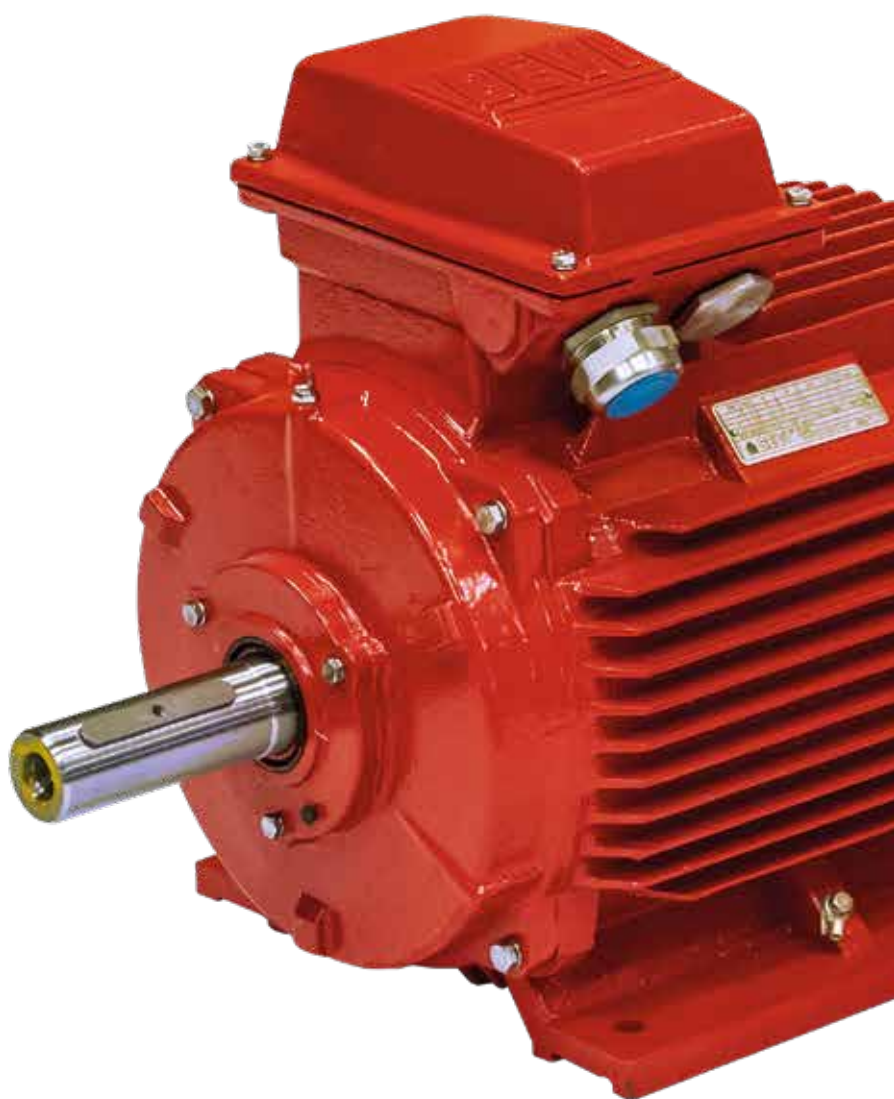


3DT electric motors

Energy efficient electric motors for sawmills, pulp and paper industries



3DT – electric motors for tough applications

After long time cooperation with sawmills in the Swedish regions of Småland and Norrland, BEVI has developed an electric motor with high efficiency specially adapted for tough applications, e.g. lumber kilns and areas within the pulp industry.

The motor is designed and produced to meet the tough demands with very high ambient temperatures and high humidity, as well as strong radial and axial forces on the motor shaft.

Construction

The stator housing and bearing shields are made of strong cast iron, for excellent durability and best bearing seat. The terminal box is mounted towards the drive end as standard. It can be mounted towards the non-drive end if desired.

All external screws, name plates, grease nipples and cable glands are made of stainless steel.

The non-drive end is fully enclosed without shaft, fan or fan cover. The ball bearings are dimensioned for heavy duty, high ambient temperatures and high humidity.

Maintenance

Motors from size 160 have nipples for lubrication of ball bearings and grease drainage as standard. All motors are delivered with high temperature grease.

Enclosure (Degree of Protection)

The motors are as standard IP55. This can be adjusted to IP44 by removing the two condensate plugs located underneath the stator body.

Temperature monitoring

The motors have built-in thermistors for monitoring or alarm and effective protection from overheating. A special cable gland is available for this. The motors can be modified with thermal contacts if desired.

Cooling

The motors are designed to be cooled by the air flow from the drying fan and are thus without their own cooling fan. For particularly large hubs on the drying fan, the motors can be ordered with its own cooling fan.

Insulation class and rated power

All motors are equipped with the higher insulation class H (maximum working temperature 180°C) on the winding material. But they are calculated/dimensioned for class B, which gives a large overload margin and long service life.

As standard the 3DT motors are dimensioned for frequency drive operation.

Frame size

The motors have IEC dimensions on the shaft and foot attachment. The kW may deviate from IEC standards due to special windings and higher ambient temperatures than normal.

Options

The motors are normally in B3 design but can be modified to B5 or B3/B5 design.

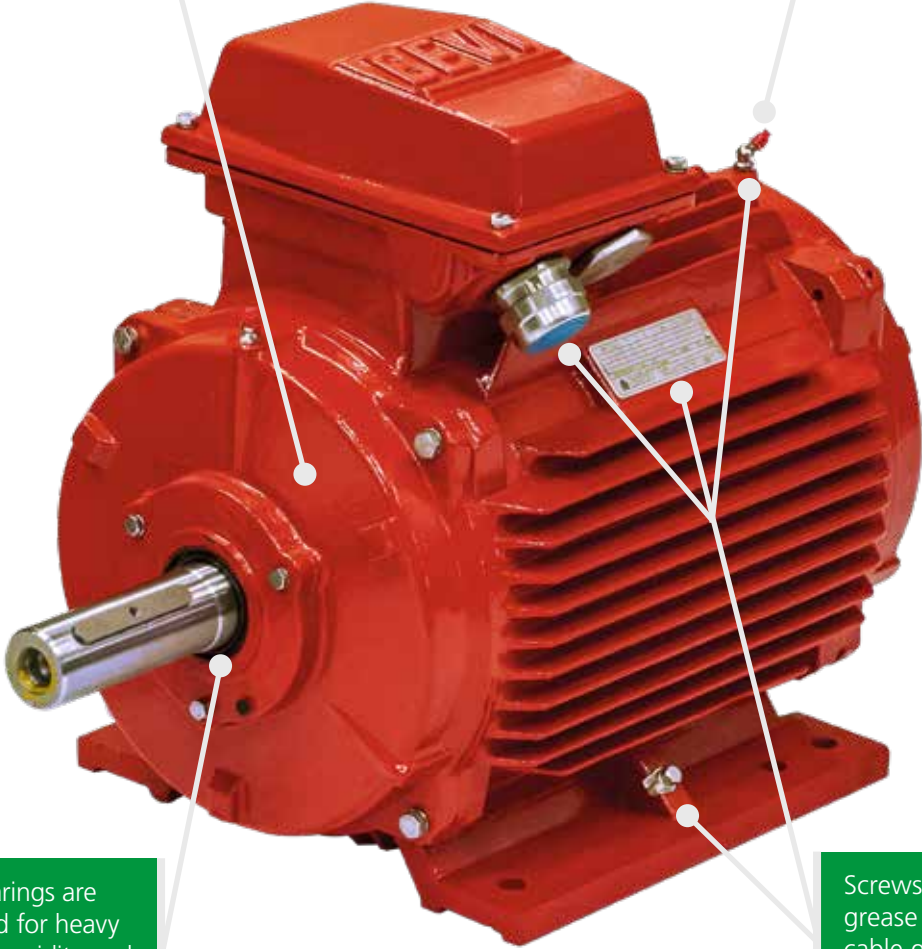
They can be equipped with anti-condensation heaters and without a terminal box, with directly mounted cable, if required. Many other modifications, such as an extended special shaft, are also available on request.

Energy efficient electric motors for sawmills, pulp and paper industries



The winding is specially adapted for high ambient temperatures.

Delivered with high temperature grease.



The ball bearings are dimensioned for heavy duty, high humidity and ambient temperatures.

Screws, name plate, grease nipples and cable glands are made of stainless steel.

3DT is a series of electric motors specially adapted for tough applications, such as lumber kilns.



Technical data

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3DT, 4 pole, IE3

Type	Rated power kW	Rated speed rpm 50Hz 400V	Rated current 400V 50Hz	Weight
2DT3 100L1-4	2.2	1455	4.5	44
2DT3 100L2-4	3	1455	6,0	49
2DT3 112M-4	4	1450	8.2	56
2DT3 132S-4	5.5	1450	10.9	81
2DT3 132M-4	7.5	1450	14.6	91
3DT3 160M-4	11	1470	20.8	125
3DT3 160L-4	15	1470	27.8	146
3DT3 180M-4	18.5	1475	34.0	202
3DT3 180L-4	22	1475	40.3	226
3DT3 200L-4	30	1480	54.6	288
3DT3 225S-4	37	1485	67.0	330
3DT3 225M-4	45	1480	80.0	351

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3DT, 6 pole, IE3

Type	Rated power kW	Rated speed rpm 50Hz 400V	Rated current 400V 50Hz	Weight
2DT3 112M-6	2.2	955	5.1	53
2DT3 132S-6	3	975	6.9	79
2DT3 132M1-6	4	975	9.1	86
2DT3 132M2-6	5.5	975	12.1	98
3DT3 160M-6	7.5	970	15.9	114
3DT3 160L-6	11	975	22.7	134
3DT3 180L-6	15	980	29.8	185
3DT3 200L1-6	18.5	985	36.5	235
3DT3 200L2-6	22	980	42.6	253
3DT3 225M-6	30	980	58.3	295

Efficiency class IE4 is available on request.



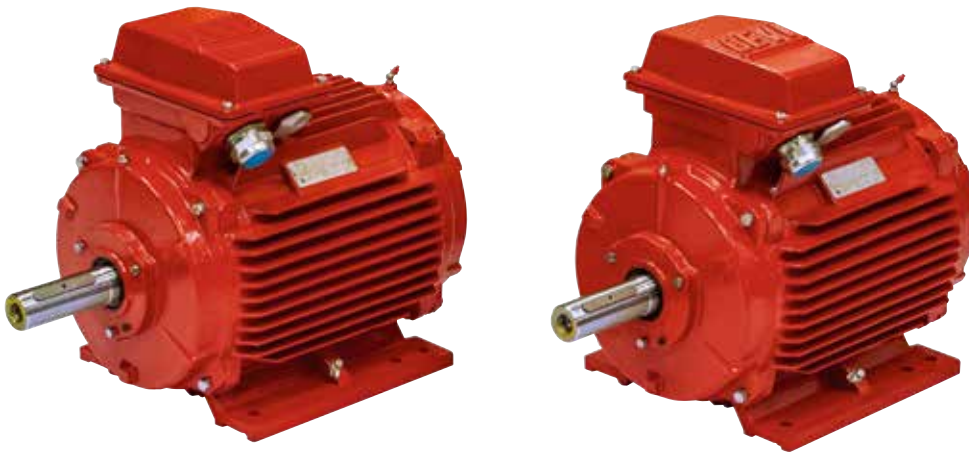
Customer references

“During fifteen years we have installed electric motors from BEVI in our lumber kilns. This has led to an increased availability in our production while costs for energy, maintenance and spare parts have decreased significantly.”

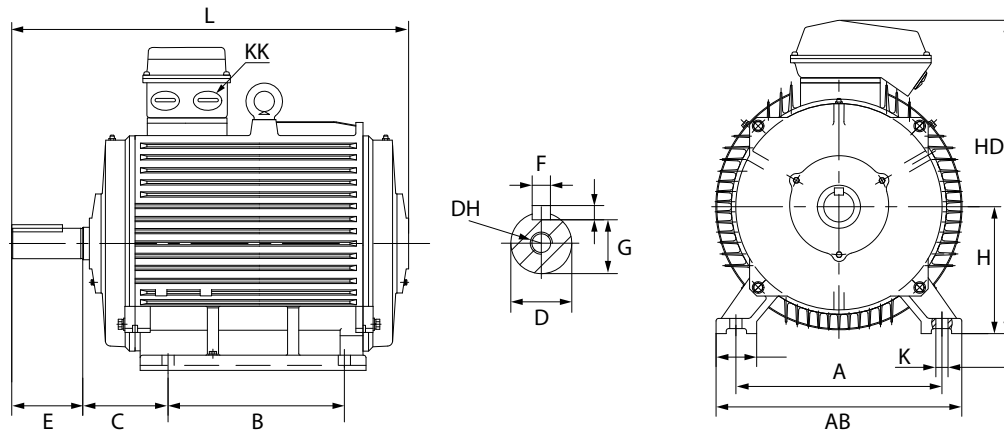
Magnus Öhman
Purchasing manager, SCA Timber, Bollstabruk, Sweden

“Since the sawmill was built in 1999, we have cooperated with BEVI for replacement and service of electric motors for our lumber kilns. BEVI's knowledge of our needs, motors and lumber kilns has resulted in shorter downtime and has saved us both money and energy.”

Christer Boklund
Maintenance manager electricity, Södra Timber,
Mönsterås, Sweden



Dimensions 3DT motors



Type	A	B	C	D	E	F	G	DH	H	K	AB	HD	KK	L
2DT3 100L	160	140	63	28	60	8	24	M10	100	12	205	290	1-M20×1.5	362
2DT3 112M	190	140	70	28	60	8	24	M10	112	12	230	325	1-M25×1.5	396
2DT3 132S	216	140	89	38	80	10	33	M12	132	12	270	365	2-M25×1.5	343
2DT3 132M	216	178	89	38	80	10	33	M12	132	12	270	365	2-M25×1.5	422
3DT3 160M	254	210	108	42	110	12	37	M16	160	14.5	320	440	2-M40×1.5	568
3DT3 160L	254	254	108	42	110	12	37	M16	160	14.5	320	440	2-M40×1.5	597
3DT3 180M	279	241	121	48	110	14	42.5	M16	180	14.5	355	470	2-M40×1.5	620
3DT3 180L	279	279	121	48	110	14	42.5	M16	180	14.5	355	470	2-M40×1.5	668
3DT3 200L	318	305	133	55	110	16	49	M20	200	18.5	395	525	2-M50×1.5	675
3DT3 225S	356	286	149	60	140	18	53	M20	225	18.5	435	580	2-M50×1.5	692
3DT3 225M	356	311	149	60	140	18	53	M20	225	18.5	435	580	2-M50×1.5	720

Measurements in mm.



About BEVI

BEVI is one of the Nordic region's largest companies in the field of electric drive systems and power generation. We offer a comprehensive range of electric motors, transmissions, power electronics, coil winding material and starter equipment.

Founded in 1931 we are present in Sweden, Denmark, Norway, Finland, Lithuania, Estonia, South Korea and China mainly through our own companies, but also through distributors. It provides good, local contact and good accessibility.

BEVI specializes in high quality energy-efficient electric motors. The combination of the best available materials, high quality sheet metal and the right amount of copper in the rotor/stator makes BEVI's electric motors highly energy-efficient.

At our production site we adapt the electric motors. They can be supplemented with a range of options and accessories or modified with a special design to endure any environment, to fit and match our customer's requirements

OUR ENERGY – YOUR SUCCESS



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