

DATASHEET

THREE PHASE INDUCTION MOTOR - SQUIRREL CAGE EXPROOF (ATEX) MOTOR (FLAMEPROOF 'db')



Type : 3TG100L4D-FA-AA-162

Date : 06/04/2026

Power [kW]	: 3.00	Efficiency Class	: IE3
Input Voltage [V]	: 400	Duty Cycle	: S1
Connection Type [Δ / Y]	: Y	Service Factor	: 1.00
Frequency [Hz]	: 50	Frame Size	: 100L
Pole Number	: 4	Weight [kg]	: 53.4
Nominal Speed [rpm]	: 1450	Insulation Class	: F [155°C]
Nominal Current [A]	: 6.26	Temperature Rise	: B [80°K]
Nominal Moment [Nm]	: 19.8	Protection Class	: IP66
Nominal Efficiency [η]	: 87.7	Vibration Severity Grade	: A
Power Factor [$\cos\phi$]	: 0.79	Method of Cooling	: IC411 (TEFC)
Locked Rotor Current [I_a/I_n]	: 7.2	Direction of Rotation	: Bidirectional
Locked Rotor Torque [M_a/M_n]	: 2.8	Balance	: Half Key
Breakdown Torque [M_k/M_n]	: 3.6	Motor Thermal Protection	: PTC (120°C)
Motor Color	: RAL 7031	ATEX Certification Number	: IEP 25 ATEX 1641X
Ambient Temperature	: -20°C / +40°C	ATEX Classification (Gas)	: II 2G Ex db IIC T4 Gb
Altitude Above Sea Level	: 1000m	ATEX Classification (Dust)	: II 2D Ex tb IIIC T120°C Db
Sound Pressure Level [dBA]	: 53	ATEX Zone Categories (Gas/Dust)	: Zone 1/21

ELECTRICAL DATA

Δ / Y	U [V]	f [Hz]	P [kW]	n [rpm]	I [A]	η [%100]	η [%75]	η [%50]	$\cos\phi$	Cl
Δ	230	50	3.00	1450	10.8	87.7	88.0	87.0	0.79	IE3
Y	400	50	3.00	1450	6.26	87.7	88.0	87.0	0.79	IE3
Y	460	60	3.00	1760	5.47	89.5	89.3	88.2	0.77	IE3
Y	460	60	3.48	1750	6.23	87.5	88.0	87.0	0.80	IE2

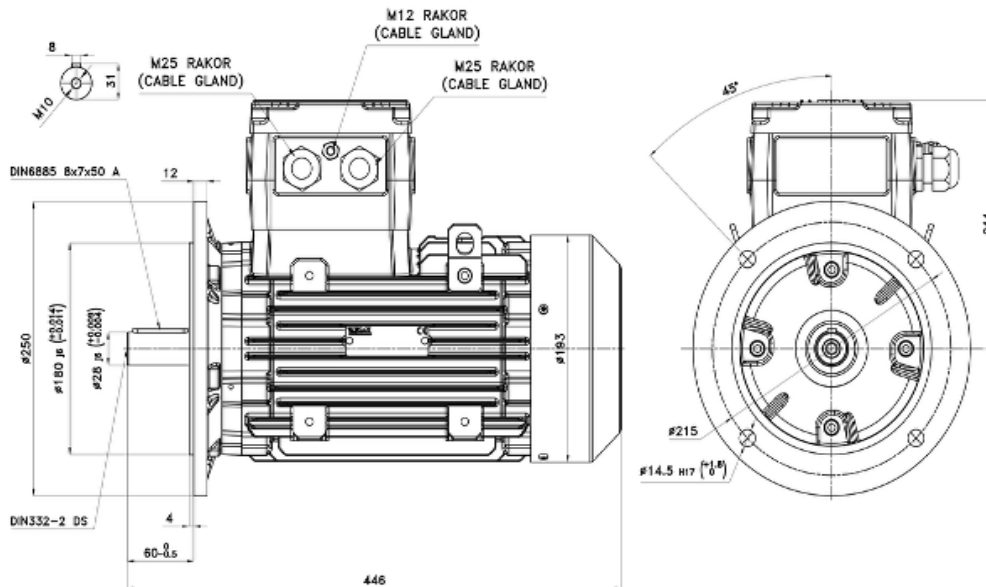
MECHANICAL DATA

Moment of Inertia [kgm ²]	: 0.00888
Bearing [DS / NS]	: 6306ZZ C3 / 6306ZZ C3
Frame Material	: Cast Iron
Flange Type / Material	: B5 / Cast Iron
Cooling Fan Material	: Aluminum
End Shield Material	: Cast Iron

TERMINAL BOX

Terminal Box Material	: Cast Iron
Terminal Box Position	: Top
Terminal Box Cable Entry	: M12x1.5+2xM25x1.5
Terminal Box Gland Material	: Metal
Contact Screw Thread	: M5

MECHANICAL DIMENSIONS



Manufactured and tested in accordance with IEC 60034

*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

*ELK Motor has right to change all the data without prior notice.

FR.AG.010 REV.NO: 04 REV.DATE: 01.01.2023