

PRODUCT INFORMATION PACKET

marathon®

Model No: TCA0451A3133GACD01

Catalog No: TCA0451A3133GACD01

TerraMAX® Cast Iron Motor, 60 HP, 3 Ph, 50 Hz, 415 V, 225M Frame





Nameplate Specifications

Phase	3	Output HP	60 Hp
Output KW	45.0 kW	Voltage	415 V
Speed	2975 r/min	Service Factor	1
Frame	225M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94 %
Ambient Temperature	50 °C	Frequency	50 Hz
Current	75.7 A	Power Factor	0.88
Duty	S1	Insulation Class	F
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6213
UL	No	CSA	No
CE	Yes	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Bi-Directional
Mounting	B35	Motor Orientation	Horizontal
Drive End Bearing	C3	Opp Drive End Bearing	C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	832 mm	Frame Length	425 mm
Shaft Diameter	55 mm	Shaft Extension	110 mm
Assembly/Box Mounting	R Side		
Outline Drawing	0222500937	Connection Drawing	8442000085

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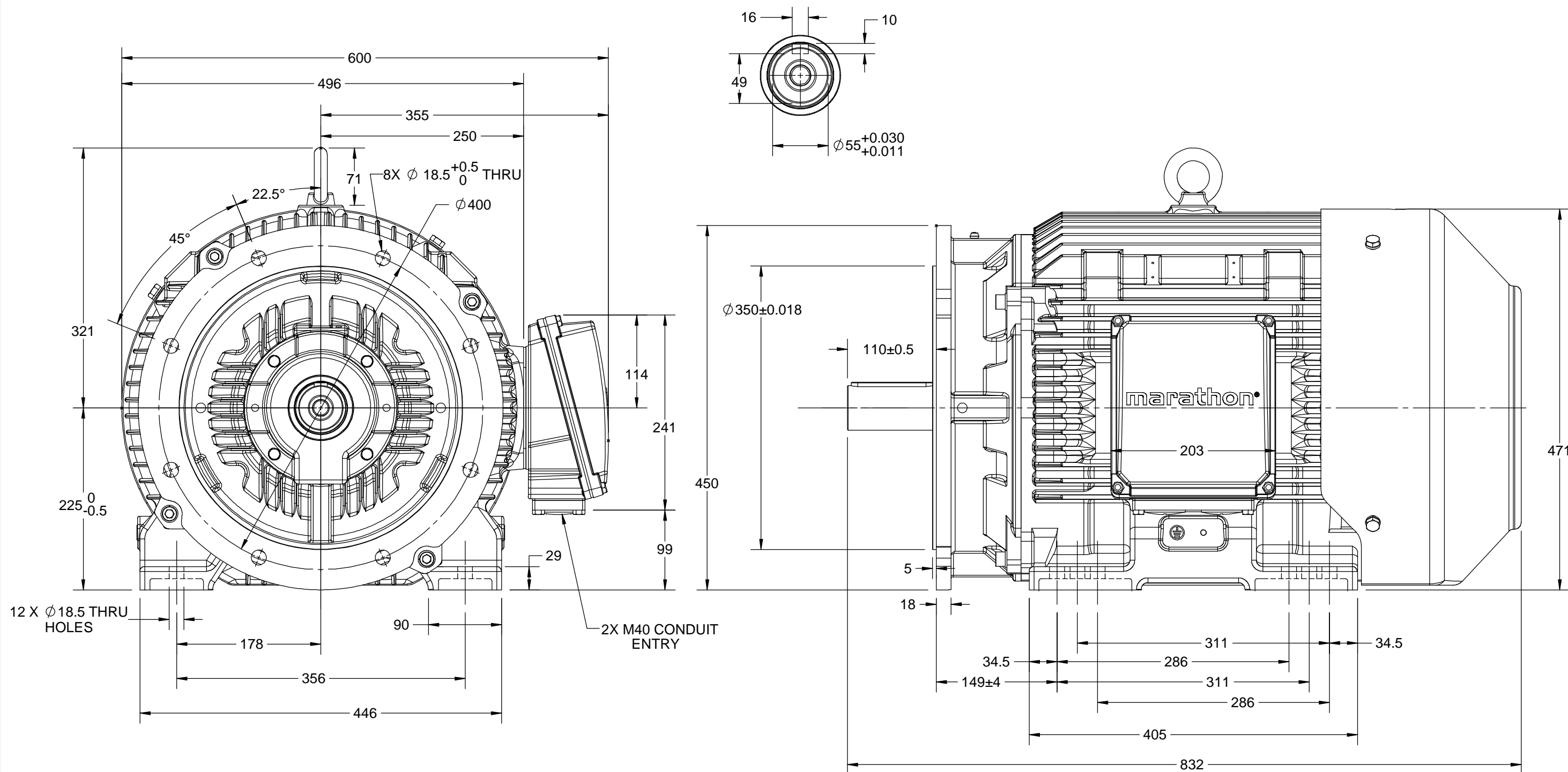
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ECO ECO-0148344	APPROVED BY SBD	DATE 09/08/2018
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DRAWN BY VS	 Regal ™ Regal Beloit America, Inc.		
DATE 09/08/2018			
APPROVED BY SBD	DESCRIPTION OUTLINE 225M FR 2P-B35 MTG TYPE: TCA/QCA-RHS TB		
DATE 09/08/2018			
REFERENCE	MATERIAL		PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER 0222500937	SHEET 1 OF 1

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ECO ECO-0116390	APPROVED BY SBD	DATE 13/01/2017
ECO DESCRIPTION NEW DRAWING RELEASE		

GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3



NOTES:

1. PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE.
2. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.

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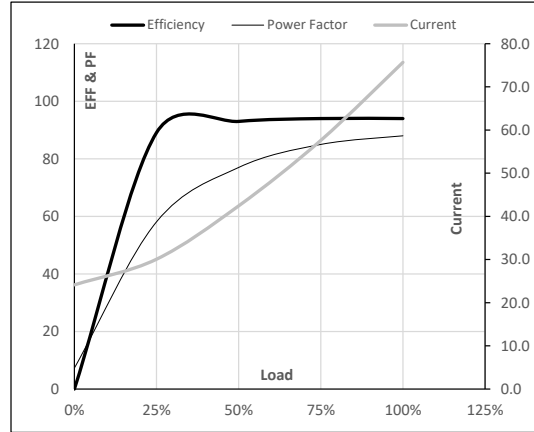
	DRAWN BY SN	Regal Beloit America, Inc.		
	DATE 16/12/2016			
	APPROVED BY SBD	DESCRIPTION CONN DIAGRAM-NAMEPLATE		
	DATE 16/12/2016			
	REFERENCE	MATERIAL	PROCESS/FINISH	
	THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER 8442000085	SHEET 1 OF 1

Model No. TCA0451A3133GACD01

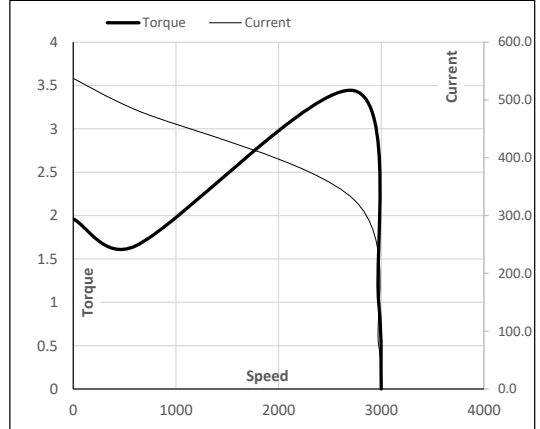
Enclosure	U (V)	Δ / Y Conn	f (Hz)	P [kW]	P [hp]	I [A]	n [RPM]	T [kgm]	T [Nm]	IE Class	Amb [°C]	Duty	Elevation [m]	Inertia [kg-m ²]	Weight [kg]
TEFC	415	Δ	50	45	60.0	75.7	2975	14.64	143.61	IE3	50	S1	1000	0.4264	414

Motor Load Data

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	24.1	30.1	42.4	57.6	75.7	
Torque	Nm	0.0	35.7	71.5	107.5	143.6	
Speed	r/min	3000	2994	2988	2982	2975	
Efficiency	%	0.0	89.1	93.0	94.0	94.0	
Power Factor	%	7.3	58.1	77.0	85.0	88.0	

Performance vs Load Chart

Motor Speed Torque Data

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	600	2737	2975	3000
Current	A	537.4	483.6	327.1	75.7	24.1
Torque	pu	2.0	1.6	3.4	1	0

Starting Characteristics Chart

NOTE Refer data sheet for applicable standard and tolerances on performance parameters

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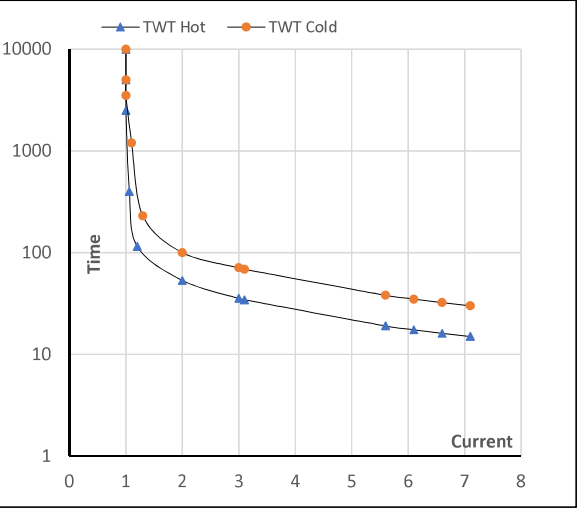
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Motor Speed Torque Data

Load	FL	I ₁	I ₂	I ₃	I ₄	I ₅	LR	
TWT Hot	s 10000	53	36	30	25	19	15	
TWT Cold	s 10000	100	71	60	45	38	30	
Current	pu	1	2	3	4	5	5.5	7.1

Thermal Characteristics Chart



NOTE Refer data sheet for applicable standard and tolerances on performance parameters

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