



浙江三花商用制冷有限公司
Zhejiang Sanhua Commercial Refrigeration Controls Co., Ltd.

Address: Zhejiang Xinchang Economic Development Zone, Damingshi, Xinchang County, 312529 P.R. China

Tel: +86-575-86551978

Rev: 2024.04

EEV1-DoC_EU-R24.04

The EU Declaration of Conformity

Issued in accordance with:
 The Pressure Equipment Directive 2014/68/EU
 The Low Voltage Directive 2014/35/EU

The manufacturer's name and address:

Zhejiang Sanhua Commercial Refrigeration Controls Co., Ltd.

Address: Zhejiang Xinchang Economic Development Zone, Damingshi, Xinchang County, 312529 P.R. China

Authorized Representative: Mr. Ilan Peleg

Authorized Company: Sanhua International Europe S.L.

Tel: +34 91 654 30 00 ; E-Mail: info@sanhuaeurope.com

Address: C/ José Celestino Mutis, 4, 2I 28703 San Sebastian de los Reyes - Spain

Section 1 - The Pressure Equipment Directive 2014/68/EU

Declaration:

Electronic Expansion Valves

shown in the following tables, are classified "Pressure accessories" in the sense of the Pressure Equipment Directive 2014/68/EU, Article 2 point (5).

The Refrigerant proper to the Group I and II as defined in the articles 13 (1) (a) and 13 (1) (b) of Directive 2014/68/EU.

- a) Refrigerant of Group I: Refrigerant is classified as hazardous substance or mixture as defined in points (7) and (8) of Article 2 of Regulation (EC) No. 1272/2008.
- b) Refrigerant of Group II: Refrigerant cannot be classified as hazardous substance or mixture as defined in points (7) and (8) of Article 2 of Regulation (EC) No. 1272/2008.

Description of Products:

1. UNI-POLAR EEV

EEV SERIES / MODELS	PS (bar)	TS (°C)	FLUID GROUP I		FLUID GROUP II	
			PED category	Module annex III – PED Directive 2014/68/EU	PED category	Module annex III – PED Directive 2014/68/EU
DPF (Txx) XXX-XX	45.0	-30°C / +70°C	Art. 4.3	-	Art. 4.3	-
DPF (TSx) XXX-XX	49.0	-40°C / +85°C	Art. 4.3	-	Art. 4.3	-
DPF (Sxx) XXX-XX	49.0	-40°C / +85°C	Art. 4.3	-	Art. 4.3	-
DPF (Rxx) XXX-XX	140.0	-40°C / +80°C	NOT SUITABLE	-	Art. 4.3	-
LPF XX-XXX (3~32)	42.0	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
LPF XX-XXX (45~62)	49.0	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
LPF XXD-XXX	60.0	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
LPF XXT-XXX	90.0	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
DBF OXHXXX	49.0	-30°C / +80°C	Art. 4.3	-	Art. 4.3	-

Table 1

2. BI-POLAR EEV

Temperaure Range (TS):	-40°C / +90°C		FLUID GROUP I		FLUID GROUP II	
	EEV SERIES	DN (mm)	PS (bar)	PED category	Module annex III – PED Directive 2014/68/EU	PED category
VPF12.5Hxx	15.5	50.0	Art. 4.3	-	Art. 4.3	-
VPF25Hxx	15.5	50.0	Art. 4.3	-	Art. 4.3	-
VPF50Hxx	19.0	50.0	Art. 4.3	-	Art. 4.3	-
VPF50H04/08/54/58	28.0	50.0	Cat.II	D	Art. 4.3	-
VPF100Hxx	28.0	50.0	Cat.II	D	Art. 4.3	-
VPF150Hxx	28.0	50.0	NOT CERTIFIED	-	Art. 4.3	-
VPF250Hxx	28.0	45.0	NOT CERTIFIED	-	Art. 4.3	-
VPF400Hxx	32.0	45.0	NOT CERTIFIED	-	Cat.I	A (point 1)
VPF400H10	61.0	34.0	NOT CERTIFIED	-	Cat.I	A (point 1)

Table 2

x positions are variable

Note:

All the models listed in the table above classified as “Art. 4.3” aren’t subjected to the Essential Safety Requirements set out in Annex I of Directive 2014/68/EU because their characteristics are below or equal to the limits fixed in Article 4 (1) (c) (i) of the same Directive. As mentioned in the Directive all these products have a nominal size “DN” below or equal to:

- a) 25mm for refrigerants belonging to Group I
- b) 32mm for refrigerants belonging to Group II

Therefore, according to requirements of Article 4.3:

- Are designed and manufactured in accordance with a sound engineering practice in order to ensure safe use.
- Are accompanied by adequate instructions for use
- Bear markings to permit identification of the manufacturer
- Don’t bear CE marking referred to in Article 18 and Article 19
- Are not accompanied by a “Declaration of Conformity” to Directive 2014/68/EU referred to in Annex IV

Covered by this declaration is in conformity with the following directives, standards or other normative documents, provided that the product is used in accordance with its instructions:

- EN ISO 21922:2021 - Refrigerating systems and heat pumps. Valves. Requirements, testing and marking
- EN 378-2:2016 - Refrigerating systems and heat pumps. Safety and environmental requirements. Basic requirements, definitions, classification and selection criteria

Notified Body:

Surveillance of the QS-System: examination / inspection / test during manufacturing:

Name:	TUV Rheinland Industrie Service GmbH
Address:	Am Grauen Stein, D-51105 Koln - Germany
Identification Number:	0035
Fluid Group:	1
EC-Certificate of conformity No:	01 202 CHN/Q-22 0740.02

Table 3

Section 2 - The Low Voltage Directive 2014/35/EU

Declaration:

Electronic Expansion Valves

shown in the tables above, and all the electrical coils shown in the table below are in conformity to the following standards as required by the Low Voltage Directive 2014/35/EU.

Automatic electrical controls for household and similar use – Part 1 : General requirements

DPF	EN 60730-1 (VDE 0631-1):2021-06; EN 60730-1:2016+A1:2019; EN 60730-1:2016/A2:2022 · With sub-clauses 7/8/9/10/11/12/13/18/19/20/21/27
LPF	EN 60730-1: 2016
VPF	EN 60730-1: 2011

Additional requirements of the following standard have been considered and fulfilled in order to allow the usage of the present electrical device with Flammable refrigerants:

* Note: the additional test are valid only for the coil models certified for usage with Fluid Group I (reference on table 4)

Household and similar electrical appliances – Safety

DPF

DIN EN 60335-2-24 (VDE 0700-24):2019-11; EN 60335-2-24:2010 + A1:2019 + A2:2019 Subclause 22.110.

DIN EN 60335-2-89 (VDE 0700-89):2018-10; EN 60335-2-89:2010 + A1:2016 + A2:2017 Subclause 22.109

DIN EN 60335-2-40 (VDE 0700-40):2014-01; EN 60335-2-40:2003 + A11:2004 + A12:2005 + A1:2006 + Cor.:2006 + A2:2009 + Cor.:2010 + A13:2012 + A13:2012/AC:2013 subclause 22.116 (no electrical component, which could be a source of ignition in case of normal operation or in the event of a leak); subclause 22.117 (Annex BB).

LPF/VPF

EN 60335-2-24:2010 + A1:2012 + A2:2019, With sub-clauses 22.110

EN 60335-2-89:2010 + A1:2016 + A2:2017, With sub-clauses 22.109

EN 60335-2-40:2003 + A11:2004 + A12:2005 + A1:2006 + A2:2009 + A13:2012/AC:2013, With sub-clauses 22.116 [no electrical component, which could be a source of ignition in case of normal operation or in the event of a leak], With sub-clauses 22.117 and Annex BB

IEC 60079-0:2011 clause 26.5.1.3

IEC 60079-15:2010 clause 6.3.1 & 6.3.4 & 6.5.1

Electrical Coils:

COIL NAME	SUITABLE FOR	Power Supply	Rated Voltage (V)	Applicability of 2014-35-EU	CERTIFIED FOR FLUID GROUP I
PQ-M10012-xxxxxx	DPF / DBF	DC	12	NO	YES
PQ-M03012-xxxxxx	DPF	DC	12	NO	YES
PQ-M24xxxx	LPF	DC	12	NO	YES
PQ-M08012-xxxxxx	DPF(Rxx)	DC	12	NO	NO

Table 4

Valve model	Notified body	Address	Certificate number
DPF	VDE	Offenbach	40045646
LPF 03 ~32	TUV	Nurnberg	R50449807
DBF 04~07 & LPF 45~62	TUV	Nurnberg	R50595714

Note:

The applicability of the Directive 2014/35/EU as mentioned in the Article 1 is limited to the coil models with voltage rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current.

All the products excluded by the Directive 2014/35/EU respects the following requirements:

- Are designed and manufactured in accordance with a sound engineering practice in order to ensure safe use.
- Are accompanied by adequate instructions for use
- Bear markings to permit identification of the manufacturer
- Don't bear CE marking referred to in Article 16 and Article 17
- Are not accompanied by a "Declaration of Conformity" to Directive 2014/35/EU referred to in Annex IV

Responsible Person to issue the declaration of Conformity:	Date	Signature
Mr.zhouyang Li		

