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## The EU Declaration of Conformity

Issued in accordance with:

The Pressure Equipment Directive 2014/68/EU

### The manufacturer's name and address:

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

### Declaration:

Thermostatic 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 II as defined in article 13 (1) (b) of Directive 2014/68/EU. 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.

### Summary:

Product Series	Design Pressure PS (bar)	TS(°C)	Table
RFKH	46	-40 to +70	See Table 2
RFKH - Range B	46	-60 to +70	See Table 2
RFGB	35	-40 to +70	See Table 3
RFGB - Range B	35	-60 to +70	See Table 3
RFGD	48	-40 to +70	See Table 4
RFGD - Range B	48	-60 to +70	See Table 4
RF GK	46	-40 to +70	See Table 5
RF GK - Range B	46	-60 to +70	See Table 5
RFGL	46	-40 to +70	See Table 6
RFGL - Range B	46	-60 to +70	See Table 6

Table 1

**Description of Products:**

SANHUA MODEL*	Inlet Ø (inch)	Outlet Ø	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
RFKH01(E)-6.0-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH02(E)-6.3-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH03(E)-4.8-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH04(E)-2.9-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH05(E)-7.6-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH07(E)-6.0-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH08(E)-6.1-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH10(E)-2.8-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH11(E)-4.5-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH14(E)-2.7-zzz	SAE 3/8"	1/2" , 12mm	NOT SUITABLE	-	Art. 4.3	-
RFKH20(E)-4.3-zzz	SAE 3/8"	1/2" , 12mm	Art. 4.3	-	Art. 4.3	-

Table 2

SANHUA MODEL*	Inlet Ø	Outlet Ø	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
RFGB01(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	NOT SUITABLE	-	Art. 4.3	-
RFGB02(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	NOT SUITABLE	-	Art. 4.3	-
RFGB03(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	NOT SUITABLE	-	Art. 4.3	-
RFGB04(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	NOT SUITABLE	-	Art. 4.3	-
RFGB06(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	Art. 4.3	-	Art. 4.3	-
RFGB09(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	Art. 4.3	-	Art. 4.3	-
RFGB15(E)-yyy-zzz	6mm; 10mm 1/4' ; 3/8"	10mm; 12mm 3/8' ; 1/2"	NOT SUITABLE	-	Art. 4.3	-

Table 3

SANHUA MODEL*	Inlet Ø (mm)	Outlet Ø (mm)	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
RFGD01E-yyy-zzz	10, 12, 16, 22	16, 22	NOT SUITABLE	-	Art. 4.3	-
RFGD01E-yyy-zzz	22; 28	28; 35	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD02E-yyy-zzz	10, 12, 16, 22	16, 22	NOT SUITABLE	-	Art. 4.3	-
RFGD02E-yyy-zzz	22; 28	28; 35	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD03E-yyy-zzz	10, 12, 16, 22	16, 22	NOT SUITABLE	-	Art. 4.3	-
RFGD03E-yyy-zzz	22; 28	28; 35	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD04E-yyy-zzz	10, 12, 16, 22	16, 22	NOT SUITABLE	-	Art. 4.3	-
RFGD04E-yyy-zzz	22; 28	28; 35	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD05E-yyy-zzz	10, 12, 16, 22	16, 22	NOT SUITABLE	-	Art. 4.3	-
RFGD05E-yyy-zzz	22; 28	28; 35	NOT SUITABLE	-	Cat.I	A (point 1)

Table 4a: Thermostatic expansion valves RFGD (metric connections)

SANHUA MODEL*	Inlet Ø (inch)	Outlet Ø (inch)	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
RFGD01E-yyy-zzz	3/8", 1/2", 5/8", 7/8"	5/8", 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGD01E-yyy-zzz	7/8"; 1"1/8	1"1/8; 1"3/8	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD02E-yyy-zzz	3/8", 1/2", 5/8", 7/8"	5/8", 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGD02E-yyy-zzz	7/8"; 1"1/8	1"1/8; 1"3/8	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD03E-yyy-zzz	3/8", 1/2", 5/8", 7/8"	5/8", 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGD03E-yyy-zzz	7/8"; 1"1/8	1"1/8; 1"3/8	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD04E-yyy-zzz	3/8", 1/2", 5/8", 7/8"	5/8", 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGD04E-yyy-zzz	7/8"; 1"1/8	1"1/8; 1"3/8	NOT SUITABLE	-	Cat.I	A (point 1)
RFGD05E-yyy-zzz	3/8", 1/2", 5/8", 7/8"	5/8", 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGD05E-yyy-zzz	7/8"; 1"1/8	1"1/8; 1"3/8	NOT SUITABLE	-	Cat.I	A (point 1)

Table 4b: Thermostatic expansion valves RFGD (imperial connections)

SANHUA MODEL*	Inlet Ø (inch)	Outlet Ø	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
RFGKxx(E)-yyy-zzz	6mm; 10mm 12mm, 16mm 1/4"; 3/8"; 1/2" ; 5/8"	10mm; 12mm 16mm, 22mm 3/8"; 1/2"; 5/8"; 7/8"	NOT SUITABLE	-	Art. 4.3	-
RFGKxx(E)-yyy-zzz	SAE 1/4"; SAE 3/8"	SAE 1/2"	NOT SUITABLE	-	Art. 4.3	-

Table 5

SANHUA MODEL*	Inlet Ø	Outlet Ø	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
RFLxx(E)-yyy-zzz	6mm; 10mm 1/4"; 3/8"	10mm; 12mm 3/8"; 1/2"	NOT SUITABLE	-	Art. 4.3	-
RFLxx(E)-yyy-zzz	6mm; 10mm 1/4"; 3/8"	10mm; 12mm 3/8"; 1/2"	NOT SUITABLE	-	Art. 4.3	-

Table 6

**Note:**

"E" letter means "External Equalization type"; no "E" means "Internal Equalization type"

"xx" letters define the refrigerant type

"yyy" letters are referred to a decimal number which represents the valve capacity expressed in Tons of refrigerant

"zzz" letters are referred to a numeric consequential code which represents the drawing revision (internal code)

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) & (ii) 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 (1) (c) them:

- 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 our instructions:

- EN 12284:2003 - 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

Responsible Person to issue the declaration of Conformity:	Date	Signature
Mr. Zhouyang Li	2021.5.27	

