

# 浙江三花制冷集团有限公司

# Zhejiang Sanhua Climate and Appliance Controls Group CO., LTD

 Add: Xialiquan Qixing District,
 Tel: +86-575-86551978

 Xinchang, Zhejiang, China 312500
 Fax: +86-575-86221855

Rev: 2021.12

EEV-DoC\_UKCA-R2309



# **UK Declaration of Conformity**

Issued in accordance with:

Pressure Equipment (Safety) Regulations 2016 (2016/1105) Electrical Equipment (Safety) Regulations 2016 (2016/1101)

## The manufacturer's name and address:

Company: Zhejiang Sanhua Climate and Appliance Controls Group Co., Ltd Address: Xialiquan, Qixing District, Xinchang, 312500, Zhejiang, 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, 21 28703 San Sebastian de los Reyes - Spain

# Section 1 - Pressure Equipment (Safety) Regulations 2016

#### **Declaration:**

**Electronic Expansion Valves** 

shown in the following tables, are classified "Pressure accessories" in the sense of the Pressure Equipment (Safety) Regulations 2016, Article 2 – [PART 1 - Interpretation].

The Refrigerant proper to the Group I and II as defined in the Article 3(1) and Article 3(2) – [SCHEDULE 3 - Classification of pressure equipment] of the Pressure Equipment (Safety) Regulations 2016.

- 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

		FLUID GROUP I		FLUID GROUP II		
EEV SERIES / MODELS	PS (bar)	TS (°C)	PED category	Part3-Pressure Equipement (Safety) regulations 2016	PED category	Part3-Pressure Equipement (Safety) regulations 2016
DPF (Txx) XXX-XX	45	-30°C / +70°C	Art. 4.3	-	Art. 4.3	-
DPF (TSx) XXX-XX	49	-40°C / +85°C	Art. 4.3	-	Art. 4.3	-
DPF (Sxx) XXX-XX	49	-40°C / +85°C	Art. 4.3	-	Art. 4.3	-
DPF (Rxx) XXX-XX	140	-40°C / +80°C	NOT SUITABLE	-	Art. 4.3	-
LPF XX-XXX (3~32)	42	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
LPF XX-XXX (45~62)	49	-30°C / +70°C	NOT CERTIFIED	-	Art. 4.3	-
LPF XXD-XXX	60	-40°C / +70°C	Art. 4.3	-	Art. 4.3	-
LPF XXT-XXX	90	-40°C / +70°C	NOT CERTIFIED	-	Art. 4.3	-

Table 1

Temperaure Range (TS): -40°C / +90°C	FLUID GROUP I	FLUID GROUP II
--------------------------------------	---------------	----------------

EEV SERIES	DN (mm)	PS (bar)	PED category	Part3-Pressure Equipement (Safety) regulations 2016	PED category	Part3-Pressure Equipement (Safety) regulations 2016
VPF12.5Hxx	15.5	50	Art. 4.3	-	Art. 4.3	-
VPF25Hxx	15.5	50	Art. 4.3	-	Art. 4.3	-
VPF50Hxx	19	50	Art. 4.3	-	Art. 4.3	-
VPF50H04/08/54/58	28	50	Cat.II	D	Art. 4.3	-
VPF100Hxx	28	50	Cat.II	D	Art. 4.3	-
VPF150Hxx	28	50	NOT CERTIFIED	-	Art. 4.3	-
VPF250Hxx	28	45	NOT CERTIFIED	-	Art. 4.3	-
VPF400Hxx	32	45	NOT CERTIFIED	-	Cat.I	A (point 1)
VPF400H10	61	34	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. 4.1" aren't subjected to the Essential Safety Requirements set out in Pressure Equipment (Safety) Regulations 2016, Article 2 – [SCHEDULE 1 - Excluded Pressure Equipment and Assemblies (Regulation 4)] because their characteristics are below or equal to the limits fixed in Article 6 (c) (i) of the same Regulation. As mentioned in the Regulation 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 6 (c) (i) items:

- 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 or UKCA marking referred to in Article 8
- Are not accompanied by a "Declaration of Conformity" to Pressure Equipment (Safety) Regulations 2016

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 our instructions:

- BS EN 12284:2003 Refrigerating systems and heat pumps. Valves. Requirements, testing and marking
- BS 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:	35
Fluid Group:	1
EC-Certificate of conformity No:	01 202 CHNQ-19 0641

Table 3

## **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 Electrical Equipment (Safety) Regulations 2016.

Additional test has been performed in order to allow the usage of the present electrical device with Flammable refrigerants as described in the BS EN-378-1/2012-08 Annex F section F.2.3

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

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

(BS) EN 60730-1:2017-05; (BS) EN 60730-1:2016;

(BS) EN 60730-1:2016/A1:2019; (BS) EN 60730-2-6:2016

With sub-clauses 7/8/9/10/11/12/13/18/19/20/21/27

Household and similar electrical appliances - Safety

(BS) EN 60335-2-24:2019-11;(BS) EN 60335-2-24:2010/A1:2019

With sub-clauses 22.110

Household and similar electrical appliances – Safety

(BS) EN 60335-2-89:2018-10; (BS) EN 60335-2-89:2010/A2:2017

With sub-clauses 22.109

Household and similar electrical appliance - Safety

(Particular requirements for electrical heat pumps, air conditioner, dehumidifiers)

(BS) EN 60335-2-40/2014-01

(BS) EN 60335-2-40/2003 + A11/2004 + A12/2005 + A1/2006 + A2/2009 + A13/2012

- · 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

For LPF series valves shown in the Table 1, with coil PQ-M24xxxx shown in the table 4, and all the valves shown in the Table 1, additional test has been performed according to :

Explosive atmospheres

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**

Licetted Colls					
COIL NAME	SUITABLE FOR	Power Supply	Rated Voltage (V)	Applicability of Electrical Equipment (Safety) Regulation 2016 (2016/1101)	CERTIFIED FOR FLUID GROUP I
PQ-M10012-xxxxxx	DPF	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

## Note:

The applicability of the Electrical Equipment (Safety) Regulations 2016 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 Electrical Equipment (Safety) Regulations 2016 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  $% \left( 1\right) =\left( 1\right) \left( 1\right)$
- Don't bear CE or UKCA marking referred to in Article 39
- Are not accompanied by a "Declaration of Conformity" to Electrical Equipment (Safety) Regulations 2016 SCHEDULE 8 (Regulation 38)

Responsible Person to issue the declaration of Conformity:	Date	Signature
Mr. Zhouyang Li	2001.5.27	7 37 3
		技术中心