

ISO 12759:2010-12 (E)

Fans - Efficiency classification for fans

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Fans -- General	2
3.2	Fan or test installation categories according to the arrangement of ducting	3
3.3	Fans -- Definitions relating to calculations	3
3.4	Definitions relating to fan efficiency	5
3.5	Fan efficiency grades	6
4	Symbols and units	6
5	Fan installation, efficiency and tolerance	7
5.1	General	7
5.2	Use of installation categories	9
5.3	Calculation of efficiency	9
5.4	Tolerances	10
6	Ratings	10
6.1	General	10
6.2	Bare shaft fans	10
6.3	Driven fans	13
Annex A (normative) Energy efficiency grades for bare shaft fans		20
Annex B (normative) Calculation method to determine efficiency of component parts		21
Annex C (informative) Variation of fan performance between installation categories		26
Annex D (informative) Input power calculation for driven fans at design point		27
Annex E (informative) Selection of fans for best efficiency		35
Annex F (informative) Determination of efficiency grade for a driven fan		38
Annex G (informative) Explanatory note		40
Bibliography		42