



Smart solutions.
Strong relationships.

WE PUT ALL OUR ENERGY INTO SAVING YOURS!

ROTATING MACHINES AND DRIVES

MOTORS
UPTO 12 MW

GENERATORS
UPTO 25 MVA

DRIVES
UPTO 3 MW

Authorized Distributor :- POWER ELECTRICALS, SECUNDERABAD

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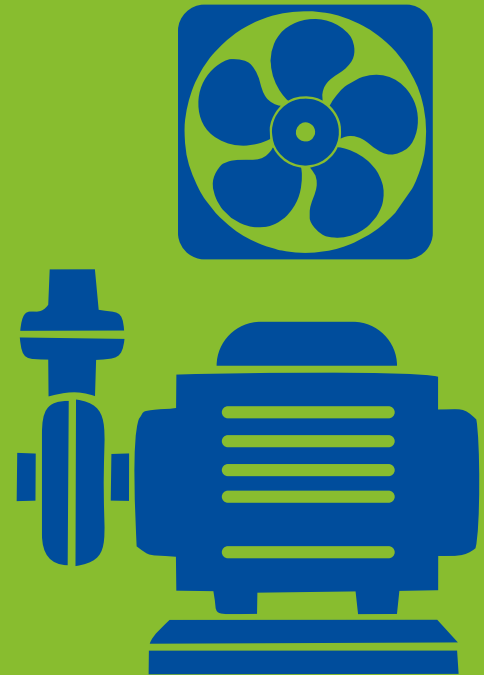


CG Power and Industrial Solutions Limited (CG) is a pioneer in modern technology in electrical field which offers complete solutions for generation, transmission and distribution of energy by supplying globally recognized high-tech products delivering elevated efficiency and robustness. Since its inception, CG has been synonymous with electricity. In 1875, a Crompton 'dynamo' powered the world's very first electricity-lit house in Colchester, U.K. CG India operations were established in 1937, and since then the company has retained its leadership position in the management and application of electrical energy.

CG' s Rotating Machines and Drives is engaged in the business of power conversion equipment. The power conversion equipment include a wide spectrum of Medium and Low Voltage Rotating Machines, Drives, Stampings, Railway Transportation and Signaling products. Rotating Machines and Drives is focused globally with a strong market presence in Europe and market leadership position in many segments in India. It caters to the global markets through its manufacturing facilities located across Europe as well as India.

CG

Commercial Products



With over 80 years of unwavering excellence, continuous innovation and reliable engineering, CG has been relentlessly working towards new product development to add value for its customers. Under the CG Commercial Products Division, a wide range of consumer products were launched in January 2019. These products are designed by the CG engineering team after extensive research and understanding of various applications.

However, these products are not new for CG, in fact, they are backed-up with proven results of more than two decades. The decision to re-launch this product range was driven by high consumer demand and positive feedback from satisfied customers across the country.

Domestic Exhaust Fans

CGmax-AIR™

CGmaxAir exhaust fan is perfect choice for eliminating heat, fumes, unpleasant odours and provides comfort for healthy feeling at your homes and workplaces. These fans perform silently and gives wonderful feeling of freshness.

Fans are manufactured with heavy components, double ball bearing, copper winding and high quality powder coating. The air delivery is best in class available in the market. Fans are certified with ISI mark.

Application	Domestic Kitchens, Office and Conference Halls, Meeting Rooms, Toilets etc.
Size	200mm & 300mm
Colour Available	Golden Brown & Lilac Glossy
Rated Voltage	1Ph – 230V, 50HZ
Input Current	0.2 Amps, 0.4 Amps
Input Watt	35 Watts, 75 Watts
Speed (RPM)	1440
Air Delivery (cu.m/hr)	800 to 1790



Cooler Kit Fans

CGcomfort™

CG "Comfort Series" motors are trusted name in Cooler segment; motors have been satisfactorily performing more than decade.

On the market demand and customers feedback, CG brings Cooler Kit (consist of motor, Fan blade and arms).

The product manufactured with high quality components in two different fan designs for Heavy Duty and Standard Duty application.



Application	Desert Air Cooler
Size	18 Inch & 20 Inch
Colours	Golden Brown and Lilac Glossy
Rated Voltage	1Ph - 230V, 50Hz
Input Current	0.68 Amps, 0.9 Amps
Input Watt	158 Watts, 198 Watts
Air Delivery(cu.m/hr)	3000 & 3600
Speed (RPM)	1440

Submersible Cooler Pump **CGminiSplashh™**

CG's "Comfort Series" motors have been performing excellently in Desert Cooler market for decades.

To serve the market demand as package, our design and engineering team extensively worked on the application and developed submersible cooler pumps for desert coolers.

The pump is precisely manufactured by using the high grade components with inbuilt T.O.P.

Application	Desert air cooler, Indoor fountains, Aquariums & RO equipments.
Models	CGminiSplashh-20 & CGminiSplashh-40
Rated Voltage	1Ph - 220V, 50Hz
Input Watt	20 Watts & 40 Watts
Head (max)	5 Feet & 8 Feet
Discharge (@5ft)	200 & 400 LPH



Heavy Duty Exhaust Fans

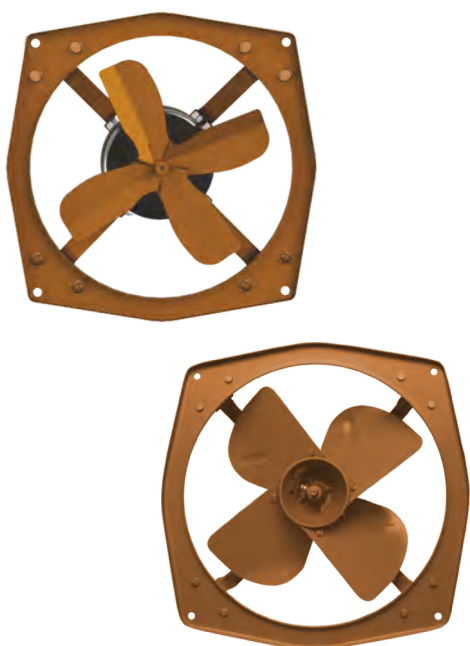
CGPowerAIR™

CG has developed the product after the myriad innovations with back-up of 15 year of proven results in exhaust fan motors. Our continuous development process enables us for the innovation to bring latest designed products consumes less energy with excellent results.

Exhaust fans are developed with years of diligent efforts of design and engineering team after understanding the application.

To serve the market, CG has developed fans in two variants-MS fan with aluminium alloy Hub and MS fan with MS hub.

The fans are precisely manufactured by using the high grade components.



Application	Exhaust Fans for hotels, Large kitchen ventilation Industrial sheds / Godowns & paint shops etc.
Size (Inches)	12,15 and18 in MS Fan with MS Hub. 12, 15, 18, 24 and 36 Inch in MS Fan with Aluminium alloy Hub
Colour	Golden Brown
Supply	1Ph - 230V, 50Hz & 3Ph - 415V, 50Hz
Input Current	From 0.25 Amps to 2.3 Amps
Input Watt	55 Watts to 1200 Watts
Speed (RPM)	700 to 1440
Air Delivery(cu.m/hr)	1150 to 25200
Insulation	F Class
Protection	IP44 / IP55

Motor Starters

CGSafeStart™

Motor starters designed by CG considering changing customer preferences and reliable operation; these starters apply direct voltage across motor terminals to start the motor.

Based on the features, starters are classified as under:

- Manual switch (Contactor) with Overload current setting for single phase(SafeStart Mini)
- Gravity operated with Overload Current Setting for three phase (SafeStart DOL).
- Gravity operated three phase DOL Starter with Single Phase Preventer (SafeStart DOL-SPP).



	Single Phase	Single Phase	3 Phase
	"Mini"	DOL Starters	DOL Starters
Recommended Motor Output	0.75kw to 2.20kw	0.75kw to 3.70kw	0.75kw to 15kw
Contactor	Manual (Inbuilt relay) 2 Pole 230V, 50Hz	AC3 Duty, 2 Pole 230V, 50Hz	AC3 Duty, 4 Pole 415V, 50Hz
Contactor Rating	20Amps	6 Amps to 32 Amp	16 Amps to 32 Amp
Relay range (in Amps)	4 - 20	6 - 32	1.5 - 32
Coil Voltage Band	-	130v - 250V	240v - 450V

#Star-delta and Coil operated starters are available on request

CGDMB™ CGCMB™

Slow Speed Self Priming Pump

Due to the growth in rural infrastructure and urbanisation, the demand in water pumping applications is increasing. To fulfil these needs CG has come-up with efficient and reliable domestic range of pumps,

Application: Bungalows, High-rise Buildings, Apartments, Small Farms, Hospitals, Flats etc.



	CGDMB	CGCMB (V-Flow)
Range (HP)	0.5 & 1.0	0.5 & 1.0
Head (max)	45meters	38 meter
Discharge (max)	3000 LPH	4000 LPH
Suction	8 meters	8 meters
Pipe Size (in mm)	25 x 25	25 x 25
Motor Body	MS	Cast Iron
Frame	56 (NEMA)	80 & 90 (IEC)
Winding	Copper	Copper
Supply	1ph 180-240V , 50Hz 3 ph 350-415V , 50Hz	1ph 180-240V, 50Hz
Pump Casing	CED Coated	CED Coated
Shaft	SS 410	SS 410
Impeller	HTB -1	HTB -1
Speed (RPM)	1425	1425

High Speed Super Suction Self Priming Pumps

CGmaxGOLD™ CGmaxVEE™

Application: Buildings, Apartments, High rise Buildings, Flats, Nursing Homes etc.

	CGmax GOLD	CGmax VEE
Range (HP)	0.5 & 1.0	0.5 & 1.0
Head (max)	36 meters	50 meters
Discharge (max)	2150 LPH	2600 LPH
Pipe Size (in mm)	15 x 15 (0.5 HP) & 25 x 25 (1.0HP)	25 x 25
Motor Body	Aluminium PDC	Aluminium PDC / Cast Iron
Frame (IEC)	71	71
Winding	Copper	Copper
Supply	1Ph 180-240, 50Hz	1 Ph 180-240, 50Hz
Pump Casing	CED Coated	CED Coated
Shaft	SS 410	SS 410
Impeller	LTB-2	LTB-2
Speed (RPM)	2850	2850



High Speed Self Priming Pumps

CGmini™

Application: Residential Buildings, Apartments, Hotels, Clubs, Lawn Sprinklers etc.

	CGminiSERGEANT	CGminiHEAD	CGminiMARSHAL	CGXtreme
Range (HP)	0.5 & 1.0	0.5 & 1.0	0.5 & 1.0	1.5
Head (max)	34 meters	39 meters	55 meters	60 meter
Discharge (max)	2700 LPH	3000 LPH	4280 LPH	3600 LPH
Suction	7.5 meters	7.5 meters	7.5 meters	7.5 meters
Pipe Size (in mm)	25x25	25x25	25x25	25x25
Motor Body	Copper	Copper	Copper	Copper
Frame (IEC)	71 (AL Extrusion)	63 & 71 (AL Extrusion)	71 & 80 (AL PDC)	80 (AL PDC)
Winding	Copper	Copper	Copper	Copper
Supply	1ph 180-240v,50Hz	1ph 180-240v,50Hz	1ph 180-240v,50Hz	1ph 180-240v,50Hz
Pump Casing	Cast Iron CED coated	Cast Iron CED Coated	Cast Iron CED Coated	Cast Iron CED Coated
Shaft	SS 410	SS 410	SS 410	SS 410
Impeller	Forged Brass	Forged Brass	Forged Brass	Forged Brass
Speed (RPM)	2850	2850	2850	2850

Shallow Well JET PUMPS

CGDSW™

Application: Small farms, Buildings, Apartments, Hotels, Clubs, Gardening etc.

Range (HP)	0.5 & 1.0
Head (max)	36 meters
Discharge (max)	3100 LPH
Pipe Size (in mm)	25 x25
Motor Body	Aluminum extrusion
Frame (IEC)	71
Winding	Copper
Supply	1ph 180-240v, 50Hz
Pump Casing	SS/Cast iron with CED coated
Shaft	SS 410
Impeller	Noryl
Speed (RPM)	2850



Domestic Open Well Pumps

CGDOW™

Application: Submerged (under water) Pumpset for Supplies to Overhead Tanks of Building, Fountains, Garden Lawn Sprinkler etc.

Range (HP)	0.5, 1.0, 1.5 & 2.0
Head (max)	38 meters
Discharge (max)	450 LPM
Suction	8 meters
Pipe Size (in mm)	25 x 25 (0.5 HP) 32 x 25 (1.0 & 1.5 HP) 40 x 40 (1.5 HP) 50 x 40 & 50 x 50 (2.0 HP)
Motor Body	Stainless Steel
Frame (IEC)	80 & 90
Winding	Copper
Voltage Bond	1ph 180-240v, 50Hz
Pump Casing	Cast Iron - CED Coated
Shaft	Carbon Steel
Impeller	Noryl/ Cast Iron (90 Frame)
Speed (RPM)	2850



Centrifugal Mono Block Pump Set

CGXMB™

Application: Small Farm House, Hospital, Irrigation, Flats and Apartments etc.

Range (HP)	0.5 HP to 2.0 HP
Head (max)	30 meters
Discharge (max)	425 LPM
Suction	8 meters
Pipe Size (in mm)	25x25 (0.5 HP) 40x40 (1.0 HP) 50x50 (1.5 HP) 65x50 (2.0 HP)
Motor Body	Cast Iron
Frame (IEC)	71 to 90
Winding	Copper
Supply	1ph 180-240v, 50Hz
Pump Casing	Cast Iron CED Coated
Shaft	Carbon Steel
Impeller	Cast Iron
Speed(RPM)	2850

#0.5 & 1.0 HP Models also available with extended shaft



Vertical Submersible Pump Set (V3 & V4)

CGSV™

Application: Small Farm House, Hospital, Irrigation, Flats and Apartments etc.



Motor Filled	Water Filled	Water Filled	Oil Filled (Prefilled)
Range (HP)	0.5HP to 1.25HP	0.5HP to 3.0HP	0.5 to 2.0HP
Head	upto 92 Meter	upto 260 Meter	upto 148 Meter
Discharge	upto 80 LPM	115 LPM	115 LPM
Motor and Pump Dia	80mm (3Inches)	100mm (4Inches)	100mm (4Inches)
Motor Body	SS 202	SS 202	SS 202
Winding	Poly wrapped Copper	Poly wrapped Copper	Poly wrapped Copper
Supply	1ph 160-240v,50Hz	1ph 160-240V,50Hz	1ph 160-240V,50Hz
Motor Bearing	Thrust Bearing SS Vs Carbon	Thrust Bearing SS Vs Carbon	Ball Bearing
Bush	Bronze LTB-4	Bronze LTB-4	-
Impeller	Noryl	Noryl	Noryl
Diffuser/Bowl	Noryl	Noryl	Noryl
Discharge Outlet	Fitted with NRV	Fitted with NRV	Fitted with NRV
Speed (RPM)	2850	2850	2850

Low Voltage Rotating Machines



CG Power and Industrial Solutions Limited offers a wide range of low voltage motors (rotating machines). The range includes safe and hazardous area motors, energy efficient motors as well as motors for special applications like brake motor, re-rolling mill, cement mill, oil-well pump etc. Our range also includes DC Motors and Traction motors. Our motors are available in various standards and customized configurations to respond to the exacting demands of the industry.

In our continuous effort, to bring out the latest, most advanced product into market-place we continuously add many new services, features and introduce new innovative solutions so as to ensure complete customer satisfaction.

Millennium Series / Maestro Series

MILLENNIUM SERIES

MAESTRO
SERIES

These motors are predominantly used for general purpose applications in MS rolled powder coated body construction. These are available in NEMA 42, 48, 56, and 100S frame with foot and flange mounting arrangements. Customized mounting can be provided on request.

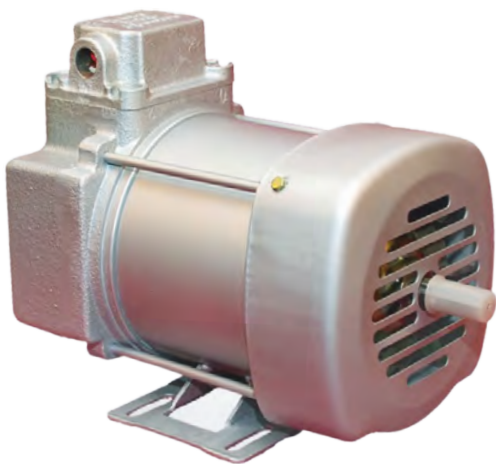
The highly efficient double capacitor designs in this series are suitable for any application requiring high starting torques are suitable for almost any application requiring higher starting torques such as Atta Chakki, Domestic Flour Mill, Tower Hoist, Air Compressor, Thresher.

Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	50 Watts to 2250 Watts
Pole	2 Pole / 4 Pole / 6 Pole
Frame	NEMA 42 & 48 (50 Watts to 370 Watts) NEMA 56 (187 Watts to 1100 Watts) 100S (700 Watts to 2250 Watts)
Mounting	B3, B5, B14



Explosion Proof Series

AGNITA
Series



These motors are exclusively designed for safety against accidental Ignition or Explosions and for continuous flawless operation in explosive or inflammable atmosphere that prevails in petrol and diesel dispensing pumps, chemical factories, petrochemical industries, fertilizer and solvent extraction plants, refineries, liquor bottling plants and paints & varnish works etc. CG's Explosion proof motors are robust, highly reliable and efficient with ATEX, Bureau of Indian Standards (BIS) and (CCOE) Chief Controller of Explosives Certifications.

Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	370 Watts to 750 Watts
Pole	4 Pole
Frame	Custom Frame
Mounting	B3

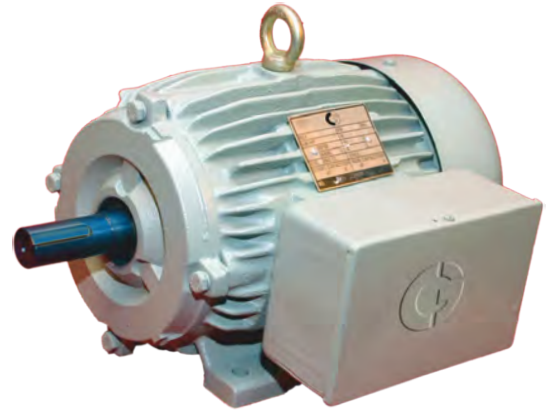
Other polarity/mounting on request.

Rhino Series

RHINO SERIES

Cast iron frame motors are most popular general purpose motors in India. The robust, highly reliable designs are suitable for operation for a wide range of applications such as Coupled Pump, Pulveriser, Rice Huller, Garage Compressor, Thresher, Floor Polisher. These motors can run for years without any trouble. These are offered in IEC (Metric) 80 to 132 frame in totally enclosed fan cooled construction.

Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	750 Watts to 5500 Watts
Pole	2 Pole / 4 Pole / 6 Pole
Frame	IEC 80 Frame to 160 Frame
Mounting	B3, B5, B14

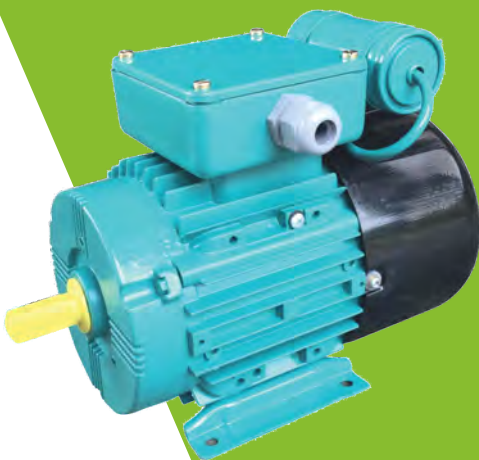


Elite Series

eLiTe SERIES

IEC metric frame single phase motors in aluminium diecast body construction. These motors cater to the needs of the global customer for light weight and efficient motors with improved ventilation and are available in IP44 & IP55 enclosures. These motors are suited for applications such as Blowers, Air Curtains, Bench Drilling M/c, Hydraulic Pumps, Paint Mixing M/c, Dryers.

Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	125 Watts to 2250 Watts
Pole	2 Pole / 4 Pole / 6 Pole
Frame	IEC 63 Frame to 132 Frame
Mounting	B3, B5, B14



AHU Series



Air handling is the major area where highly reliable and efficient motors are required. CG has got a variety of motors in different electrical starting arrangements and constructions to suit customer requirements. These are basically in rolled steel powder coated body with permanent split capacitor (PSC) or 3 Phase types with variety of mounting arrangements. Thermal protection is optional provided against requirement. Mostly used in Air Curtain, Chiller Unit, Condenser Unit, Exhaust Fan, Coolers, Fan Coil Unit, Blowers etc.

Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	22 Watts to 750 Watts
Pole	2 Pole / 4 Pole / 6 Pole
Frame	NEMA 42, 48, 56 and custom made 95, 110, 127 dia
Mounting	Foot, Pad, Stud, Customized



Sheetal Series



Optimized design of CI body motors for robust, rigid, light & compact construction with better electrical performance. Sheetal Series will cater to the needs of rural, suburban customers for CI Body motors and is available in 0.5HP-3HP in IEC 80-112 Frames. This series has an elegant design with flexible terminal box mounting & is thermally protected.

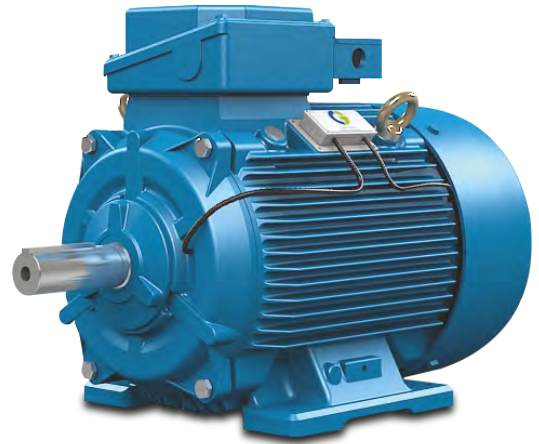


Voltage	220 Volts or 110 Volts, 50 or 60 Hz
Power	370 Watts to 2250 Watts
Pole	2 Pole / 4 Pole
Frame	IEC 80 Frame to 112 Frame
Mounting	B3

Smart Motor



Smart Motor is able to communicate with us by using CG Smart sensor kit. Motors used in critical applications always need monitoring of parameters like noise, temperature, vibration. This sensing kit can measure key parameters from the surface of the equipment which can be used to gain meaningful information on the condition and performance of the motor, enabling users to identify inefficiencies within their system and to reduce risks related to operation and maintenance. Maintenance can now be planned according to actual needs rather than based on generic schedules. This extends the lifetime of equipment, cuts maintenance costs and reduces or prevents unplanned downtime due to breakdowns.



Output	75 kW & above
Pole	2/4/6/8
Frame	280 & above
Voltage	415V, Other on request
Mounting	All mounting



Tri-Axial
Vibration



Temperature



Noise



FFT
Spectrum



Pattern Learning



Productivity



OEE



Super Premium Motor – IE4



IE4 Apex series motor is a next generation of green solution. It complies with new efficiency requirements of IEC60034-1:2017-05 with highest efficiency and lowest payback period. Our super premium efficiency motor delivers highest efficiency ever which ensures even lower payback period over the life cycle of motor. By maximizing the output especially in continuous duty applications, due to energy efficiency, Apex series IE4 motor offers a way to curb energy consumption without limiting your growth and hence reduces CO₂ emissions.

	IE 4 - Conventional Apex Series motor	IE 4 - LSPM Technology motor
Output	0.55 kW to 132 kW	5.5 kW to 22 kW
Poles	2 / 4 / 6 / 8	4
Frames	80 to 315	132 to 180
Voltage	415V, Other on request	415 V, Other on request
Mounting	Foot / Flange	Foot/flange



Premium Efficiency IE3 & IE2 Motors



Apex series IE3 & IE2 premium efficiency LV motors is another green initiative by CG to save energy, Motors are designed to save energy and environment. Motors tested in NABL/CSA accredited test facility at CG and validated by TUV for guaranteed efficiency.

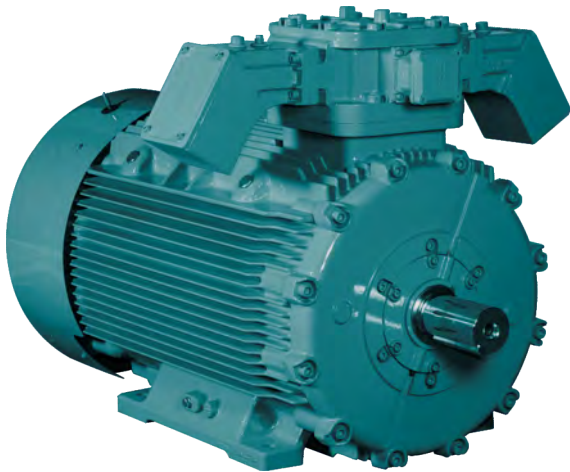
CG's Apex series IE3 motors are designed to fulfil the requirements of various applications. They comply to the requirement of IEC 60034:2008. New harmonized international efficiency standards for three phase induction motors. Motor achieves the benefits by providing energy saving, higher level of productivity & extended life time operation with minimum maintenance.

Output	0.37 kW to 710kW
Pole	2/4/6/8
Frame	71 to 500
Voltage	415V, Other on request
Mounting	All mounting



Agnita Series

Flameproof IE3 & IE2 Motors



CG offers wide range of flame proof motors Ex 'd', increased safety Ex 'e' and non sparking Ex 'n' motors suitable for hazardous area. These motors are designed to suit the ignitable atmospheres present in hazardous locations such as Zone1 and 2 or Class1 Div 1 and 2. These motors are suitable for various temperature classes & gas groups. These motors are licensed by BASEEFA for ATEX, CSA for IEC, Ex Div 2 and DGMS / CCOE.

As per new requirements of IS 12615:2011/IEC60034-30

Cast Iron frames	
Output Range	0.37 kW to 450 kW
Frame	80 to 400
Pole	2 / 4 / 6 / 8
Mounting	All mountings
Voltage	415 V, Other on request
Gas	Group I, IIA, IIB, IIC, IIIC
Temp.	Class T4

Approved by BASEEFA / ATEX / ICE EX / PESO / DGMS

Smoke Extraction Motor

CG Smoke extraction motors are designed for stringent operating conditions during fire / high temperature ambient conditions. Smoke extraction motor ensures the air circulation in closed environment. Our smoke extraction motor complies with latest standard BS EN 12101-3:2015.

Smoke Extraction Motor

Output	0.75 kW to 37 kW
Poles	2 / 4 / 6 / 8 Dual speed Motors
Frames	80 to 225
Voltage	415V, Other on request
Mounting	Foot, Other on request

- 1) S1 Duty (In normal conditions)
- 2) S2 Duty (In case of fire)
- 3) Temperature during accidental condition –F200 -2hr , F250° -2hr, F300°-2hr



UL (Underwriters Laboratories) Listed Motors

CG offers UL listed motors in IEC & NEMA frames this motor for specially designed fire fighting duty application which complies with the requirements of UL 1004-1 and UL 1004-5. This motors will have listing mark including control no. on the rating plate.



The certificate of compliance is according to the following standards for safety:

UL 1004-1 Rotating Electrical Machines - General Requirements

UL 1004-5 – Fire fighting motors

UL listed fire fighting motors with special paint: post box Red ACP-536, ACP-538

UL Motor

Output	0.55 kW to 375 kW
Poles	2 / 4 / 6 / 8
Frames	90 to 355
Voltage	415V, Other on request
Mounting	Foot, Other on request

NEMA Motors

- MEPS (Australia / NZ)
- NEMA (North America)

CG offers NEMA Epact / Premium Motors as per NEMA MG 1, CSA C 22.2 No. 100 and UL 1004. These motors are most energy efficient and meet Premium efficiency standards. These motors are also listed in DOE and CSA.



	EPACT	PREMIUM
Output	HP to 200 HP	1 HP to 100 HP
Poles	2 / 4 / 6 / 8	2 / 4 / 6
Frames	143T to 504T	143T to 405T
Voltage	460/575V 60 HZ	460/575V 60 HZ
		other on request
Mounting	Foot, Face	Foot, Face

Aluminium Motors

Lighter is Better

Aluminium multi-mounting motors range is suitable for a variety of industrial applications around the world. Aluminium motors provide optimal balance between standard product features, reduced weight, rapid availability, competitive pricing.

Design leadership, manufacturing expertise and application knowledge combine with innovative and elegant new technologies to provide maximum value. CG Aluminium frame motors have been developed to provide the rugged performance and long service life you have come to depend on—plus exceptional operating efficiencies to further reduce your company cost of ownership.

Output	0.12 kW to 9.3 kW
Pole	2/4/6/8
Frame	63 to 132
Voltage	415V, Other on request
Mounting	Foot / Flange / Face



Electric Vehicle Motor

EV Motor

EV Motor Converting your vehicle to electric can be a very efficient, eco-friendly move. By switching to an electric motor, you'll not only save on the growing cost of fuel, but your electric vehicle will be powered by a 'clean energy source' meaning your vehicle will not be producing emissions. This EV Motor provides an excellent low maintenance, zero emissions and reduced noise pollution solution to powering all types of vehicles. CG has already developed solution for bus, car & three vehicles.



Output	2kW to 315 kW
Pole	All pole
Frame	Upto 400
Voltage	17VAC To 460V
Mounting	Suitable to application

- Zero emissions - Clean energy source
- Cost effective - Save on fuel bills
- Reduced noise pollution - Almost silent

Water Cooled Motor

CG water cooled motor is a compact product that was designed to meet several industrial applications.

This motor is suitable to operate in reduced-space and aggressive environments that demand low noise level and minimum thermal dissipation to the environment. The product was designed with a cooling system consisting of longitudinal cooling water channels, allowing inspection and cleaning much easier, then reducing maintenance costs. The motor is packed with features like higher efficiency better reliability, faster ROI.



Output	37KW to 375KW
Pole	2/4/6/8
Frame	225 to 315
Voltage	415V, Other on request
Mounting	All mounting

Roller Table Motor

CG provides squirrel cage roller table specially designed for use with frequency converters and ensures reliable operation. Robust construction and withstand tough condition in rolling mill. These motor are low speed units to be directed to mills. The pole no. and frequency can be selected, avoiding the need for gearbox therefore saving on maintenance cost and increasing the overall efficiency of the drive.



Output	0.55 kW to 24 kW
Pole	4 to 16
Frame	NR132 to NR355
Voltage	220V To 690V
Mounting	Foot/Flange

Crusher Duty Motor

CG has complete range for crusher series applications, which caters the fluctuating load & high starting requirements. This crusher series motors are designed & manufactured with high grade material properties which meets high service factor load, higher load impacts, etc. Our motors has prone for long decades for crusher applications. A design created to maximize performance and energy savings .Compare the standard feature of CG crusher duty motor to any other and see why these motor are "crusher duty" tough!

Crusher Duty Motor

Output	0.55 kW to 600 kW
Poles	4 / 6 / 8
Frames	80 to 450
Voltage	415V, Other on request
Mounting	Foot Other on request



Brake Motor

Kibosh Series



CG brake motors are standard motors modified for braking duties, i.e. three phase induction motors with standard dimensions and output rating. The electromagnetic disc brake is powered, either DC or three phase AC current, from a rectifier located in the motor terminal box

CG offers the most reliable range brake motors with highly competitive delivery time. Flameproof and weather proof brake available. Multi-mounting construction for up to 132 frame in AL body. Kibosh brake motors are designed to serve various braking applications like crane, hoists, rolling mills, wind mills, elevators etc.

Range	Aluminium Frame	Cast Iron Frame	FLP Brake Motor
Output Range	0.37 kW to 7.5 kW	0.55 kW to 45 kW	1.5 kW to 15 kW
Frame	GD71 to GD132	80 - 200	E90 to E160
Pole	4 / 6 / 8	4 / 6 / 8	4 / 6 / 8
Mounting	Foot/Flange /Face	Foot / Flange / Face	Foot / Flange / Face
Voltage	415V	415V	415V

Crane Duty Motors

Squirrel cage/slip ring crane duty motors are specially designed for service on cranes and hoists. They can also be used for similar application such as material handling equipments, and cranes of all type. These motors can serve as auxilliary motors in rolling mills or where ever intermittent duty drives are required.

These are duty type rated motors developing high starting torque with low starting current. The motors are suitable for frequent start/stop and reversals. Also rapid acceleration is achieved by high pull out torque/rotor inertia ratio.

Range	Squirrel Cage	Slip Ring
Output Range	0.25 kW to 350 kW	2.2 kW to 450 kW
Frame	63 to 335 other on request	132 to 400
Pole	4 / 6 / 8	4 / 6 / 8
Mounting	Foot / Flange	Foot / Flange
Voltage	415V, Other on request	415V, Other on request



Slip Ring Motors

CG offers low voltage slip ring electric motor in both TEFC (IP55) and drip proof (IP23) construction. These motors are designed with new slip ring and brush gear arrangement for trouble free operations and long lasting brush life. Slip ring is moulded in epoxy-based insulation with excellent stability at high temperature. It complies with IPSS standards to meet the requirements of steel plants.



TEFC Slip Ring

Output Range	2.2 kW to 400 kW
Frame	132 to 400
Pole	4 / 6 / 8
Mounting	Foot / Flange
Voltage	415V, Other on request

SPDP Slip Ring

Output Range	3.7 kW to 400 kW
Frame	160 to 400
Pole	4/6/8 other on request
Mounting	Foot /Flange
Voltage	415V, Other on request

Large Industrial Machines



Large Industrial Machines offers a wide range of high voltage motors from 2 to 24 poles up to 12 MW range in various enclosures like closed Air Circuit Water Cooled (CACW), Closed Air Circuit Air Cooled (CACA), Totally Enclosed Tube Ventilated Motors (TETV), Screen Protected Drip Proof (SPDP), Totally Enclosed Fan Cooled (TEFC) to meet various industrial requirements of any specific application. We offer both Squirrel Cage (TPC Range) and Slip Ring (TPR Range) motors in horizontal (IMB3), vertical (IMV1) and inclined (IMB5, IMV5) mounting options to suit every customer requirement. Built in accordance with IEC60034, IS/IEC 60034 standards, customized, energy efficient and intelligent motors are offered for various applications in IP23 & IP55 enclosures.

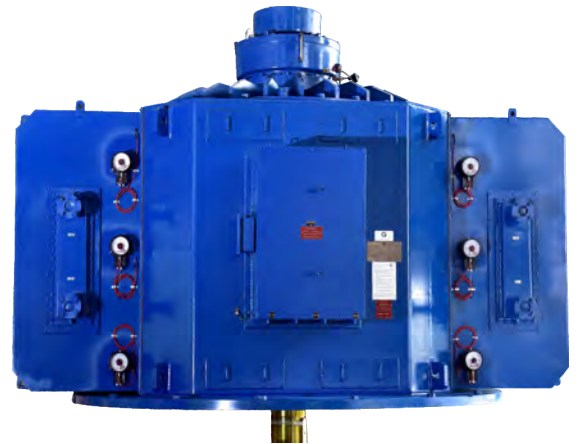
Large Industrial Machines design excellence made its products qualified for IECEx and ATEX approval for serving world wide oil & gas sector with its wide range of Ex-n, Gr-IIC upto 12 MW/ 11kV, Ex-e, Gr IIC, upto 12MW/ 3.3kV and Ex-e, Gr- IIA +IIB, upto 12MW/ 11kV along with Indian certification of FLP motors upto 1570kW, 710 Frame, 6.6KV voltage range and Ex-p motors upto 12 MW/11kV to serve India and across the globe.

Squirrel Cage & Slip Ring Induction Motors in CACW enclosure (IC8A1W7)

CG offers Closed Air Circuit Water Cooled (IC8A1W7) as per IEC 60034. Squirrel cage motors are suitable for VFD operations. These motors are widely used in all Industries for various applications like pump, fan, blower, crusher, conveyor, pulper, feeder etc.

Range	Squirrel Cage	Slip Ring
Voltage	upto 13.8 kV	upto 13.8 kV
Power	upto 12000 kW	upto 12000 kW
Pole	2 Pole to 24 Pole	4 Pole to 24 Pole
Frame	355 - 1250	355 - 1250
Series	UW	
Mounting	B3, V1, B35	

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.



Squirrel Cage & Slip Ring Induction Motors in CACA enclosure (IC6A1A1 & IC6A1A6)

CG covers the most popular enclosure i.e. Closed Air Circuit Air method of cooling (IC6A1A1 & IC6A1A6) as per IEC 60034 for Slip ring and Squirrel cage motors. Squirrel cage motors are also suitable for VFD operation. These motors are widely used in all Industries for various applications like pump, fan, blower, crusher, conveyor, pulper, feeder mills, kiln etc. applications

Range	Squirrel Cage	Slip Ring
Voltage	upto 13.8 kV	upto 13.8 kV
Power	upto 12000 kW	upto 12000 kW
Pole	2 Pole to 24 Pole	4 Pole to 24 Pole
Frame	355 - 1250	355 - 1250
Series	TP	
Mounting	B3, V1, B35	

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.



Squirrel Cage & Slip Ring Induction Motors in SPDP enclosure (IC0A1)

CG Large Re-Rolling Mill Duty slip ring induction motors (KMR series) are used to drive re-rolling mill for rolling hot steel billets into rods, flat bars, rails, channels, angles, sheets etc. under arduous conditions of widely fluctuating loads & sudden overloads which last for few seconds. Screen protected drip proof (IC0A1) UDC / UDR series is suitable for operation in clean atmosphere specially pump & fan applications. SPDP motor offers higher kW in lower frame.

Range	Squirrel Cage	Slip Ring
Voltage	upto 13.8 kV	upto 13.8 kV
Power	upto 12000 kW	upto 12000 kW
Pole	2 Pole to 20 Pole	4 Pole to 24 Pole
Frame	355 - 1250	355 - 1250
Series	KMR, UD	
Mounting	B3, V1, B35	

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.



Squirrel Cage & Slip Ring Induction Motors in TETV enclosure (IC5A1A1)

Totally Enclosed Tube Ventilated (IC5A1A1) motors are most suitable in highly dusty, humid & polluted atmosphere for use in industries such as cement, steel, tyre, rubber, paper, refineries, petrochemicals, fertilizers, power generation plant, mines etc. The dimensions are generally as per IEC 60072. A or IS: 8223. Motors are with double ended radial ventilation with low noise, low loss internal fan for uniform temperature gradient.

These motors occupy lesser overall volume compared to CACA enclosure and hence are preferred at locations where space constraint exists.



Range	Squirrel Cage	Slip Ring
Voltage	upto 13.8 kV	upto 13.8 kV
Power	upto 6000 kW	upto 5000 kW
Pole	2 Pole to 20 Pole	4 Pole to 20 Pole
Frame	400 - 1250	450 - 1250
Series	TV	
Mounting	B3, V1, B35	

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.



Energy Efficient AC Motors

NG[®] series motors belongs to a family of energy efficient, TEFC (IC4A1A1), state-of-the-art, squirrel cage induction motors. The new series of motors have high efficiency with almost flat efficiency curve from 60% to 100% loading. Additionally, the motors have desirable features of low noise & low vibrations.



Range

Voltage	upto 11 kV
Power	upto 2000 kW
Pole	2 Pole to 12 Pole
Frame	315 to 630
Mounting	B3, V1, B35

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.

Motors For Hazardous Area

CG offers a wide range of motors for use in Hazardous area in CACA, TEFC, TETV & CACW enclosures. These motors are widely used in petrochemical, refinery, chemical, fertilizer, oil & gas and various other industries wherein inflammable gases are likely to be present. The motors are specially designed to meet requirement of IEC: 60079-7 (for Ex-e motors), IEC: 60079-15 (for Ex-n motors), IEC: 60079-2 (for Ex-p motors) & IEC: 60079-1 (for Ex-d motors). Ex 'e' & Ex 'n' motors are IEC - Ex, ATEX approved.

Range	Ex (e) Increased Safety	
	Ex (n) Non Sparking	
	Ex (p) Pressurised	Ex(d) Flame Proof
Voltage	upto 13.8 kV	upto 11 kV
Power	upto 12000 kW	2000 kW
Pole	2 Pole to 20 Pole	2 Pole to 8 Pole
Frame	315 to 1120	355 to 900
Mounting	B3, V1	B3, V1

Ratings for other polarity, Voltage grade & frame sizes can be engineered suiting to specific application requirements.



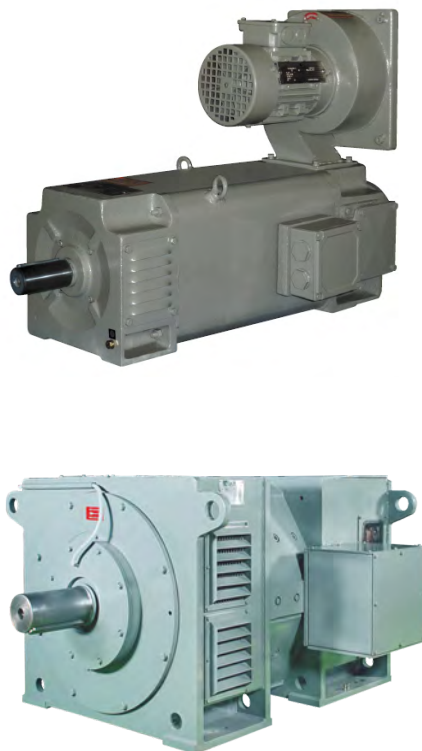
Nuclear Sector Application Motor

- High Efficiency
- Low Noise & Vibration
- Better Power Factor
- Improved Power to Weight ratio

The nuclear sector inside Dome motors are the latest addition in CGs HT motor portfolio. These are high efficiency, low noise and low vibration motors with lower weight as compared to its contemporaries. These motors are specially designed suitable for a wide variety of demanding applications Inside Dome. The motors have been developed using state-of-the-art technology with rigorous analytical simulation techniques.

Area Rotor Type	Inside Dome, SCR
Power	upto 6 MW
Frame	355 - 1250
Pole	2 Pole to 20 Pole
Voltage	Upto 6.6 kV
Mounting	B3, V1
Enclosure / cooling	IC6A1A1, IC8A1W7, IC6A1A6

Ratings for other polarity & frame sizes can be engineered suiting to specific application requirements.



Industrial Duty DC Motors



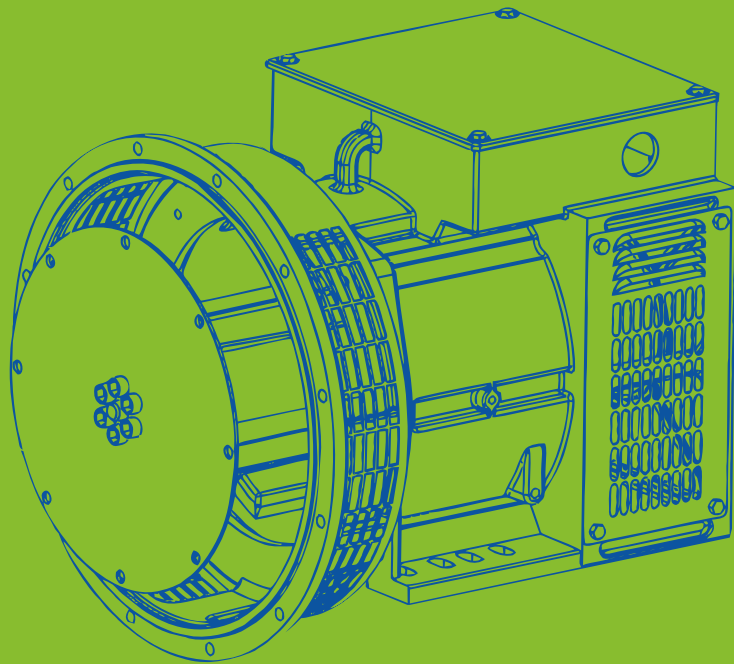
CG offers a wide range of DC machines which are compact & robust, thus offer higher power to weight ratio. The range includes blower cooled, CACA, and CACW in IP22, IP23, IP54 & IP55 protection. Critical items are manufactured in-house under stringent quality control & are proven as six sigma products. Machines are with compensated windings to withstand high short time overloads under field weakening conditions. Motors are with skewed rotor construction which ensures low noise, low weight & GD2 for swift mechanical response. Large size bearings & moulded design commutator ensures longer & trouble free operation. Motor conforms to IEC: 60034-1, BS: 5000 Part 99 & IS:4722.

Frame	upto 710
Power	upto 2000kW
Mounting	B3(otheronrequest)
Armature	Voltage400Vto800V

Motors with other voltage level & speed range can also be offered, engineered to specific requirements.

Generators / Alternators

CG Power and Industrial Solutions Limited offers a wide range of AC & DC generators (alternators), both brushless and slip ring type. Our single phase alternators are designed to meet the customer requirements in remote as well as urban areas for uninterrupted power supply. Our AC brushless generators incorporate advanced European technology and are designed for optimum performance. Our compact slip ring alternators are popular in agro industries. We also offer laminated yoke DC Generators up to 2000 kW.



Generators

CG offers wide product range for your power generation needs. We offer standard rating as well as highly customised machines, which meet your power requirement.

LV Alternators

CG Alternator are state of -the -art, self excited, self regulated and dependable source of power. Manufactured in modern integrated manufacturing facility, ISO: 9001 certified by BVQIUK with structured TQM and six sigma implantation .

These Alternators incorporate advanced European technology and are designed for optimum performance with well-qualified engineers and technocrats ,backed by a strong R&D team, CG has fully harnessed long experience in design and software to offer a range of innovative, reliable and efficient alternators.

Slip Ring

	Single Phase	Three Phase
Range	5 kVA to 20 KVA	5 kVA to 82.5 KVA
Frame	IEC 132 to 160	IEC 132 to 200
Voltage	240 V	415 V

Brushless

	Single Phase	Three Phase
Range	5 kVA to 82.5 kVA	5 kVA to 2250 kVA
Frame	IEC 132 to 200	IEC 132 to 450
Voltage	240 V	415 V / 575 V



Slipring Alternator
(Ustad Series)



Brushless AC Alternators

Synchronous Generator (LIM Range)

CG has capability to design and manufacture generators for stringent application requirements. With rich experience of technical excellence, quality and reliability CG has supplied many generators across the globe. CG manufacture generators in both constructions i.e Salient Pole & Cylindrical rotor type. All generators are custom built type and are designed, manufactured with the latest state of art facility in M.P., India including the use of Vacuum Pressure Impregnation (VPI) technology .We offer generators for various applications like Hydro, Steam, Diesel, MG Set & test bed for various sectors like Power, Sugar, Textile, Chemical etc. The manufacturing facility is automated to reduce the manufacturing lead time. With our operational excellence, customer orientation, market reach and wide range service network has won us loyal customer.



Parameters	Range
Rating	1 MVA - 25 MVA
Frequency	50 Hz - 250 Hz
Voltage	415 V - 13.8 kV
Polarity	4 Pole to 20 Pole
Mounting	B3, V1
Altitude	upto 4000 meter
Degree of Protection	IP 23, IP 44, IP 54
Type of Cooling	IC0A1, IC6A1A1, IC8A1W7
Insulation Class	Class F
Type of Insulation	VPI / Resin Poor
Excitation Type	Brushless / Static / PMG



Wind Turbine Generators



The renewable energy business is experiencing phenomenal worldwide growth driven by declining costs of generation, growing electricity demand and mounting environmental concerns, particularly over climate change. CG with keen interest in renewable energy has developed technology of generators that can be used in wind mills. These generators are custom made based on the specification. CG currently offers wind turbine generators with following technologies.

- Doubly Fed Induction Generators (DFIG)
- Permanent Magnet Generators (PMG)

Parameters	Range
Rating	upto 3 MW
Frequency	50 / 60 Hz
Voltage	upto 690 V
Ambient	(-) 20° to 50 °C

CG Drives & Automation

CG Power and Industrial Solutions Limited being market leader in motors had aspiration to give a complete solution to its customer and thus offering peace of mind. To fulfil this, CG Power and Industrial Solutions Limited acquired Emotron, a Sweden based technological company in 2011 and established CG Drives & Automation (D&A) as an identity. Emotron was not only a technology leader in Europe but also a pioneer in AC Drive technology worldwide with an existence of more than 40 years. EMOTRON was the first one to introduce PWM technology in AC drives in the year 1976 and introduced OTC technology in AC Drives in year 1998. With this acquisition CG-D&A offers low voltage AC drives, soft starters, shaft power monitor, solar drives with "EMOTRON" as a brand name well accepted by Indian as well as rest of the world customers.

CG-D&A has its state-of-the-art Engineering centres in Germany and Netherlands. CG-D&A has two manufacturing facilities along with in-house capability, one in India and another in Sweden to cater the World market. Both the facilities are CE as well as UL certified and supply directly to the World.

CG-D&A India not only offers standard modules but has full capability of providing engineering solution to the Industry. CG-D&A has credentials with large organizations like NPCIL, SAIL, TATA, NTPC, ONGC, IOCL and many more. We are approved at major consultants like EIL, Mecon, ThyssenKrupp and many more ...

CG-D&A offers all services through its vast network of authorised service centres and competent regional service engineers.

CG-D&A offers peace of mind to its customer by providing complete solution under one umbrella which includes drive solution with motor.

CG Emotron's expertise covers engineering, design, supply and commissioning of drive solutions for industries like power generation, water/wastewater, process industries, mining, infrastructure, and machine builders. We also offer standard and customised drive panel solutions to our customers. We have authorised service centres and repair centres spread across India, Europe and Middle-east for quick and fast troubleshooting support. We have one of the strongest distribution network pan India.

CG Emotron is an ISO 9001 :2015, ISO 14001 :2015 & BS OHSAS 18001 :2007 Company.



Emotron VFX 2.0 Drives

Full control with precision

The Emotron VFX 2.0 variable speed drive optimizes your processes and prevents damage and downtime. The combination of direct torque control, accurate speed control and efficient vector braking makes it the ideal solution for all dynamic applications such as cranes, crushers, mills, mixers and centrifuges.

Range

0.75 kW to 3000 kW

Supply

400V/525V/690V Three phase

Application - Variable torque/ Constant torque

Protection class: IP20, IP21, IP54

Certified: CE, UL



Emotron FDU 2.0 Drives

Full control and optimized operation

Emotron FDU helps you save energy and draw maximum efficiency from your processes. Emotron FDU with modular concept allows cost optimization and is a perfect choice for tailor made requirements.

Range

0.75 kW to 3000 kW

Supply

400V/525V/690V Three phase

Application - Variable torque

Protection class : IP20, IP21, IP54

Certified : CE, UL

Emotron TSA – Soft Starter

Starts, stops and protects

Emotron TSA softstarters take motor control to a new level. Soft torque starting, intelligent load monitoring bypass contactor and smart stops are all included and accompanied by a robust and compact design.

Range

5.5 kW to 1800 kW

Supply

400V/525V/690V Three phase

Application - Variable torque/ constant torque

Protection class : IP00, IP20

Certified : CE, UL



Emotron MSF 2.0 Softstarters

More than just a soft start

Whilst traditional softstarters handle the most common start challenges, Emotron MSF 2.0 offers a lot more. Start and stop sequences are optimized. Advanced braking techniques increase productivity. Built-in monitor functionality protects your process from inefficiency, damage and downtime. Easy installation and set-up save time and money.

Range

7.5 kW to 1600 kW

Supply

400V/525V/690V Three phase

Application - Variable torque/constant torque

Protection class : IP00, IP20

Certified : CE, UL

Emotron VSS Drives

Small yet powerful

EMOTRON VSS is a multipurpose AC drive which is packed with features to meet applications requirements. VSS is cost effective, easy to install, easy to use drive for the single phase supply system in challenging industrial environment. VSS series meets user's need and runs variety of applications like packaging, wood working, pumps, blowers, mixtures and other machineries.

Range

0.4 kW to 2.2 kW

Supply

220V Single phase

Application - Variable / Constant torque

Protection class : IP20

Certified : CE



Emotron VSB/VSU Drives

Dynamic drives for small AC motors

Although small in size, our Emotron VSB/VSU AC drive is equipped with several advanced features. It offers great flexibility in all senses. Functionality is easily adapted to your specific application requirements. The compact format offers flexible installation and the user-friendly set-up will have your system up and running in no time.

Range

VSB- 0.75 kW to 3.7 kW

VSU- 0.75 kW to 18.5 kW

Supply

400V Three phase

Application - Variable / constant torque

Protection class : IP20



Suraj Emotron VSR Drives

Efficient and user-friendly operation for solar pumping



Emotron VSR series drives offer reliable, cost-efficient and user-friendly operation. The Emotron VSR series has been specially developed for solar water pumping. Built-in self adaptive high accuracy maximum power point tracking (MPPT) algorithm of VSR ensures maximum water flow output. The compatibility of VSR with AC as well as DC input gives user the flexibility to optimize the operation and improve reliability of operation.



Range

0.4 kW to 7.5 kW

Supply

AC110V and DC 170V/AC220V and DC310V/AC380 and DC540V

Application - Solar water pumping

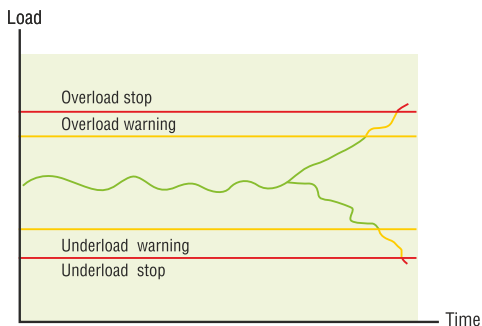
Protection class : IP20

Certified : CE

Emotron M20 Shaft Power Monitor

Your shield against overloads and damage

Emotron M20 shaft power monitor helps you save time and money. It protects your pumps and other equipment against damage and detects process inefficiency. Early warnings allow you to take preventive action. Unique features include measuring shaft power output and using the motor as a sensor. The result is reduced maintenance and installation costs, extended equipment lifetime and increased reliability.



Range

0.4A to 999A

Supply

220V/400V/525V/690V Single phase / three phase

Application - Fixed Speed load

Protection class : IP20



Emotron FlowDrive

Dedicated waste water drive

Emotron FlowDrive is designed for use in the most common pumping scenarios (1-2 pumps of any brand) in the wastewater management industry. The heart of FlowDrive is automatic reservoir level control - which optimises energy use, minimises the need for maintenance and enables real time process monitoring.

Range

0.75 kW to 160 kW

Supply

400V/525V/690V Three phase

Application - Variable torque

Protection class : IP20, IP21, IP54



Compact, Robust, Reliable, Engineered Panel Solution:

CG Drives & Automation offers complete drive panels solutions that ensure the safe and cost-efficient operations.

We provide drive panel solutions to users, system integrators and OEMs around the world.

Range

0.75 kW to 160 kW Standard Drive Panel

0.75 kW to 3000 kW Customized Drive Panel

Supply

400V/525V/690V Three phase

Application - Variable/ Constant torque

Protection class : IP42, IP54



Stamping

Stamping Introduction

CG Power and Industrial Solutions Limited, the pioneer and leader in the electrical industry for last seven decades, manufactures its own requirement of stamping & laminations for the entire range of Electric Motors, Alternators, Fans, Pumps and Chokes. Our stampings division is fully equipped with the latest High Speed Blanking lines, 'H' frame high tonnage presses and CNC precision notching machines. We are also equipped with ultra modern heat treatment facility having continuous roller hearth furnace with exothermic gas as protective atmosphere. We also have our own ultra modern captive tool room facility. All this, coupled with professional experience and manufacturing technology, has enabled us to manufacture high quality stampings, now available to meet the stamping & lamination need of the industries as well.

Stamping Product Range

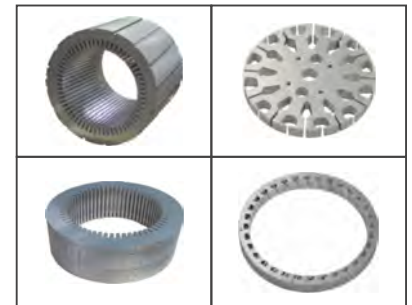
- All types of Electrical Motor & Alternator Stampings, Stator/Rotor Auto Stitched, Stator Riveted/Cleated and Rotor Die Cast as per customer requirements.
- All types of choke laminations.
- All types of Fan, Mixer, Submersible and Mono-block Pumps, Windmill, Hydro/Turbo Generator Stampings.
- Any other types of precision stampings as per specific customer requirements including manufacturing of tooling for the same.



Tool Design & Tool Room

Our tool room is equipped with more than forty precision machines, prominent among them are:

- Swiss make CNC wire cut Electric Discharge Machines having capacity up to 400 x 700 mm co-ordinate travel.
- Jig boring machine with digital read-out having capacity up to 1120 x 710 mm coordinate travel.
- Jig Grinder with planetary and slot grinding attachments and optical rotary table.
- NC milling and boring machine.
- VMC with FANUC control having capacity up to 2000 x 800 mm co-ordinate travel.
- Precision surface grinder having capacity up to 1500 x 700 mm with accessories like diaform attachment and sine table for grinding accurate profiles.
- CMM & profile projector for checking of slot profile.



Manufacturing Facilities

Our state-of-the-art manufacturing facilities include the latest machinery such as:

- High speed blanking presses up to 300 ton capacity running at 250 strokes per minute with progression dies and auto-feeders.
- Schuler CNC notching machine with 16 ton capacity for circular & segmental stampings, 399-1250 mm diameter for circular stampings, and 300-4500 mm diameter for segmental stampings.
- Precision notching machines up to 16 ton capacity with facility of skip notching and skew punching.
- Large mechanical presses up to 500 ton capacity with auto-feeders up to 1200 mm.
- Fully operational double loop camber free slitting line with capacity to cut 1200 mm width coil & weight of 7 mt.

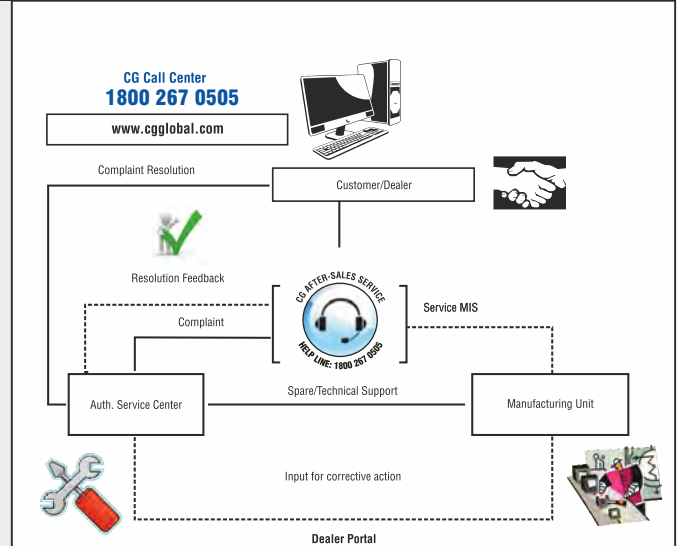
SERVICE PLUS PERFORMANCE

Customer Service A Responsiveness



Leveraging After Sales Service

- Repair & refurbishment
- Spares supply / Management
- Diagnostic services & Condition monitoring
- Annual Maintenance Contract (AMC)
- Training



- Response in 24 hours - service backed by wide trained more than 300 authorised service contractors and 18 service stations
- Availability of CG Power and Industrial Solutions Limited genuine spares at service dealers outlets
- Service facility at Europe, Africa, Middle East and South East Asia Regions