ок	ок
	Regulatory Compliance Mark (Australia & Nuova Zelanda)	ОК	NO*
ERC	Eurasec Conformity (Russia, Bielorussia, Armenia e Kazakhstan)	ОК	NO*
NSF	NSF INternational (Nord America)	ОК	NO*

 $<sup>^{\</sup>ast}$  The extension to other countries will be assessed based on sales volumes .

QUALITY C	ERTIFICATIONS	PJ** model	PQ** model
IECEE	<b>IEC-CB Report:</b> International standard accepted by all certification bodies, useful for obtaining certification and local marks more quickly for the final application	NO	ок

FLAMMABLE REFRIGERANT GASES				
PJ** model	PQ** model			
OK Flammability Declaration Of Conformity Carel (D.O.C.)	ок			
The PJEZ models of easy series use components and, more specifically, electromechanical relays tested in accordance to UL 60079-15 ed. 4 / ISA 12.12.01:2013 (Sealed or Enclosed Break Device). Acceptability of these relays in end use application where flammable refrigerants are employed shall be reviewed and judged in the end use application.	For use of PQEZ models of easy series with flammable refrigerant gases, the controllers have been evaluated and judged compliant with the following requirements of IEC 60335 series standards:  •Annex CC of IEC 60335-2-24:2010 referenced by clause 22.109 and Annex BB of IEC 60335-2-89:2010 referenced by clause 22.108; components that produce arcs or sparks during normal operation have been tested and found to comply with the requirements in UL/IEC 60079-15;  •IEC/EN/UL 60335-2-24 (clauses 22.109, 22.110) for household refrigerators and freezers  •IEC/EN/UL 60335-2-40 (clauses 22.116, 22.117) for electrical heat pumps, air-conditioners and dehumidifiers  •IEC/EN/UL 60335-2-89 (clauses 22.108, 22.109) for commercial refrigerated appliances  The controllers have been verified for the maximum temperatures of all components, which during the tests required by IEC 60335 cl. 11 and 19 do not exceed 272 ° Acceptability of these controllers in end use application where flammable refrigerant gases are used shall be reviewed and judged in the end use application.			

#### 5. **Product availability**

Availability will follow the schedule outlined below.

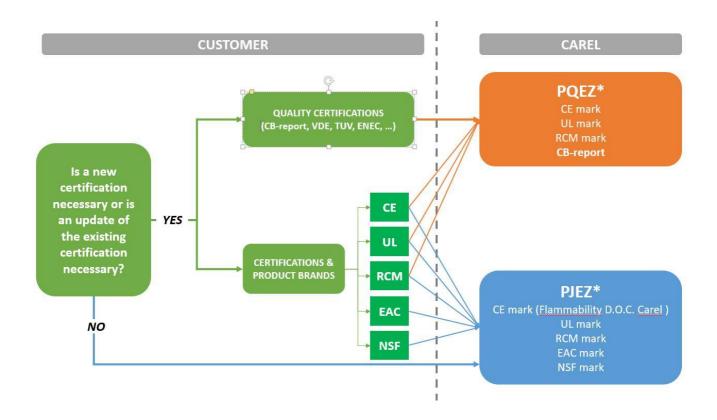
Opportunities must be evaluated with CAREL CSE, together with a forecast plan and corresponding timeline.



#### **Availability of sales support tools** 6.

Document	Doc no.	Rev.	Availability
Technical leaflet (easy)	+050004140	1.7	
Technical leaflet (easy 30A)	+050004148	1.7	
Manual (ITA)	+030220790	3.4	
Manual (ENG)	+030220791	3.4	
Manual (FRE)	+03C220791	3.4	www.carel.com
Manual (RUM)	+030220792	3.4	
Manual (DEU)	+030220793	3.4	
Manual (SPA)	+030220794	3.4	
Manual (POR)	+030220795	3.4	
Manual (RUS)	+030220796	3.4	
Manual (POL)	+030220797	3.4	

## 7. Frequently Asked Questions (FAQs)



#### [1] Why would a customer request a CB report?

The CB report can be considered a sort of "international product passport". This document in fact makes it easier to obtain certification of units in non-EU countries. The report is based on the principle of mutual recognition of test results by certification bodies. It is therefore recognised internationally by the different certification bodies for the safety of electrical equipment.

If a customer also applies the CB scheme, or is certifying the complete unit, having an electronic controller with a CB report has the advantage of accelerating acceptance of the controller by the certification bodies, with a faster testing and certification process and global recognition.

#### [2] When should I propose a PQ\*\* model?

When the customer requests a certificate from an independent body for compatibility with flammable gases (A2, A2L and A3) or a product with a CB report.

#### [3] A customer currently uses a PJ\*\* model and needs a CB report. Is this available?

The CB report is NO longer available for PJ\*\* models and the documentation distributed until now is to be considered OBSOLETE.

The CB report is only available for the PQ\*\* models. If the required PQ\*\* model is not available, a new PQ\*\* model will need to be created, through a request to Carel CSE.

Example:

PJEZC0H000

PJEZ 230VAC 2HP 8A 8A 2NTC 1DI BUZ REMOVABLE TERM RED DISPL.

PQEZC0H000

PQEZ 230VAC 2HP 8A 8A 2NTC 1DI BUZ REMOVABLE TERM RED DISPL.

#### [4] Can the PJ\*\* easy standard and easy 30A models be used with flammable gases?

Yes, these products can be used with flammable gases. However, they are not certified by a third party in this regard.

#### [5] What happens if a customer requires CE certification for use with flammable gases?

For a CE declaration, Carel self-certification (Flammability Declaration Of Conformity - D.O.C) is available for the PJ\*\* models. If this is not sufficient, propose the PQ\*\* models.

#### [6] What happens if a customer requires UL certification for use with flammable gases?

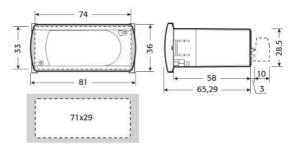
Propose the PJ\*\* models as is done currently. If the customer requests a CB report in addition to UL certification, then propose the PQ\*\* models.

# [7] If a customer currently purchases PJ\*\* models and installs them in units with flammable refrigerants, can they continue to use them?

Yes. The customer can continue to use the PJ\*\* models in the units these are currently installed on. For updates or re-certification of the units, see the above chart.

#### [8] Are there any mechanical and/or dimensional differences?

No. The PJ\*\* and PQ\*\* models are part of the same product range and therefore have the same characteristics in terms of usability and assembly.



#### [9] Are there differences in the maximum current ratings of the relays?

Some changes to the current ratings have been made for some relays. For further information, please see the updated manual or technical leaflets.

#### [10] How is the CB report sent to customers who request it?

There are two types of documentation:

- CB TEST CERTIFICATE -> Document that can be shared with the customer and can be required to Carel CSE.
- CB REPORT -> Confidential document. This type of document can only be shared with
  the authorities and certification bodies/laboratories. A formal request therefore needs to
  be made to <a href="mailto:sales.cse@carel.com">sales.cse@carel.com</a>, indicating the contact details of the person at the

certification body/laboratory responsible for the customer's file (name, surname, email address, phone number, certification body/laboratory). The CB report will then be shared directly by our Certifications Dept. to the person indicated at the certification body/laboratory.