



# OMEC NORTH AMERICA INC

CAST IRON - GENERAL PURPOSE MOTORS

## PRODUCT FEATURES

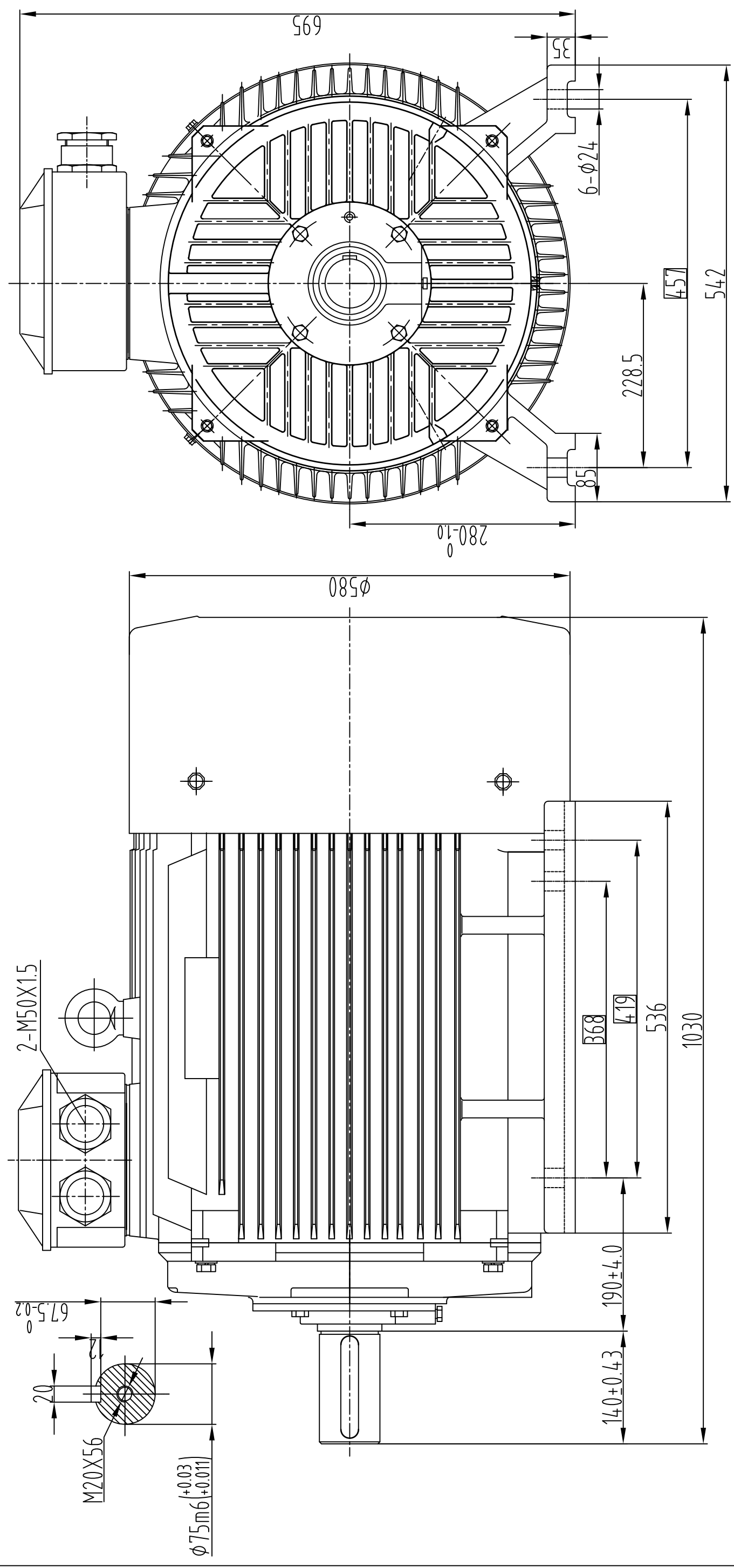
Model Number	OMT3-280SM0-4 90KW		
Standard	IEC 60034-1	Output	90.00 KW
Hazardous Classification	None (Safe Area)	No of Poles	4 Pole
Efficiency Class	IE3	Frame Size	280SM(A)
Number of Phases	3 Phase- Induction	Mounting Type	B3; B35, B5, V1
Material of Construction	Cast Iron	Enclosure Type / Cooling	TEFC-IC411
Insulation Class	Class F	Degree of Protection	IP55
Temperature Rise Class	80K (B class)	Duty Cycle	S1- Continuous Duty
Ambient Temperature	-15°C ~ 50°C	Service Factor	SF 1.15
Starting Method	DOL / WYE-DELTA	Operating Altitude	1000 masl

## TECHNICAL DETAILS

Winding Connection	Δ (Delta)						
Frequency	50Hz			60Hz			
Rated Speed	1490 Rpm			1785 Rpm			
Voltage	380	400	415	380	400	440	460
Full Load Current [ IN ]	163.23 A	155.07 A	149.46 A	163.23 A	155.07 A	140.97 A	134.84 A
Locked Rotor Current [ IL / IN ]	6.9	6.9	6.9	6.9	6.9	6.9	6.9
Full Load Torque [ TN ]	576.85 Nm	576.85 Nm	576.85 Nm	481.51 Nm	481.51 Nm	481.51 Nm	481.51 Nm
Locked Rotor Torque [ TL / TN ]	2.0	2.0	2.0	2.4	2.4	2.4	2.4
Breakdown Torque [ TB / TN ]	2.3	2.3	2.3	2.8	2.8	2.8	2.8
Efficiency	50% load	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
	75% load	95.1%	95.1%	95.1%	95.1%	95.1%	95.1%
	100% load	95.2%	95.2%	95.2%	95.2%	95.2%	95.2%
Power Factor (cos φ)	50% load	0.78	0.78	0.78	0.78	0.78	0.78
	75% load	0.85	0.85	0.85	0.85	0.85	0.85
	100% load	0.88	0.88	0.88	0.88	0.88	0.88

## OTHER DETAILS

Bearing Configuration (DE / NDE)	Ball Bearing / Ball Bearing		
Bearing Lubrication Type	Grease - ESSO UNIREX N2		
Bearing Series Type	DE:	6317/C3	NDE: 6314/C3
Vibration	2.2 mm/sec	Direction of Rotation	CW or CCW
Moment of inertia (kg.m <sup>2</sup> )	2.1536	Sound Pressure Level	88 dB(A)
Final Colour	RAL-5012 : BLUE	Paint Specification	2 Pack Epoxy
Terminal Box Position	TOP/SIDE	Weight	670 kg



# IP55-Cast Iron B3 MOTORS

**OMEC NORTH AMERICA INC.**

Description: OMT3 Type-1

Motor Frame: 280SM-4



Drawing Title:

Outline Drawing

Sheet No.	Dim.	Size	Scale
1 OF 1	mm	A3	1:5

A.J.B. 15.Jan.2025 00

Drawn By Date Approved By Rev.



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## Performance Curves

kW: 90 RPM: 1490

IE3 GENERAL PURPOSE MOTORS- OMT 400V 50Hz

