

### **Declaration of Performance no. D2000**

AS PER ARTS. 4, 6, 7 AND ANNEX III TO REG. (UE) 9-3-2011, No. 305/2011

MOD.CL.DDP – Rev. 00

Date 06/05/13

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<b>1.</b> Univoca	product-type	identification	code:	KALDUS	2000
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- 2. Type, lot, series no. or any other element that enables the construction product to be identified pursuant to article 11, paragraph 4: **KALDUS**
- 3. Intended use(s) of the construction product according to the relative harmonised technical specification, as stated by the manufacturer: Heat emitting radiators designed for permanent installation in heating systems of residential buildings, fed from a remote source with hot water or steam at a temperature < 120 °C. (EN 442-1 December 2014, EN 442-2 December 2014)
- 4. Name, registered trade name or registered trademark and address of the manufacturer pursuant to article 11, paragraph 5: Radiatori 2000 S.p.a. Via Francesca, 54/A 60, 24040 Ciserano (BG) ITALY
- 5. If applicable, name and address of mandatary whose mandate includes the assignments as per article 12, paragraph 2: **N.A.**
- 6. System(s) for the assessment and verification of constancy of performance of the construction product, as per annex V: **system 3**.
- 7. In a declaration of performance concerning a construction product that comes under the scope of a harmonised standard:

# Notified Testing Laboratory: Politecnico di Milano – Energy Department (Notified body number: 1695)

(name and identification number of notified body, if applicable)

has performed **type tests (standard UNI EN 442-1)** according to system **3.** (description of third party assignments as per annex V)

#### and has issued:

- Determination of the thermal output of a heating body (Test report ENE/MRT.RAP.09171 of 28/05/09)
- Pressure tightness tests (Test report ENE/MRT.RAP.09171/P of 28/05/09)

(constancy of performance certificate, plant production control conformity certificate, test/design reports – as applicable)

#### Notified Testing Laboratory: AQM S.r.l. (LAB No. 0095)

(name and identification number of organisation notified, if applicable)

has performed **type tests (standard UNI EN 442-1)** according to system **3.** (description of third party assignments as per annex V)

#### and has issued

Adherence test and Corrosion test in salt mist. (Test report 2009-1463/PC of 28/05/09)
 (constancy of performance certificate, plant production control conformity certificate, test/design reports – as applicable)



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8. In a declaration of performance concerning a construction product for which a European technical assessment has been released:

(name and identification number of technical assessment body, if applicable)	
has released	
(reference number of European technical assessment)	••
based on	
(reference number of European assessment document)	•
performed	
and has issued	
(constancy of performance certificate, plant production control conformity certificate, test/design reports - as applicable)	-
Performance declared	

#### 9. Performance declared

Notes to table:

- 1. Column 1 contains the list of the basic properties as defined in the harmonised technical specifications for the use(s) specified in § 3 above;
- 2. For each property listed in column 1 and conforming to the requirements as per article 6, this column gives the performance declared, expressed in terms of level, class, or through a description, in relation to the corresponding basic properties. If no performance has been declared, the column shows "NPD" (No Performance Determined):
- 3. For each basic property listed in column 1, column 3 gives:
  - A reference, with relative date, to the corresponding harmonised standard, and, if applicable, a. the reference number of the specific technical documentation, or that of the appropriate technical documentation used;

or

b. A reference, with relative date, to the corresponding European assessment document, if available, and the reference number of the European technical assessment used;



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Basic properties	Performance	Harmonised technical spec.	
(see note 1)	(see note 2)	(see note 3)	
Reaction to fire	A1	Tests on organic part of any paint or surface treatment substance to verify whether it is <1 % by mass. (Clause 5.2, standard EN 442-1:2014)	
Release of hazardous substances	None	Clause 5.3, standard EN 442- 1:2014	
Surface temperature	120° C maximum and corresponding to water supply temperature	EN 442-1:2014	
Maximum operating pressure	6 bar	EN 442-1:2014	
Pressure tightness (leak test)	7,8 bar	Clause 5.4, standard EN 442- 1:2014	
Pressure tightness (resistance test)	10,1 bar	Clause 5.6, standard EN 442- 1:2014	
Rated thermal output ΔT 50 K	308,6 Watt/element	Clause 5.8, standard EN 442- 1:2014	
Rated thermal output ΔT 30 K	154,6 Watt/element	Clause 5.8, standard EN 442- 1:2014	
Thermal power in different operating conditions (Characteristic equation)	$\Phi = \text{Km } x \Delta T^n$	Clause 5.8, standard EN 442- 1:2014	
Coefficient Km	1,547	Clause 5.8, standard EN 442- 1:2014	
Coefficient n	1,353	Clause 5.8, standard EN 442- 1:2014	
Durability (impact resistance lightweight)	Level 0	Clause 5.9, standard EN 442- 1:2014	
Durability (corrosion test)	No corrosions after 100 h in salt mist	Clause 5.9, standard EN 442- 1:2014	

(	impact resistance lightweight)			1:2014	
•	Durability	No corros	sions after 100 h in salt	Clause 5.9, standard EN 442-	
(corrosion test)			mist	1:2014	
lf a s produ	pecific technical document has be uct:	een used, pu	ursuant to art. 37 or art. 3	38, the requirements met by the	
10.	The performance of the product	as per §§ 1	& 2 above conforms to t	the performance declared as per § 9	
	This declaration of performance above.	is released	under the sole responsil	bility of the manufacturer as per § 4	
	Signed in the name and on beha	alf of:			
	ARIANNA SCAR	AVAGGI	Mana (name and functions)	iging Director	

Ciserano (BG – Italy) 05/10/2015 (place and date of issue)

(signature)