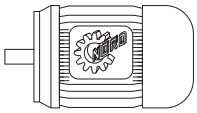

HIGH EFFICIENCY THREE-PHASE MOTORS
4-poles 400 V / 50 Hz

Frame size	50 Hz											
	P_n [HP]	P_n [kW]	n_n [RPM]	I_n (400 V)* [A]	I_a / I_n	Code Letter	T_n [lb-in]	T_a / T_n	T_k / T_n	cos φ	η [%]	J_{mot} [lb-ft^2]
90 SH/4	1.5	1.1	1430	2.51	5.2	H	66.1	2.8	3.1	0.75	84.0	0.0817
90 LH/4	2.0	1.5	1435	3.59	5.6	K	87.8	3.6	3.7	0.71	85.0	0.0929
100 LH/4	3.0	2.2	1465	4.88	6.9	J	129	3.3	4.0	0.74	87.5	0.178
112SH/4	4.0	3.0	1455	6.70	7.2	K	174	3.3	4.2	0.72	87.4	0.283
112 MH/4	5.4	4.0	1455	8.90	6.9	K	234	3.3	3.2	0.73	88.3	0.304
132 SH/4	7.5	5.5	1415	12.0	7.5	K	334	3.7	4.0	0.73	90.1	0.753
132 MH/4	10	7.5	1470	15.5	6.6	H	429	2.9	3.5	0.77	90.8	0.841
160 MH/4	15	11	1460	20.5	6.9	H	632	2.7	3.2	0.85	91.5	1.23
160 LH/4	20	15	1460	27.5	7.0	H	861	2.9	3.3	0.86	92.0	1.35
180 MH/4	25	18.5	1465	34.5	7.0	H	1063	2.5	3.2	0.84	92.5	3.56
180 LH/4	30	22	1465	40.5	7.3	H	1266	2.6	3.4	0.84	93.0	4.51
200 LH/4	40	30	1465	53	7.0	H	1722	2.6	3.2	0.87	93.5	7.60

* Motors 3.0 HP (2.20 kW) and below are rated 230Δ / 400Y - volts.
* Motors above 3.0 HP (2.20 kW) are rated 400Δ / 690Y - volts.

ABBREVIATION LEGEND

- **P_n** = Rated power [HP]
- **n_n** = Rated speed [RPM]
- η = Efficiency of motor [%]
- **cos φ** = Power factor
- **I_n** = Rated current [AMPS]
- **T_n** = Rated torque [Lb-in]
- **T_a / T_n** = Starting torque ratio
- **I_a / I_n** = Starting current ratio
- **T_k / T_n** = Breakdown torque ratio
- **J_{mot}** = Inertia of motor [Lb-ft^2]

Energy efficient, 1.0 Service factor
Inverter duty, TEFC
Synchronous speed 1500 rpm @ 50Hz, 4-pole
Voltages: 400 - 50 Hz, Three-phase
Continuous Duty, 40° C Ambient, up to 3300 ft Elevation
Class B temperature rise, Class F insulation

CE

Brakes not available for energy efficient motors