

HAZLOC®/HazLoc-NA® EDRN Series AC Motors and Brakemotors

Suitable for hazardous locations, the lower inertia design of the EDRN series AC squirrel-cage motor and brakemotor provides IE3 efficiency with outstanding system stability and tighter control than an equivalent NEMA motor. In many cases, its performance allows it to replace a servo motor.

With a patented dual coil design and specialized rectifiers, its ATEX electrically-released brake automatically engages during a power failure while providing extremely fast stopping, fast starting, minimal drift, and very low noise.

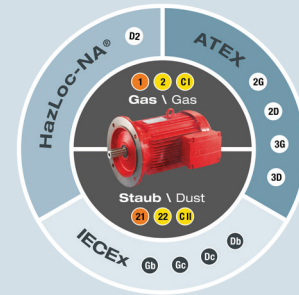
Each motor is available with multiple brake sizes and torques to optimize cost and to provide application-specific solutions. Use larger brake for stopping or smaller brake for holding the load with a VFD.

Standard Features

- 0.25 to 275 HP
- 2-year warranty
- Inverter duty; continuous duty, TEFC
- IE3 Efficiency per NEMA Premium MG1 Table 12-12, CSA 390-10, and IEC 60034-30-1
- Hazardous certified for NEC 500, CSA 22.2 per CSA 45341
- Speed range: 10-60Hz (6:1), constant torque with standard cooling fan. Motor wired for either 460V@60Hz or 230V@60Hz*
- Speed range: 10-104Hz (10:1), constant torque with standard cooling fan. Motor wired for 230V@60Hz and 400V@104Hz**
- 1.0 motor service factor, 4-pole, -20°C to 40°C
- Gearmotor service factor > 1.0
- Lower inertia, higher cycling, and tighter control than NEMA motor with equivalent horsepower
- Connection terminals (not pigtail)
- Double sealed or shielded bearings lubed for life
- Stainless steel nameplate

Mounting Styles

- Integral - for SEW gear units
- IEC flange (B5 or B14)
- IEC foot mount
- NEMA C-Face flange (size 48C - 256TC) - 4 pole



Insulation System

- Phase insulators - prevents phase-to-phase shorts
- Class F varnish; dipped, baked, and cured
- Slot liners and top stick - prevents winding-to-ground shorts
- Wire sleeves - protects wires entering conduit box
- Voltage spike resistant per NEMA MG1-31.4.4.2, which states 1600 V peak at .1µs or larger rise time

Temperature Ratings

- Across-the-line operation:
 - Non-brake motors = T3C (160°C) gas
 - Brakemotors + Internal rectifier = T3B (165°C) gas
 - Brakemotors + External rectifier = T3C (160°C) gas
 - All motors = T4A (120°C) dust
- Inverter operation:
 - All motors = T3 (200°C) gas, T3C (160°C) dust

Optional Features (see also back)

- High temperature brake (to size BE30E) for inverter duty
- Two or more brake sizes per motor
- 10 cycles/hour maximum with 6 minute minimum wait between cycles when used with brake
- Thermistor thermal protection (TF). Required for inverter duty and for brakemotors
- IP55, IP65, IP56, and IP66 internal protection
- OS2, OS4 external protection
- Aluminum fan for cold environments
- Canopy on fan to prevent water/ice entry (M4 mtg)
- FKM seals on both ends of motor shaft

* Speed range = 20-60Hz for EDRN100L4.

** When used with appropriately-sized VFD. Speed range = 20-104Hz for EDRN100L4. Above 60Hz, consider thermal limitations of an attached gear unit.

Brakemotors:



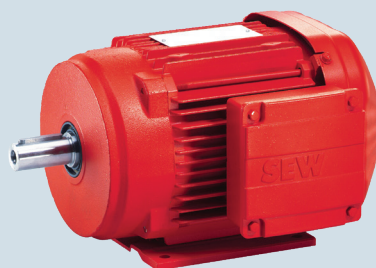
Motors:



PRODUCT FOCUS



Nomenclature / Options	
EDRN	IE3 efficiency
/2W	Extended shaft @ back end of motor
/AL	Aluminum fan (cold environment)
/BE..E	Electrically-released ATEX brake to size BE30E
/C	Canopy on fan guard
/CID2	Class I, Div 2, Groups A, B, C & D
/CID2	Class II, Div 2, Grps F & G
/CICIID2	Class I, Div 2, Groups A, B, C & D Class II, Div 2, Grps F&G
/FC	NEMA C-Face flange
/FF	IEC Flange with through holes (B5)
/FG	Flange for integral gearmotor
/FI	IEC foot-mounted
/FL	Alternate IEC flange (B5)
/FT	IEC flange with threaded holes (B14)
HF	Screw release on brake
HR	Hand release on brake
/LN	Low noise fan guard
/RI	Reinforced insulation (575V)
/RS	Backstop on motor
/TF	Thermistor (PTC) thermal protection (required with brake or inverter duty)
/XV.A, XC.A	Non-SEW Encoder HTL, TTL (5V)



OS Surface Protection		
OSG	Dip Primer Acrylic Primer	Not a finish coat. User should apply additional coating
STD	Dip Primer Acrylic Top Coat	Indoors - clean atmosphere, heated buildings Ex: automobile industry, shops, airports
OS2	Dip Primer Acrylic Primer Acrylic Top Coat+UV	Outdoors - low pollution, rain Indoors - unheated with humidity, condensation, splashing water Ex: water treatment facility, amusement parks
OS4	Dip Primer Epoxy Primer Polyurethane Top Coat Polyurethane Clear Coat+UV	Outdoors - high pollution or salinity Indoors - pressure spray, chemical wash, brine Ex: breweries, food processing, chemical plants, dairies, outdoor coastal areas

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About SEW-Eurodrive...

Our product is motion. Our focus is solutions. As a worldwide supplier of innovative gearing, motor, and electronic drive technology, we have been solving problems in large and small applications within virtually every industry since 1931.

Locally, we have 5 assembly centers in the US, where we provide final assembly, custom modifications, and assistance with project planning, startup, and training. All products are backed by our industry-leading 24/7 support program.

To order a HAZLOC® motor, please contact one of our five assembly centers shown at left, or visit our online quotation program:

www.ptipilot.com

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