

DIN EN 12977-4:2018-07 (E)

Thermal solar systems and components - Custom built systems - Part 4: Performance test methods for solar combistores

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Symbols and abbreviations	6
5	Store classification	6
6	Laboratory store testing	7
6.1	Requirements on the testing stand	7
6.1.1	General	7
6.1.2	Measuring data and measuring procedure	7
6.2	Installation of the store	7
6.2.1	Mounting	7
6.2.2	Connection	7
6.3	Test and evaluation procedures	8
6.3.1	General	8
6.3.2	Test sequences	9
6.3.3	Data processing of the test sequences	12
7	Test report	14
7.1	General	14
7.2	Description of the store	14
7.3	Test results	15
7.4	Parameters for the simulation	16
Annex A (normative) Store model benchmark tests		17
Annex B (normative) Verification of store test results		18
Annex C (normative) Benchmarks for the parameter identification		19
Annex D (informative) Requirements for the numerical store model		20
Annex E (informative) Determination of hot water comfort		21
Annex F (informative) Implementation for Ecodesign and Energy Labelling		22
F.1	Standing loss	22
F.2	Nominal store volume	22
F.3	Volume of the non-solar heat storage	22
Annex ZA (informative) Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EC) No 811/2013 aimed to be covered		23

Annex ZB (informative) Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EC) No 812/2013 aimed to be covered	24
DIN EN 12977-4:2018-07 EN 12977-4:2018 (E) Annex ZC (informative) Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EC) No 814/2013 aimed to be covered	25
Bibliography	26