

Key Components for material handling:

- Palletising Modules
- Vertical Conveyors
- Pallet Packaging
- Safety Fencing

Subject: SEW Motor winding voltage USA

After the introduction of the global IE3 motor type DRN.., SEW noticed that customers are quite uncertain about the applicable motor winding voltage in North America and especially in the USA.

Contrary to many other parts of the world in this area a difference is made between the supply voltage and the specified motor winding voltage. The needed motor winding voltage in relation to the corresponding supply voltage is described in the NEMA®-MG1 standard Part 5.20. Please find below a table of the relevant section:

NEMA®-MG1 voltage ratings

For three phase AC machines, 50 Hz or 60Hz, intended to be directly connected to distribution or utilization systems, the rated voltages shall be selected from the voltages given in following table. Other voltages are subject to the approval between manufacturer and purchaser.

Nominal System voltages for 50 Hz		Nominal System voltages for 60 Hz	Preferred motor rated voltages for 60 Hz (North America Practice)
a)	b)	480	460
400	400	600	575
3300	3000	2400	2300
6600	6000	4160	4000
11000	10000	6900	6600
		13800	13200

In practice this means that for a power supply of 3 x 480V, 60 Hz the needed standard motor winding voltage is 3 x 460V, 60 Hz, which as such is listed on the identification tag. SEW DRN.. global motors comply with the standard motor winding voltage of 3 x 460V 60 Hz and can therefore be used in the USA and partly in Canada.