

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting High Efficiency  
Three-Phase

Product code : 14051984

Catalog # : .5518EP3EAL80FF-W22

Frame : 80  
Output : 0.75 HP (0.550 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 2.50/1.25 A  
L. R. Amperes : 18.8/9.38 A  
LRC : 7.5  
No load current : 1.76/0.880 A  
Rated speed : 1740 rpm  
Slip : 3.33 %  
Rated torque : 2.26 ft.lb  
Locked rotor torque : 320 %  
Breakdown torque : 360 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 0.0574 sq.ft.lb  
Design : N

Locked rotor time : 18s (cold) 10s (hot)  
Temperature rise : 80 K  
Duty cycle : S1  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP55  
Cooling method : IC411 - TEFC  
Mounting : B35L(E)  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 48.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 29.2 lb

Output	50%	75%	100%
Efficiency (%)	72.0	76.5	77.0
Power Factor	0.50	0.63	0.72

Foundation loads  
Max. traction : 63 lb  
Max. compression : 93 lb

	Drive end	Non drive end
Bearing type	6204 ZZ	6203 ZZ
Sealing	Oil Seal	Oil Seal
Lubrication interval	-	-
Lubricant amount	-	-
Lubricant type	Mobil Polyrex EM	

### Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Checked by				
Date	13/04/2020			

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

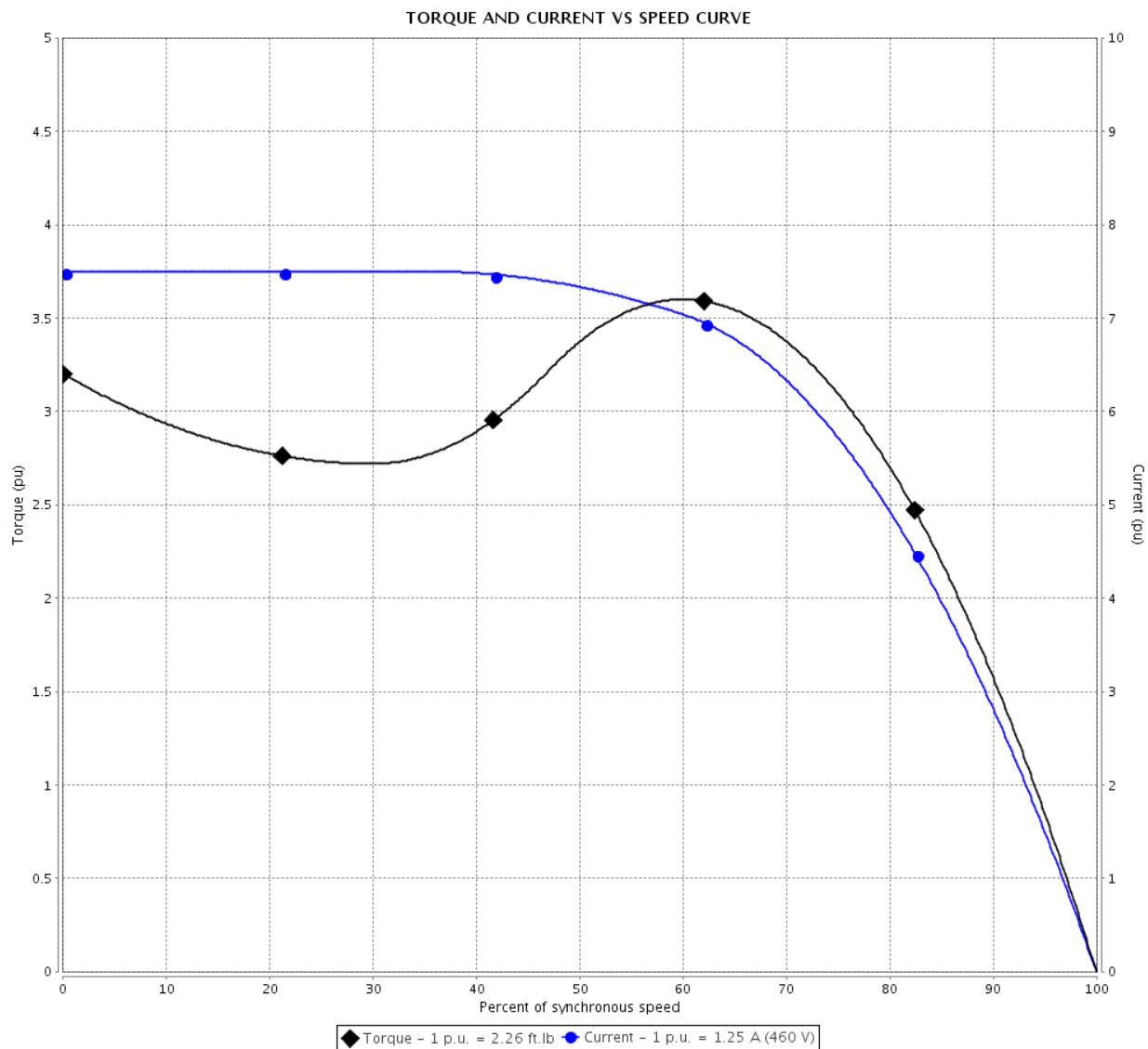


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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

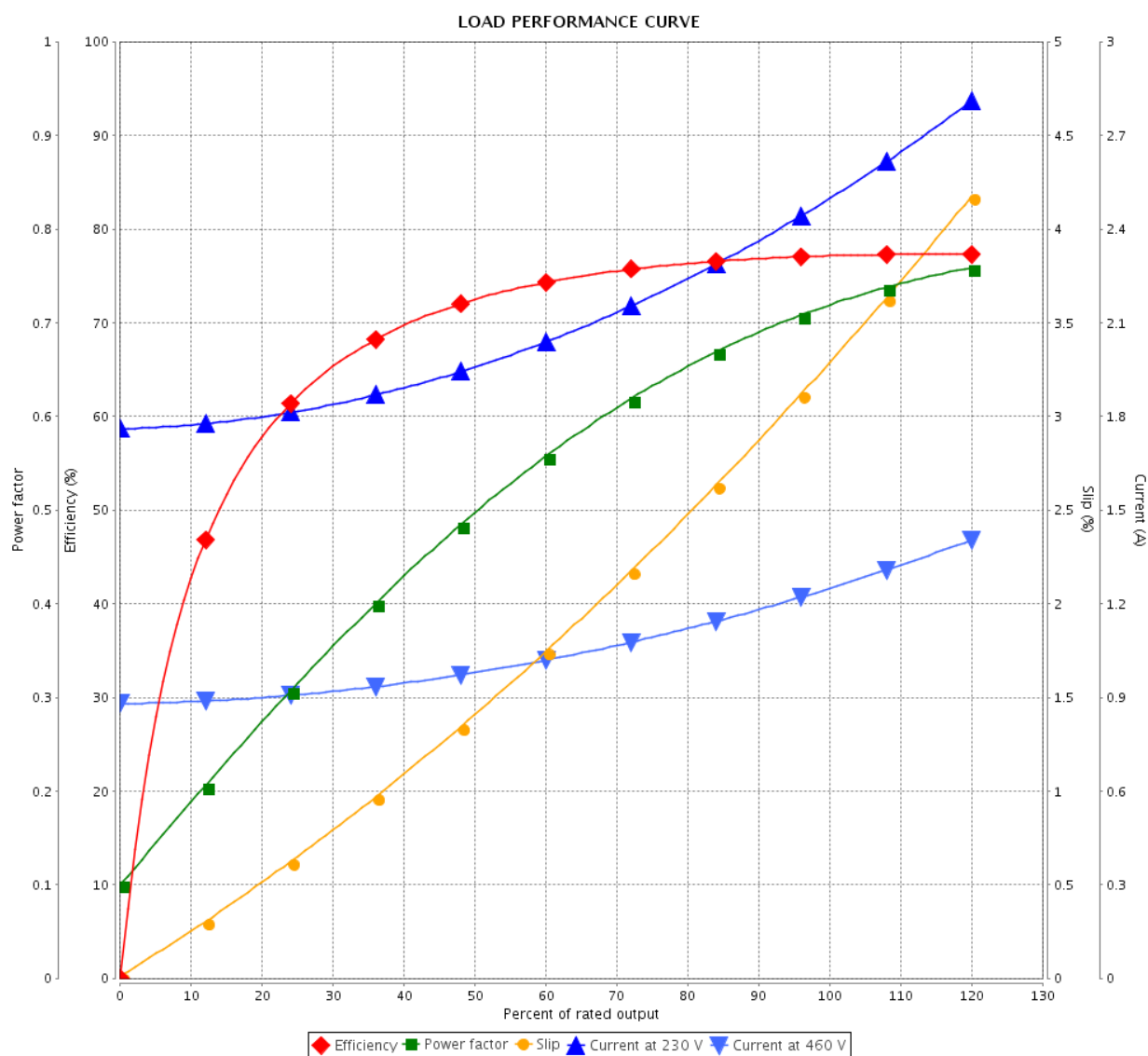


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# THERMAL LIMIT CURVE

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Design : N

Heating constant

Cooling constant

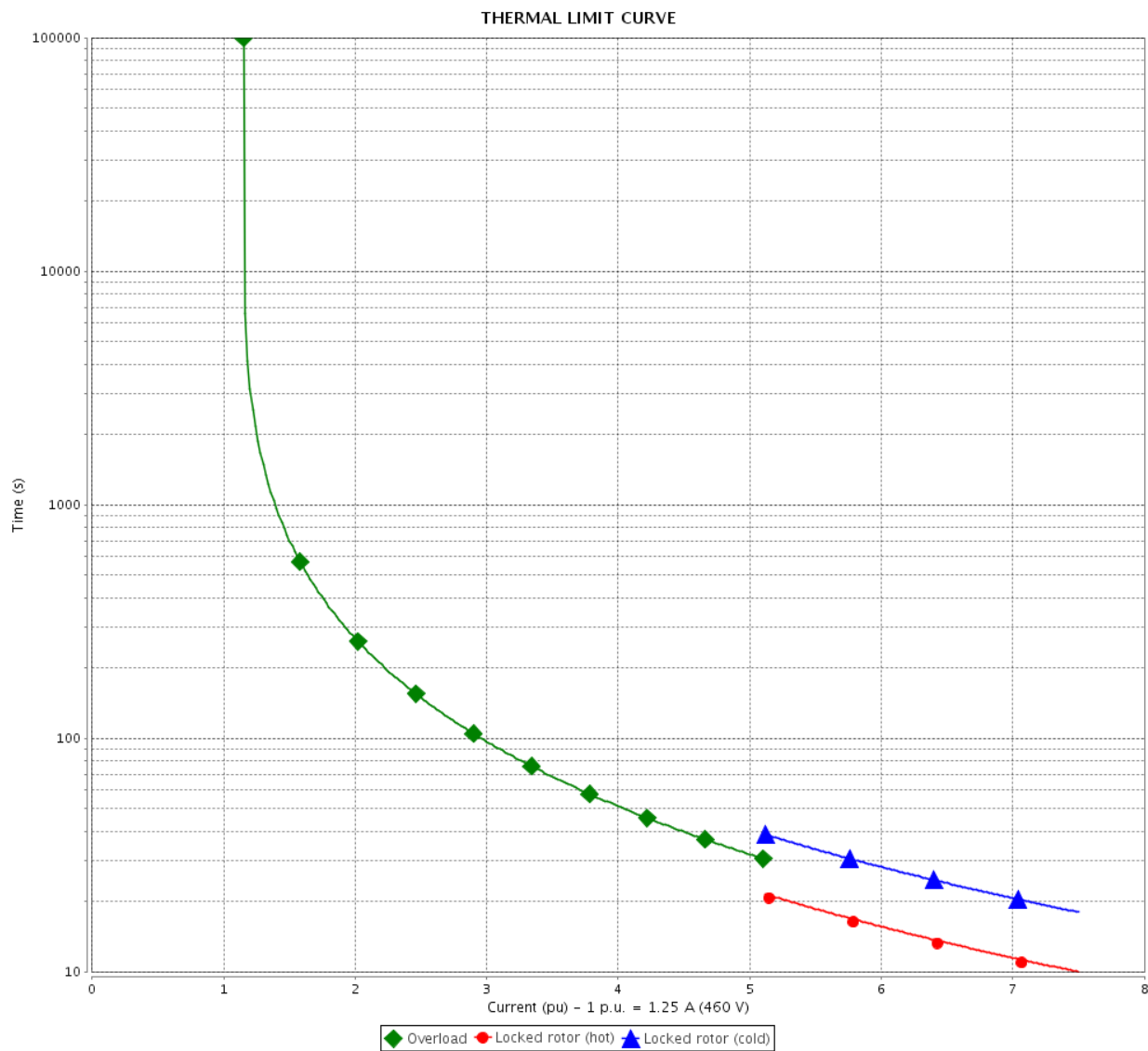
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

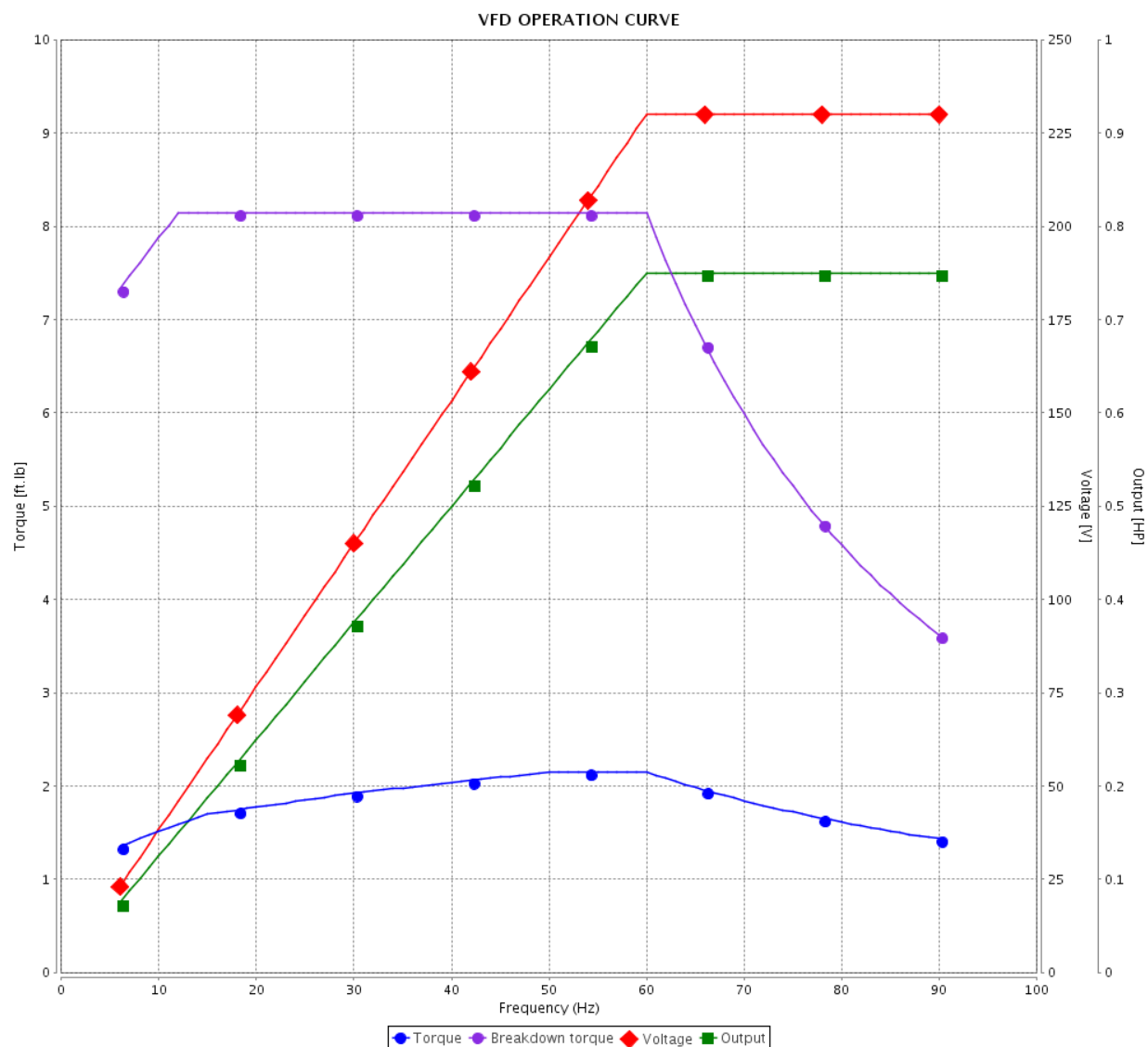


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Catalog # : .5518EP3EAL80FF-W22



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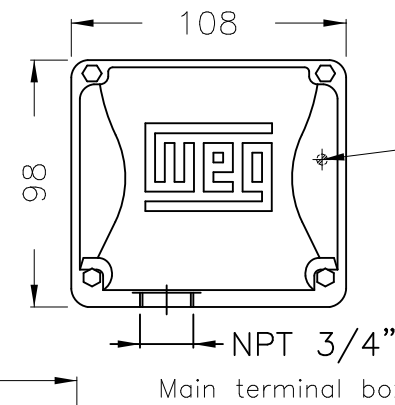
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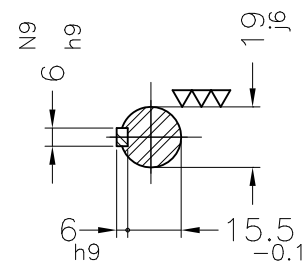
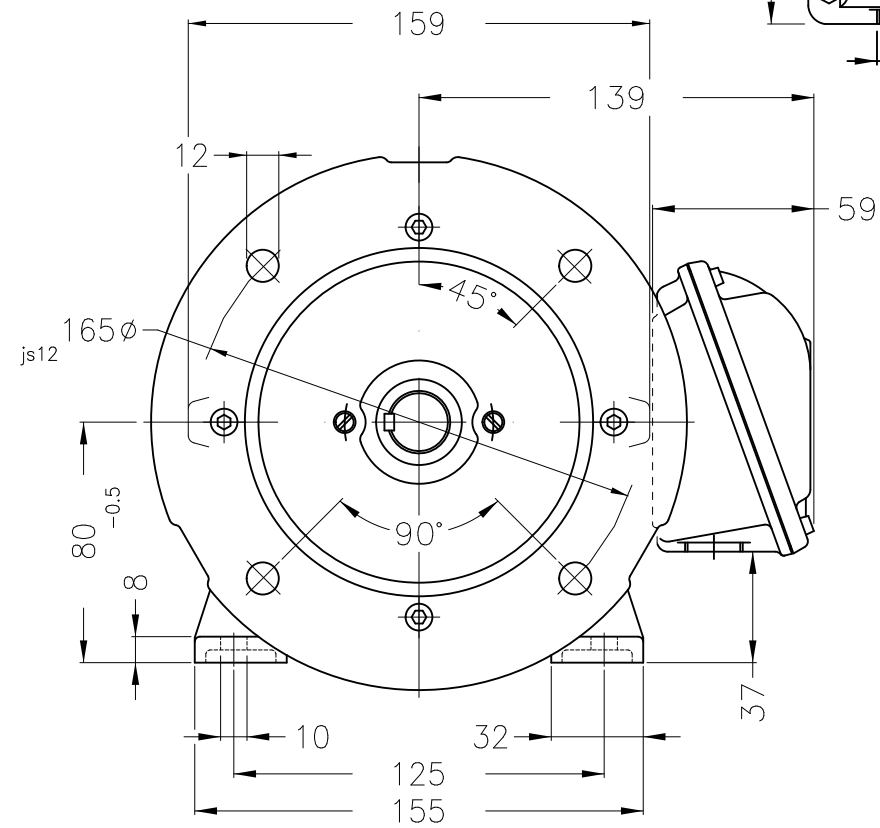
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Dimensões em mm  
Dimensions in mm

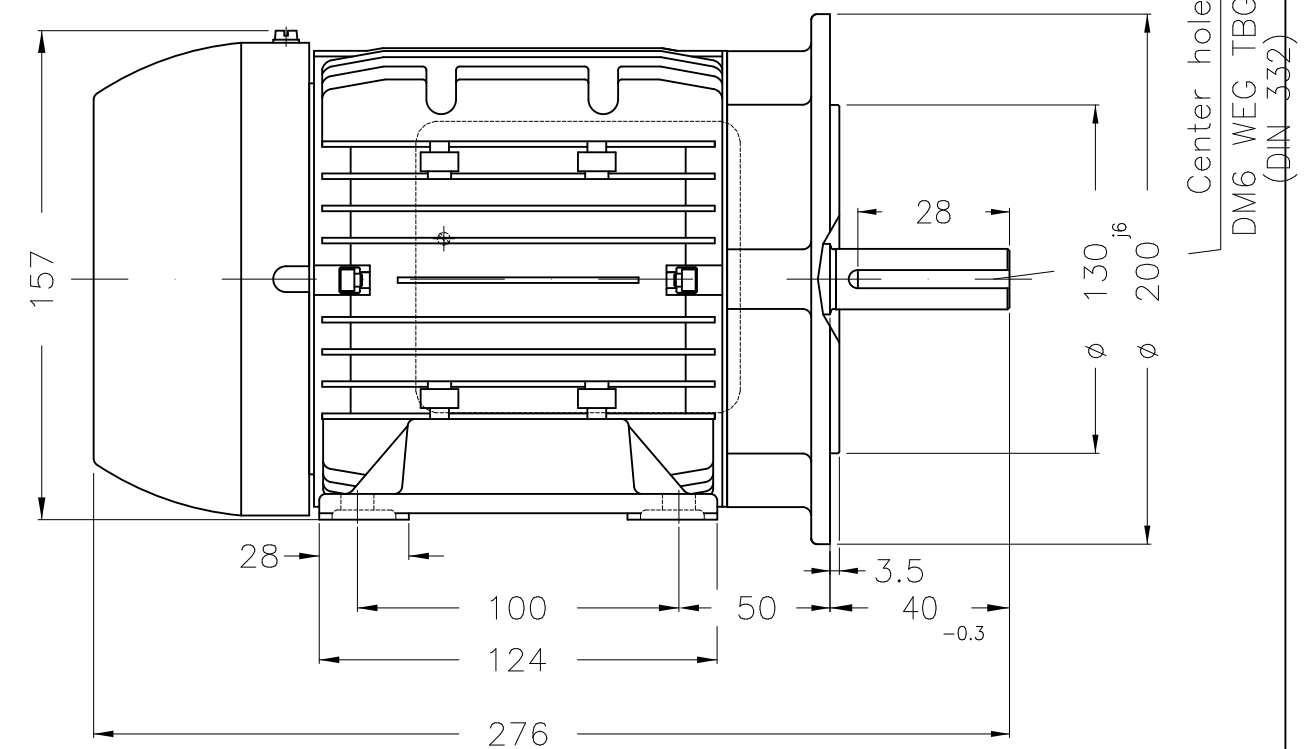
THIS IS AN UPDATED REVISION, THE  
PREVIOUS ONE MUST BE DISREGARDED.



– Grounding for leads 0.5–6 mm<sup>2</sup> / 20–10 AWG



DE Shaft End



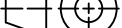

Center hole  
DM6 WEG TBG12  
(DIN 332)

Bearing cap

Color	RAL 7022
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Painting plan 207A

Mounting	B35L(E)
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ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN		THREE PH.MULTI M. H.EFF.MOTOR TRU METRIC						A3
CHECKED			FRAME 80 IP55 TEFC						
RELEASED			WEG code: 14051984						
REL DT	13.04.2020	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

0.75 HP      04 Poles      60Hz

A

WEG's property. Forbidden reproduction without previous authorization.

ZME A3



CC029A  
Severe Duty

IE3-77.0%



IEC 60034-1

MODEL .5518EP3EAL80FF-W22

3 ~ AL80

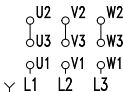
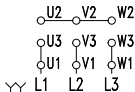
AMB 40°C

INS CL. F ENCL TEFC TYPE ET IP55 DUTY CONT.

kW(HP)	Hz	VOLTS	RPM	AMPS	PF	SFA
0.55(0.75)	50	380 Y	1410	1.35	0.80	-
		415 Y	1455	1.30	0.75	-
0.55(0.75)	60	230 YY	1740	2.50	0.72	2.88
		460 Y		1.25		1.44

Hz	SF	CODE	$\Delta t$ (k)	ALT 1000 m.a.s.l.
50	1.00	J	80	NEMA EFF 60Hz DES NOM(%) 77.0 3/4(%) 76.5
60	1.15	L	80	

## RUN CONNECTION



→ 6204-ZZ

→ 6203-ZZ

MOBIL POLYREX EM

Lbs

TEMP CODE T3C

Class I, Div. 2, Gr. B, C and D

Class I, Zone 2, IIC

MOD.TE01A0X0H0000300437



EAC