

ISO 5826:2014-02 (E)

Resistance welding equipment - Transformers - General specifications applicable to all transformers

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	3
5	Construction, additional equipment	4
5.1	Thermal protection	4
5.2	Output current sensing coil	4
6	Physical environment and operating conditions	5
6.1	General	5
6.2	Ambient air temperature	5
6.3	Humidity	5
6.4	Altitude	5
6.5	Transportation and storage	5
6.6	Provisions for handling	5
6.7	Cooling liquid temperature	6
7	Tests	6
7.1	Test conditions	6
7.2	Type tests	6
7.3	Routine tests	7
8	Protection against electric shock	7
8.1	Insulation resistance	7
8.2	Dielectric strength	7
8.3	Calibration of output current sensing coil	8
8.4	Protection against electric shock in normal service (direct contact)	9
8.5	Protection against electric shock in case of fault condition (indirect contact)	9
8.6	Class II transformer insulation requirements	9
9	Thermal rating	9
9.1	General	9
9.2	Limits of temperature rise	10
9.3	Heating test conditions	11
9.4	Methods of temperature measurements	13
10	Rated output voltage	15
10.1	General	15
10.2	a.c. no-load voltage (U₂₀)	15
10.3	d.c. no-load voltage (U_{2d})	15
11	No-load input current (I₁₀)	15
11.1	General	15
11.2	Measurement procedure	16

12	Short-circuit voltage (U_{cc})	16
13	Output current under load condition	16
14	Cooling liquid circuit	17
15	Dynamic behaviour	17
16	Rating plate	17
16.1	General	17
16.2	Description	18
17	Instruction manual	20
Annex A (informative) Example of a rating plate		21
Annex B (normative) Corrections for higher altitudes and cooling medium temperatures		22
Annex C (informative) Notes on physical concepts and comments on some definitions		23
Annex D (informative) Type code for single-phase transformers for alternating welding current ²⁹		
	Bibliography	30