

Motor Series DRS../DRN.. Modular AC Motors and Brakemotors

The lower inertia design of the DRS.. and DRN.. squirrel-cage IEC motors and brakemotors from SEW-EURODRIVE provides outstanding system stability, tighter control and higher cycling capacity than an equivalent NEMA motor. In many cases, their high performance enables them to replace a servo motor.

With a patented dual coil design and specialized rectifiers, their electrically-released brake automatically engages during a power failure and delivers extremely fast stopping and starting times with minimal drift. Moreover, their low-noise operation and quiet braking make them perfectly suited for theater applications.

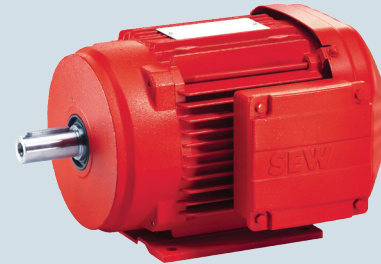
Every motor is available with multiple brake sizes and torques to optimize cost. Select larger brake for stopping or smaller brake for holding the load with a VFD. With their various connector options, DRN.. motors are especially suitable for automotive manufacturers.

Standard Features

- 0.25 to 300 HP
- Inverter duty
- Continuous duty, TEFC, 1.15 SF @ constant speed
- Efficiency per NEMA Premium MG1 Table 12-12, IEC 60034-30-1, and CSA 390-10; IE3 \geq 1.0 HP, IE1 <1.0 HP
- Speed range: 10-60Hz (1:6), constant torque w/std fan, 1.0 SF, 4-pole, 40°C max. Motor wired 230V@60Hz or 460V@60Hz*
- Speed range: 10-120Hz (1:12), constant torque w/std fan, 1.0 SF, 4-pole, 40°C max. Motor wired 230V@60Hz & 460V@120Hz**
- Lower rotor inertia, higher cycling, and tighter control than equivalent NEMA motor
- Connection terminals (not pigtail)
- Double sealed or shielded bearings lubed for life
- Stainless steel nameplate

Mounting Styles

- Integral - for SEW gear units
- IEC flange
- IEC foot mount
- NEMA C-Face flange (size 56C - 256TC) - 4 pole



Insulation System

- Phase insulators - prevents phase-to-phase shorts
- Slot liners and top stick - prevents winding-to-ground shorts
- Wire sleeves - protect wires entering conduit box
- Voltage spike resistant per NEMA MG1-31.4.4.2, which states 1600 V peak at .1 μ s or larger rise time

Optional Features (see also back)

- 50Hz, 60Hz, or 50/60Hz global motor
- High cycling, electrically-released brake
- Two or more brake sizes per motor
- Backstop
- Encoder - built-in or externally mounted
- IP55, IP65, IP56, and IP66 ingress protection
- OS2, OS4 external protection
- Encapsulated stator (<10 HP)
- Food Industry Option Package (IO1) + 2 year warranty
- Forced cooling fan for low frequency operation
- Thermostats, thermistors, KTY temperature sensors
- Low noise fan cover
- MOVIMOT® integrated frequency inverter
- Plug connectors for quick disconnect
- Cast iron high-inertia fan or aluminum fan
- Canopy on fanguard to prevent water/ice ingress (M4 mtg)
- FKM seal on motor shaft
- Class H insulation (not available with UR rating)
- Hazardous Location certified per CSA 45341 for Class I Div 2 Grps A-D, Class II Div 2 Grps F&G

* Speed range = 20-60Hz for DRN100L4, DRN225M4, and DRN280S4.

** When used with appropriately-sized VFD. Speed range = 20-120Hz for DRN100L4, DRN225M4, and DRN280S4. Above 60Hz, consider thermal limitations of an attached gear unit.



U.S. Operations:

Midwest Region

SEW-Eurodrive, Inc.
2001 West Main Street
Troy, OH 45373
Telephone: (937) 335-0036
Fax: (937) 332-0038
cstroy@seweurodrive.com

Northeast Region

SEW-Eurodrive, Inc.
2107 High Hill Road
Bridgeport, NJ 08014
Telephone: (856) 467-2277
Fax: (856) 845-3179
csbridgeport@seweurodrive.com

Southeast Region

SEW-Eurodrive, Inc.
1295 Old Spartanburg Hwy.
Lyman, SC 29365
Telephone: (864) 439-7537
Fax: (864) 439-7830
cslyman@seweurodrive.com

Southwest Region

SEW-Eurodrive, Inc.
3950 Platinum Way
Dallas, TX 75237
Telephone: (214) 330-4824
Fax: (214) 330-4724
csdallas@seweurodrive.com

Western Region

SEW-Eurodrive, Inc.
30599 San Antonio Street
Hayward, CA 94544
Telephone: (510) 487-3560
Fax: (510) 487-6433
cshayward@seweurodrive.com

www.seweurodrive.com

Nomenclature / Options

DRS..	IE1 (<1 HP) size 71
DRN..	IE3 (≥1 HP) sizes 80 - 315
/AC../AS../AM../AD../AB../IS	Plug Connectors
/A_7Y or /A_7W	SSI or RS-485 absolute encoder
/AL	Aluminum fan (cold environment)
/BE	Electrically-released brake
/C	Canopy on fan guard
/DH	Condensation drain hole
/EI7_	Built-in encoder
/E_7C	Mounted HTL encoder
/E_7R	Mounted TTL (RS-422) encoder
/E_7S	Mounted Sin/cos encoder
/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	Brake Screw Release
HR	Brake Hand Release
-I01	Industry Option Package for Food
/LF	Air filter
/LN	Low noise fan guard
/MM..D	MOVIMOT® inverter
/RS	Backstop on motor
/TF	Thermistor (PTC) thermal protection
/TH	Thermostat thermal protection
/U	Non-ventilated (no fan)
/V	Separately wired cooling fan
/Z	High inertia flywheel fan (cast iron)
/2W	Extended shaft @ end of motor

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

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 for over 85 years.

We also specialize in reducing the total cost of ownership with our customer-specific energy saving solutions.

Globally, we have assembly centers in 48 countries, along with 15 manufacturing plants. Therefore, we are able to provide uniform quality standards and international application experience.

Locally, we provide final assembly and custom modifications plus assistance with project planning, startup, and training. All products are backed by our industry-leading 24/7 support program.

SEW-Eurodrive ... Driving the World