MARATHON ELECTRIC

Since 1913, Marathon Electric's name has been recognized for engineering excellence, custom-designed products and an extensive product line of industrial quality motors. Available in all popular enclosures from 1/12 HP through 800 HP and in a variety of mounting configurations, Marathon Electric's unique designs provide more ways in which to add accessories, such as blowers, brakes and encoders, to our motors than anyone else in the motor business. Our state-of-the-art lab facilities are equipped and staffed with the finest resources available to ensure successful utilization of our products. Finally, as the preferred supplier of motors to most of the top drive manufacturers in North America, we have what it takes to be a leader in understanding the interaction of drives as they are applied with AC induction motors.

WEBSITE AND E-COMMERCE

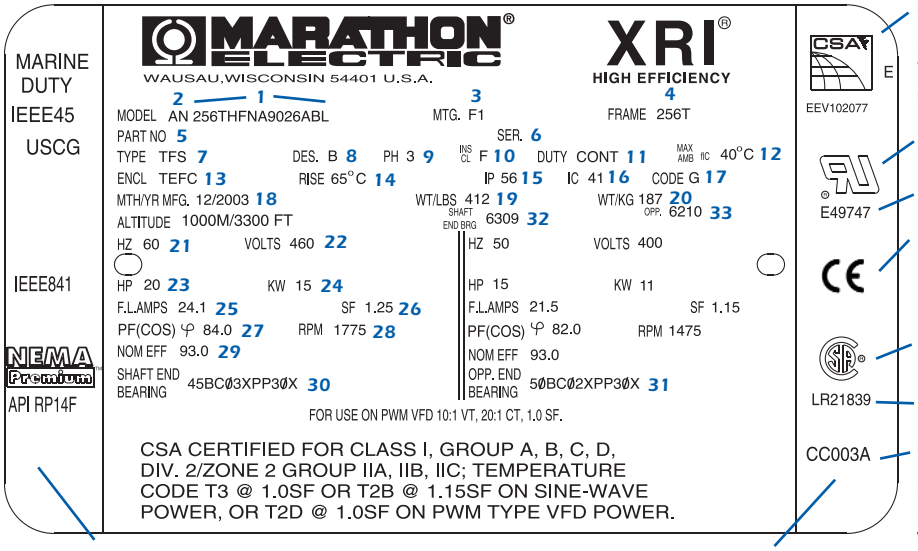
Information can be accessed instantly, any time of the day on ME-business. Marathon customers can sign-up for ME-business by contacting their sales representative.

ME-business can be accessed through:
www.marathonelectric.com.

- Stock Availability
- Order Status
- Shipping Information
- Invoice Information
- Product features and performance data

Marathon Electric Nameplate Information - HOW TO READ A MARATHON ELECTRIC NAMEPLATE

The nameplate is the key to selecting the proper replacement motor.



CSA Verification Mark - Complies with CSA's Energy Efficiency Verification Service and their Standard C390 - C390 is the Canadian efficiency equivalent of EPAct.

Underwriters Laboratories, Inc.
UL Recognized Component Mark
UL file #

CE (Conformité Européene) Marking
This mark signifies the motor complies with the European Low Voltage Directive.

CSA Mark - Certified by the Canadian Standards Association
CSA file #

CC# - Compliance Certification Number as per assigned by the Department of Energy. Motors meeting EPAct efficiencies or higher will have this number.

Motor Specifications (Example)

Agency Symbols

1. **MODEL** - The ID number
2. **DATE CODE** - The month and year manufactured
3. **MTG.** - Mounting
4. **FRAME** - The size & mounting
5. **PART NO.** - Customer part number
6. **SER.** - Serial number
7. **TYPE** - Electrical type
8. **DES.** - Code by NEMA or IEC
9. **PH** - Electrical phase usually 1 or 3
10. **INS CL** - Insulation Class
11. **DUTY** - Time rating under load
12. **MAX AMB** - The allowable surrounding air temperature
13. **ENCL** - Enclosure (i.e. TEFC)
14. **RISE** - The temperature rise over ambient expressed in degrees Celsius when the motor operates at nameplated HP or KW
15. **IP** - Inherent Protection of the enclosure to solids and liquids as defined by IEC 34-5
16. **IC** - Inherent Cooling
17. **CODE** - NEMA locked-rotor KVA
18. **MTH/YR MFG.** - Month and year motor was manufactured
19. **WT/LBS** - Motor weight in pounds
20. **WT/KG** - Motor weight in kilograms
21. **HZ** - Input frequency of the power supply, usually 50 or 60 HZ
22. **VOLTS** - Voltage rating of the motor at the operating frequency
23. **HP** - Rated horsepower the motor will produce
24. **KW** - Rated output in watts
25. **F.L. AMPS** - The rated load current expressed in amps at nameplated horsepower with nameplate voltage and frequency
26. **S.F.** - Percentage of the rated horsepower the motor can safely operate at: Example: 1.15 SF (115% of rated HP)
27. **PF / COS** - Power Factor / Cosine is the ratio of actual power to the apparent power
28. **RPM** - Full load speed at rated frequency
29. **NOM EFF** - Average Efficiency
30. **SHAFT END BEARING** - Manufacturer drive end bearing number
31. **OPP. END BEARING** - Manufacturer opposite drive end bearing number
32. **SHAFT END BRG** - Drive end bearing size
33. **OPP** - Opposite drive end bearing size

General Information

HOW TO READ A MODEL NUMBER:
Each Marathon Electric motor carries a model number that can be used to define some of the motor's physical and electrical characteristics.

Example (For Fractional): 1PC48C17D2000AP

This is a breakdown of the model on the nameplate:

1	P	C	48	C	17	D	2000	A	P
1	2	3	4	5	6	7	10	11	12

This is a breakdown of the model in the catalog:

48	C	17	D	2000
4	5	6	7	10

Example (For Integral): 2QA215TBDRA7076ALL

This is a breakdown of the model on the nameplate:

2	Q	A	215T	B	D	R	A	7076	AL	L
1	2	3	4	5	7	8	9	10	11	12

This is a breakdown of the model in the catalog:

215T	B	D	R	A	7076
4	5	7	8	9	10

1. **Date Code** - Year of Manufacture
(Not shown in catalog listings.)

2. **Thermal Protection** (Not shown in catalog listings.)

	UL Recognized Motor Protector Combination	UL Recognized Motor Construction
Automatic Reset	Automatic Reset	Automatic Reset
Q	Yes	Yes
S	No	No
U	No	Yes
W	#	Yes
Manual Reset	Manual Reset	Manual Reset
P	Yes	Yes
Z	No	Yes
X	No	No
None	None	None
V	No	Yes

Motor protector combination is U.L. recognized only if motor is used in direct drive fan duty application, and is under locked rotor condition, or is running under no-load condition.

3. **Date Code** - Month of Manufacturer (Not shown in catalog listings.)

4. **NEMA Frame Size** - (Integral motors - T and U designate standard shaft, TS and US designate short shaft)

5. **Electrical Type**
Single Phase:
A = Permanent split capacitor
B = Capacitor start, capacitor run
C = Capacitor start, induction run
N = Split phase start, capacitor run
S = Split phase
Three Phase:
T = Three phase
H = Inverter Duty/IEEE841 Inverter Duty
V = Medium Voltage
DC Power:
E = Permanent Magnet DC

6. **RPM or Speed at 60 Hz (Fractional Only)**
34 = 2-Pole, 3600 rpm
17 = 4-Pole, 1800 rpm
11=6-Pole, 1200 rpm
8 = 8-Pole, 900 rpm

7. **Enclosure**
D = Dripproof
E = Explosion proof, non-ventilated
F = Totally enclosed, fan cooled
G = Explosion proof, fan cooled
O = Open
P = Partial
S = Semi-enclosed
T = Totally enclosed, non-ventilated
V = Washdown, non-ventilated
W = Washdown, fan cooled

8. **Frame Construction**

Integral		Fractional (where applicable)
L	= Aluminum (Full Frame)	B = Rolled Steel - Sourced
Y	= Aluminum (Full Frame)	D = Stainless Steel - Sourced
Z	= Aluminum (High Mount Down Frame)	U = Frameless - Sourced
H	= Aluminum - Sourced	
R	= Rolled Steel (Full Frame)	
W	= Rolled Steel (Full Frame)	
X	= Rolled Steel (High Mount Down Frame)	
B	= Rolled Steel - Sourced	
S	= Cast Iron (Full Frame)	
N	= Cast Iron (Full Frame)	
P	= Cast Iron (High Mount Down Frame)	
C	= Cast Iron - Sourced	
D	= Stainless Steel	

9. **Style Letter** (A, B, C, etc. indicate redesign)

10. **Sequence Number**

11. **Minor Modification Letter(s)**
Fractional - 1 letter; Integral - 2 letters

12. **Manufacturing Code** - A code for the factory where the motor was manufactured.