

Cat[®] Electric Motors

For Gas Compression





GET TOUGH.

Get power built for your most demanding gas compression applications.

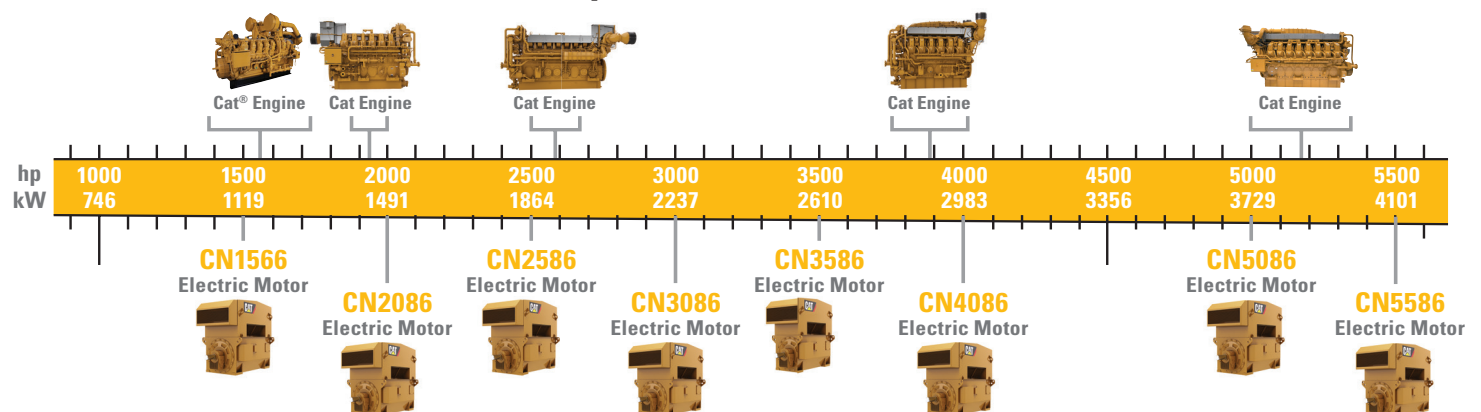
Every Cat® electric motor is tested to make sure it performs reliably and according to your process requirements. You get high operating efficiency, low maintenance costs, decreased noise levels, and no site emissions.

CAT ELECTRIC MOTORS

	CN1566 1200 rpm	CN2086 900 rpm	CN2586 900 rpm	NEMA CN3086 900 rpm	CN3586 900 rpm	CN4086 900 rpm	CN5086 900 rpm	IEC CN2785 750 rpm
Rating	1500 hp	2000 hp	2500 hp	3000 hp	3500 hp	4000 hp	5000 hp	2700 kW (3602 hp)
Number of Poles	6	8	8	8	8	8	8	8
Voltages	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	4000 V/ 4160 V 60 Hz	10 kV 50 Hz
Enclosure Type	WP11 (IP24W)	WP11 (IP24W)	WP11 (IP24W)	WP11 (IP24W)	WP11 (IP24W)	WP11 (IP24W)	WP11 (IP24W)	IP55
Cooling	IC01	IC01	IC01	IC01	IC01	IC01	IC01	IC611
EX Protection	—	—	—	—	—	—	—	EX px II T3
Service Factor (Inverter Fed)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	1.15 SF (1.0 VFD)	—
Temperature Rise	Class B*	Class B*	Class B*	Class B*	Class B*	Class B*	Class B*	Class B
Insulation	Class F	Class F	Class F	Class F	Class F	Class F	Class F	Class F
Weight (Approx.)	8289 lb	12,037 lb	13,735 lb	17,130 lb	18,431 lb	19,268 lb	23,330 lb	13 210 kg (29,123 lb)
Hazardous Location	Class 1, Division 2, Groups A, B, C, and D (T3)							Zone 1

* Class B rise at nameplate rated load

CAT ELECTRIC MOTORS – RANGE (hp/kW)



POWER THAT NEVER QUILTS.

Cat electric motors are of the AC induction type and built for low vibration and high rigidity, so you get great performance over a long, productive life. Standard features include hazardous location ratings and a high strength alloy (AISI 4140/DIN 42CrMo4) forged, keyless shaft.

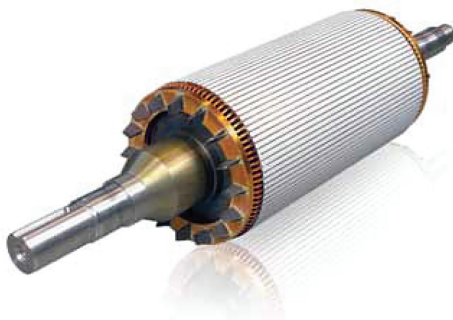
BEARINGS

- Sleeve bearings standard on 2000 hp and above, anti-friction on 1500 hp (sleeve bearings available as an option)
- Insulated non-drive end bearings to reduce bearing currents
- Bearing and winding RTDs for temperature monitoring



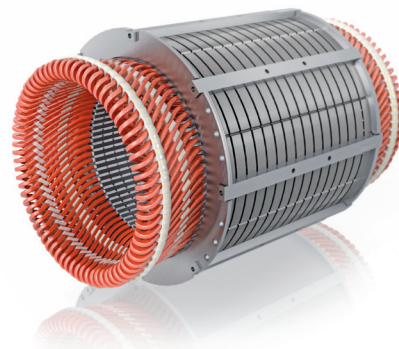
ROTORS

- Designed for minimal vibration
- Dynamic balancing at full operational speed
- Fabricated copper squirrel cage
- Swaged rotor bars
- Forged, keyless shaft sized to match common compressors



STATORS

- Welded and machined stator core retains its rigidity throughout motor life
- Radial air ducts ensure uniform and efficient cooling
- 2x RTDs per phase
- Vacuum pressure impregnated with a specially formulated epoxy resin to ensure a sealed and homogeneous insulation system that results in high dielectric strength, excellent heat transfer and the elimination of hazardous internal partial discharges
- NEMA motors designed for use with variable frequency drives





OPTIONAL ATTACHMENTS

- Oversized terminal box
- Surge protection
- Differential CTs
- Differential pressure switch (NEMA WP11 only)
- Oil sump heater and controller
- Star point connection in terminal box
- Blower motor cooling (NEMA WP11 only)
- Right-hand or left-hand (F1 or F2) main Terminal box location
- Stainless steel air filters (NEMA WP11 only)

It's an easy choice.

From selection and installation to ongoing technical support and maintenance, your Cat dealer is there to help you. Installation drawings, performance data, manuals, and other documentation are readily available. Shorter lead times, industry-leading availability and extended service intervals mean less stress and lower cost of ownership. Our goal is to make your life easier.

To learn more, call your local Cat dealer today or visit www.cat.com/oilandgas

LET'S DO THE WORK.™

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