

ECOL MOTOR
MODEL D1S 180L-4
TECHNICAL DATA SHEET

General Data	
Frame size	180
Housing material	Casting iron
Install model	According to the standard
Type of feet	Removable feet (Standard) Fixed feet (Optional)
Net weight	165 kg
Insulation class	F (Standard)
	H (Optional)
Protection degree	IP 55 (Standard)
	IP 56 (Optional)
Thermal protection	Without (Standard)
	Customizable (Optional)
Service duty	S1
Vibration level	A
Balance	Half-key balanced
Cable glands	2 - M32x 1.5
Cooling	IC 411
Painting color	RAL 7024 (Standard)
	Customizable (Optional)
Regulations	IEC / DIN / ISO / VDE / EN
Standard	IEC 60034

Environmental conditions	
Ambient temperature	From -20°C to +40°C
Maximum altitude	1000 m above sea level

Electrical Data		
Output	22	kW
Frequency	50	Hz
Voltage (±5%)	400	V Δ @ 50Hz
	690	V Y @ 50Hz
	480	V Δ @ 60Hz
	828	V Y @ 60Hz
Rotation speed	1480	RPM @ 50Hz
	1776	RPM @ 60Hz
Rated current	40.6	A (In) @ Δ 50Hz
	23.44	A (In) @ Y 50Hz
Starting current	8	xIn
Rated torque	143.9	Nm (Mn)
Starting torque	2.2	xMn
Breakdown torque	2.6	xMn
		IE1
Efficiency	89.9	@ 100% load
	90.7	@ 75% load
	89.3	@ 50% load
Power factor cosφ	0.87	@ 100% load

Mechanical Data		
Bearings brand	C&U	(Standard)
	Customizable	(Optional)
Bearings type	6311 C3	(DE)
	6311 C3	(NDE)
Lifetime of bearings		- hours
Allowed radial load		3373 N
Allowed axial load		30000 N
Grease type	polyurea-based grease	
Lubrication interval of NDE bearing		18500 h
Lubrication interval of DE bearing		18500 h
Moment of inertia	0.165410	Kg*m ²
Noise level	76	dB(A)

