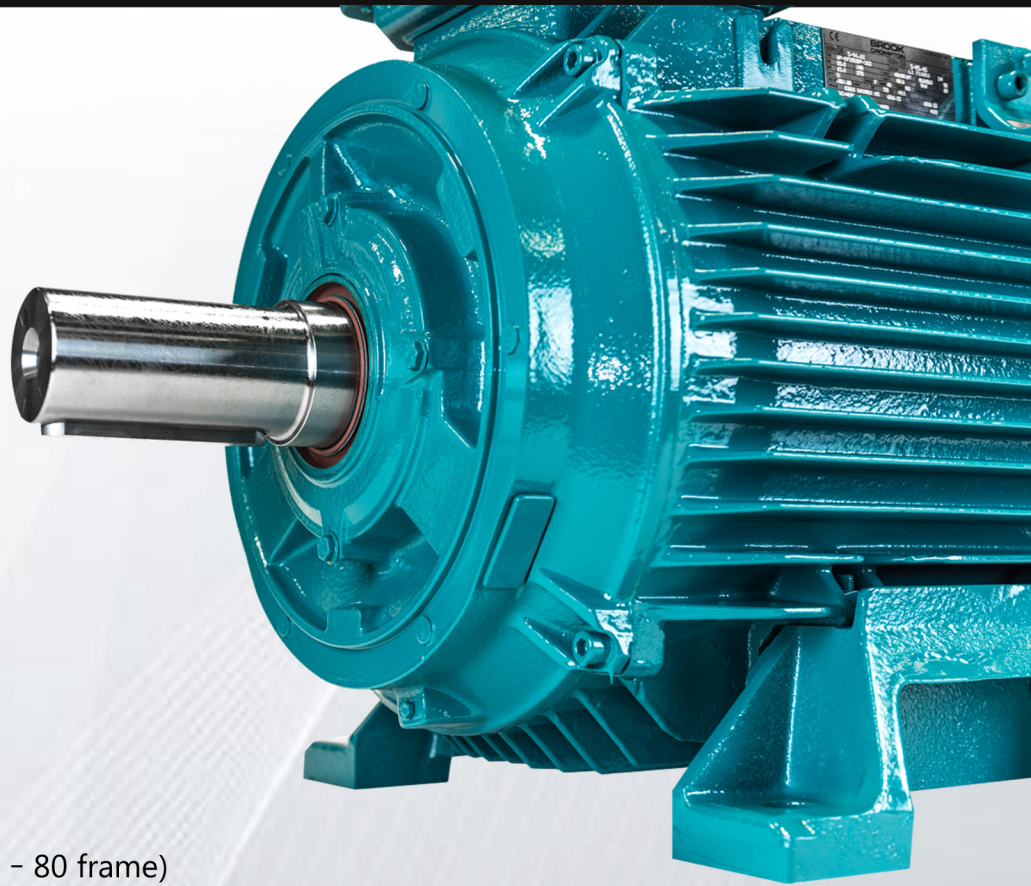


### **Broad Definition:**

- 1-500 HP or equivalent kW
- Single speed
- Continuous duty
- Squirrel cage rotor
- Polyphase
- Operated on 60 Hz
- 2, 4, 6, 8 pole
- 600V or less
- 3 or 4 digit NEMA frame and TEFC 56 frame (and IEC equivalent - 80 frame)
- NEMA DES A, B, C (or IEC N, H)

### **ADDED TO EXISTING TABLE 12-12:**

- 56 frame three phase TEFC
- NEMA Design C motors
- Footless, C & D flanges
- Close Coupled Pump (JM/JP), 56J, vertical hollow shaft, thrust bearing, sleeve bearing
- Design A&B LV motors from 201 - 500 HP
- 8 Pole Motors
- Poly-Phase Motors under 600 V (not designed to run at 230 V or 460 V)
- Integral (and non-integral) Brake motors
- U-Frame motors
- Gearmotors and partial motors
- TENV
- Immersible
- Encapsulated
- Motors with non-standard flanges
- NEMA 66 (IEC 100)
- Special shafts



### **NOT COVERED:**

- Single phase (may be covered under small motor rule)
- DC
- Two digit 42/48 frame (may be covered under small motor rule)
- NEMA 56 ODP (may be covered under small motor rule)
- NEMA Design D
- TEAO and air over
- Component (rotor-stator) sets
- Multi-speed
- Submersible
- Liquid cooled
- Inverter-only (cannot be run across the line)
- Medium voltage
- Synchronous
- Permanent magnet
- Servo

Annex A

**NEMA MG1-2014 Table 12-12 (Continued)**  
**FULL-LOAD EFFICIENCIES FOR 60 HZ PREMIUM EFFICIENCY MEDIUM ELECTRIC MOTORS**  
**RATED 600 VOLTS OR LESS (RANDOM WOUND)**

**Enclosed Motors**

HP	2 Pole		4 Pole		6 Pole		8 Pole	
	<u>Nominal Efficiency</u>	<u>Minimum Efficiency</u>	<u>Nominal Efficiency</u>	<u>Minimum Efficiency</u>	<u>Nominal Efficiency</u>	<u>Minimum Efficiency</u>	<u>Nominal Efficiency</u>	<u>Minimum Efficiency</u>
1	77.0	74.0	85.5	82.5	82.5	80.0	75.5	72.0
1.5	84.0	81.5	86.5	84.0	87.5	85.5	78.5	75.5
2	85.5	82.5	86.5	84.0	88.5	86.5	84.0	81.5
3	86.5	84.0	89.5	87.5	89.5	87.5	85.5	82.5
5	88.5	86.5	89.5	87.5	89.5	87.5	86.5	84.0
7.5	89.5	87.5	91.7	90.2	91.0	89.5	86.5	84.0
10	90.2	88.5	91.7	90.2	91.0	89.5	89.5	87.5
15	91.0	89.5	92.4	91.0	91.7	90.2	89.5	87.5
20	91.0	89.5	93.0	91.7	91.7	90.2	90.2	88.5
25	91.7	90.2	93.6	92.4	93.0	91.7	90.2	88.5
30	91.7	90.2	93.6	92.4	93.0	91.7	91.7	90.2
40	92.4	91.0	94.1	93.0	94.1	93.0	91.7	90.2
50	93.0	91.7	94.5	93.6	94.1	93.0	92.4	91.0
60	93.6	92.4	95.0	94.1	94.5	93.6	92.4	91.0
75	93.6	92.4	95.4	94.5	94.5	93.6	93.6	92.4
100	94.1	93.0	95.4	94.5	95.0	94.1	93.6	92.4
125	95.0	94.1	95.4	94.5	95.0	94.1	94.1	93.0
150	95.0	94.1	95.8	95.0	95.8	95.0	94.1	93.0
200	95.4	94.5	96.2	95.4	95.8	95.0	94.5	93.6
250	95.8	95.0	96.2	95.4	95.8	95.0	95.0	94.1
300	95.8	95.0	96.2	95.4	95.8	95.0		
350	95.8	95.0	96.2	95.4	95.8	95.0		
400	95.8	95.0	96.2	95.4				
450	95.8	95.0	96.2	95.4				
500	95.8	95.0	96.2	95.4				