



OMEC NORTH AMERICA INC

CAST IRON - GENERAL PURPOSE MOTORS

PRODUCT FEATURES

Model Number	OMT3-280SM0-2 90KW		
Standard	IEC 60034-1	Output	90.00 KW
Hazardous Classification	None (Safe Area)	No of Poles	2 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

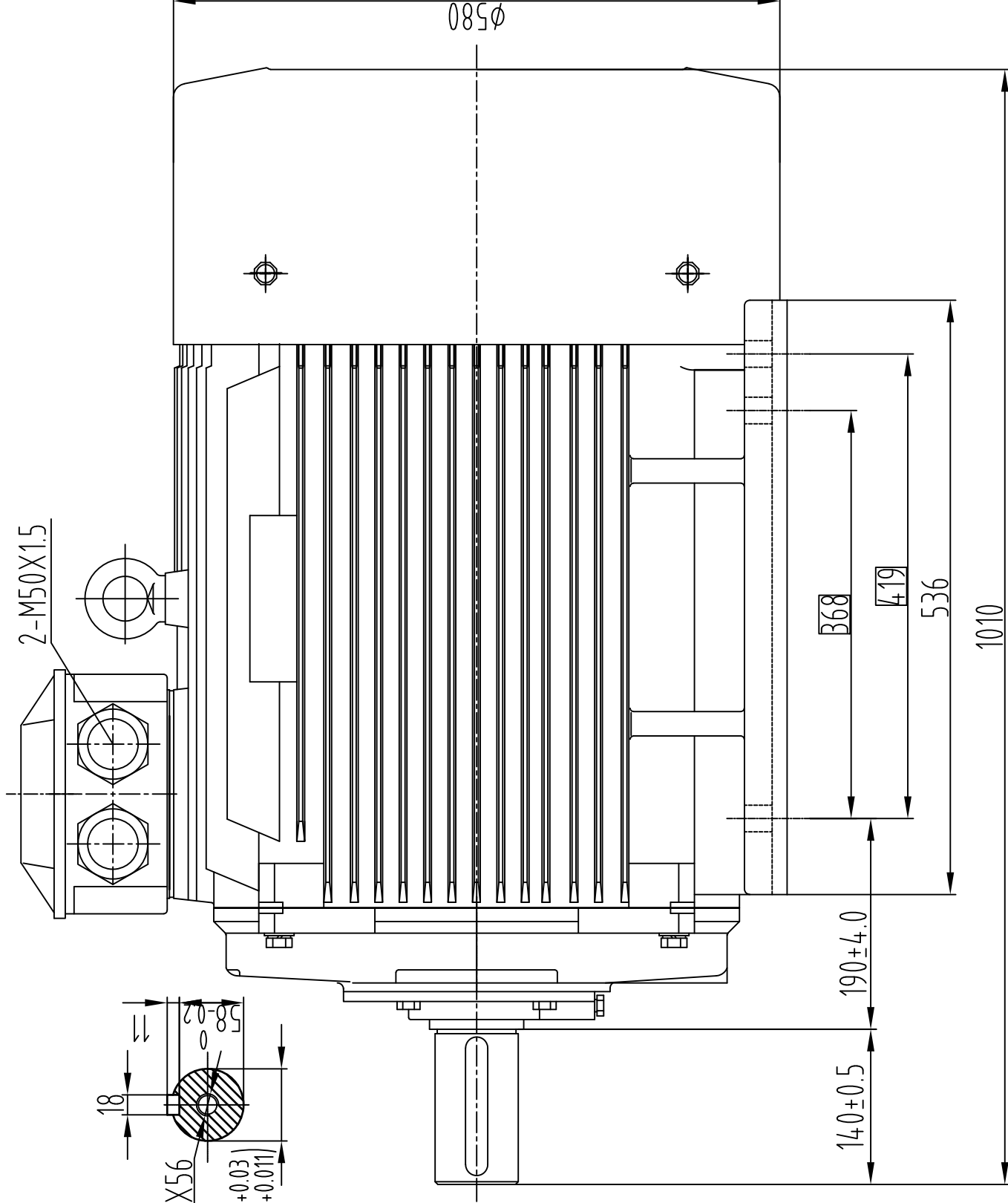
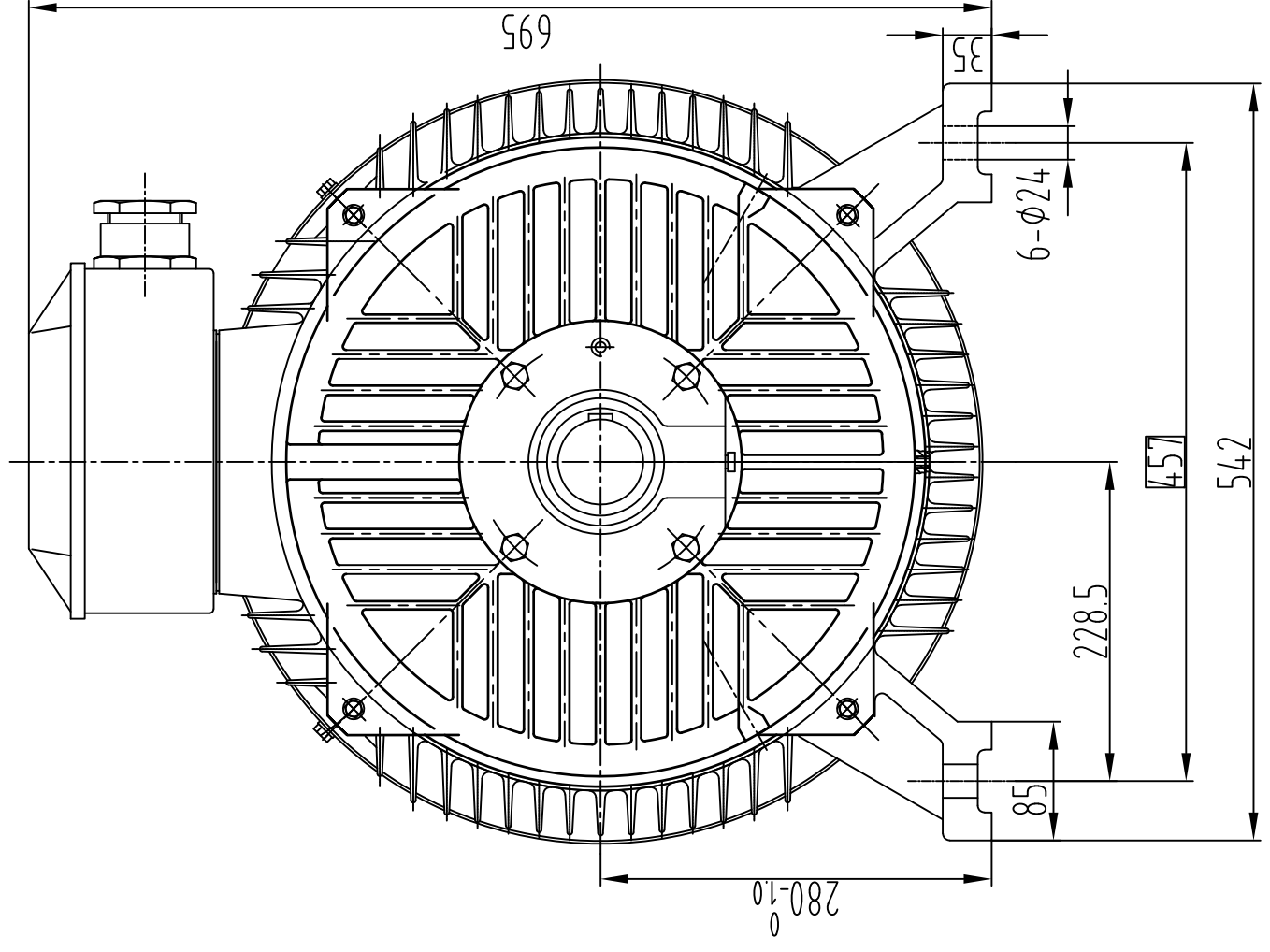
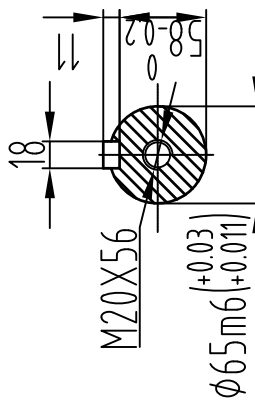
TECHNICAL DETAILS

Winding Connection	Δ (Delta)						
Frequency	50Hz			60Hz			
Rated Speed	2975 Rpm			3570 Rpm			
Voltage	380	400	415	380	400	440	460
Full Load Current [IN]	159.94 A	151.94 A	146.45 A	159.94 A	151.94 A	138.13 A	132.12 A
Locked Rotor Current [IL / IN]	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Full Load Torque [TN]	288.91 Nm	288.91 Nm	288.91 Nm	240.76 Nm	240.76 Nm	240.76 Nm	240.76 Nm
Locked Rotor Torque [TL / TN]	1.8	1.8	1.8	2.2	2.2	2.2	2.2
Breakdown Torque [TB / TN]	2.3	2.3	2.3	2.8	2.8	2.8	2.8
Efficiency	50% load	94.0%	94.0%	94.0%	94.0%	94.0%	94.0%
	75% load	94.9%	94.9%	94.9%	94.9%	94.9%	94.9%
	100% load	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Power Factor (cos φ)	50% load	0.85	0.85	0.85	0.85	0.85	0.85
	75% load	0.89	0.89	0.89	0.89	0.89	0.89
	100% load	0.90	0.90	0.90	0.90	0.90	0.90

OTHER DETAILS

Bearing Configuration (DE / NDE)	Ball Bearing / Ball Bearing		
Bearing Lubrication Type	Grease - Mobil Polyrex EM		
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 ²)	0.8472	Sound Pressure Level	94 dB(A)
Final Colour	RAL-5012 : BLUE	Paint Specification	2 Pack Epoxy
Terminal Box Position	TOP/SIDE	Weight	680 kg

2-M50X1.5



Description: OMT3 Type-1

Motor Frame: 280SM-2



Drawing Title:

Outline Drawing

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

IP55-Cast Iron B3 MOTORS

OMEC NORTH AMERICA INC.

A.J.B.	15.Jan.2025	00
Drawn By	Date	Approved By
		Rev.

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Performance Curves

kW: 90 RPM: 2975

IE3 GENERAL PURPOSE MOTORS- OMT 400V 50Hz

