

DATA SHEET

Premium Efficiency Motor: **IEC20-18-160,**

60 Hz

WorldWide Electric Corporation

1 (800) 808-2131

Worldwideelectric.net



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Customer:

MOTOR INFORMATION	
HP	20
RPM	1800
Phase	3
Frequency	60
Voltage	230/460
Frame Size	160L
Enclosure	TEFC
Degree of Protection	IP55
Service Factor	1.15
Poles	4
Full Load Speed	1775
Insulation Class	F
Temp Rise	80°C
NEMA Code Letter	K
Duty Cycle	S1
Slip	1.37%
IEC Design	N
Moment of Inertia	2.342 lb.ft.^2
Locked Rotor Time (Hot)	12 seconds
Sound Pressure Level	94 dB(A)
Number of Starts	2 Hot / 3 Cold
Max Ambient Temperature	40° C
Max Elevation	1000 m.a.s.l (3300 f.a.s.l)
Mounting	F3
Rotation	Bidirectional
Area of Classification	Safe
Inverter Rating	10:1 CT/20:1 VT
Standard	IEC 60034 and IEC 60072
Approvals	UL, CE

EFFICIENCY/POWER FACTOR		
LOAD	EFF	P. F.
100%	93.0 %	0.83
75%	93.9 %	0.79
50%	93.2 %	0.69

TORQUE		
FULL LOAD	LRT	BDT
80.58 lb.ft.	360 %	399 %

AMPERAGE INFORMATION		
	230V	460V
Full Load Amps	48.16	24.08
Locked Rotor Amps	403.40	201.70
No Load Current	19.19	9.60

BEARING INFORMATION	
DE Bearing	6309 ZZ
ODE Bearing	6309 ZZ
Grease Type	NS7

ADDITIONAL DATA	
Multi-Mount	Yes
Shaft Material	AISI 1040/45
Connection Diagram	9 Lead Wye
Approximate Weight	105.5 kg

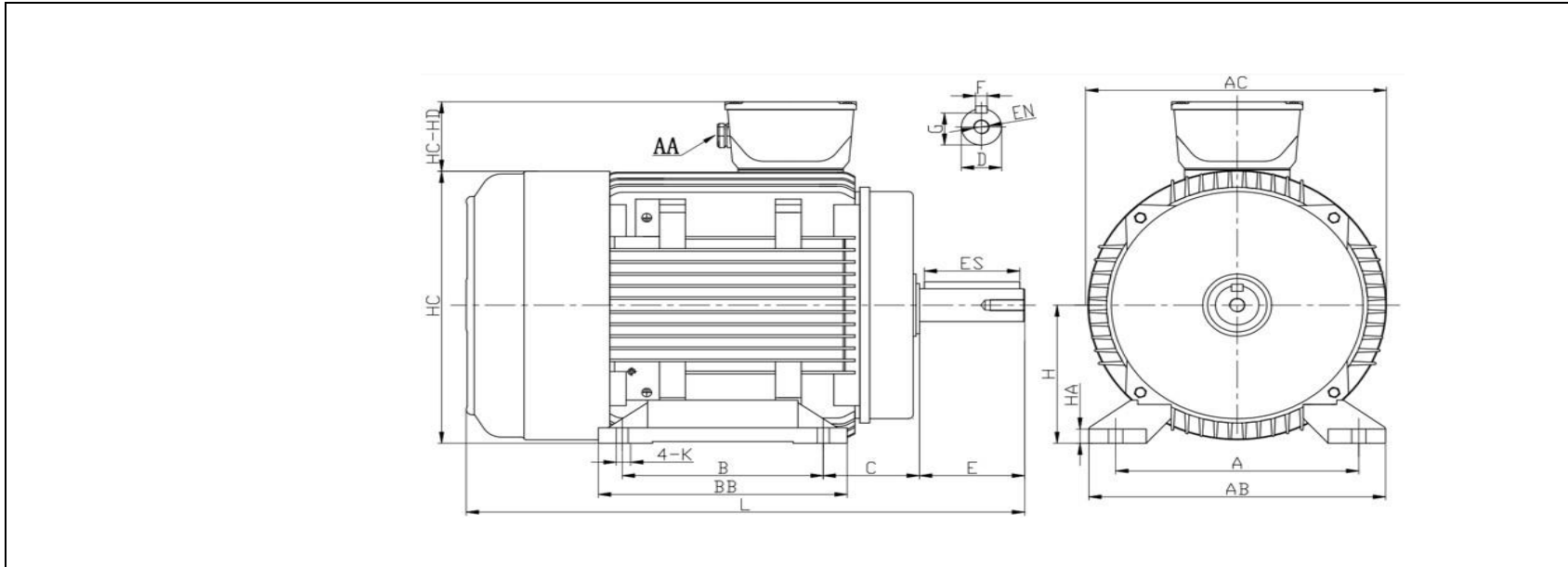
MOTOR DRAWING

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DIMENSION - METRIC (mm)

MOUNTING					L	H	HA	AC	HC	K
A	B	C	AB	BB						
254	254	108	310	304	640	160	18	310	319	14.5

SHAFT & KEY					
F	ES	G	E	D	EN
12	80	37	110	42	M16*32mm

TERMINAL BOX	
AA	HD-HC
M32	81

PERFORMANCE CURVES

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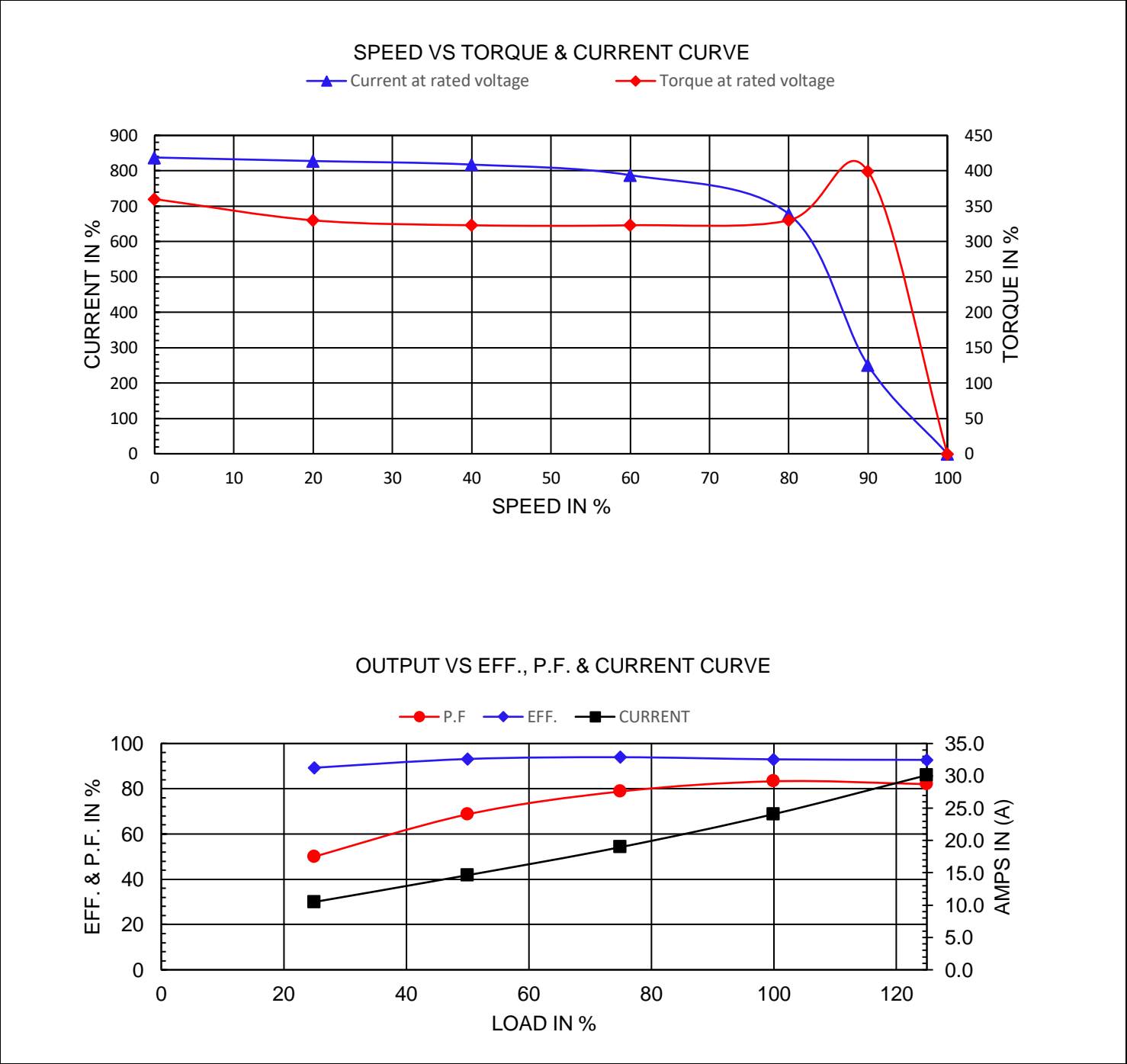
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Motor Type					
Output Rating (HP)	20	FL Speed	1775		
Full Load Torque	80.580 lb.ft	LRT (%FLT)	360	460 volt FLA	24.08
Rotor Wk ²	2.342 lb-ft ²	BDT (%FLT)	399	230 volt FLA	48.16



NAMEPLATE / WIRING

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SAMPLE NAMEPLATE DATA

		3-PHASE INDUCTION MOTOR						IE3 CE			
						<small>ENERGY C US E309286</small>		<small>IEC 60034-1</small>			
TYPE		OUTPUT		HP	kW	INS.F	FR.	IP55	AMB.40°C		
V	Hz	A	r/min	SF	IE CODE	η 100%	η 75%	η 50%			
				Code " " at 60Hz			Duty	S1			
				DES	N	DE BRG					
				IC	411	ODE BRG					
				SN.		Date	Weight	kg			

TYPE	IEC20-18-160		OUTPUT	HP	20	kW	14.91	FRAME	160L
V	Hz	A	r/min.	SF	IE CODE	η100%	η75%	η50%	
190/380	50	57.18/28.59	1468	1.00	IE3	92.1	93.7	93.6	
230/460	60	48.16/24.08	1775	1.15	IE3	93.0	93.9	93.2	

Code"	K	"at 60Hz	DE BRG	6309 ZZ	Weight	105.5 kg
			ODE BRG	6309 ZZ		