PRODUCT INFORMATION PACKET

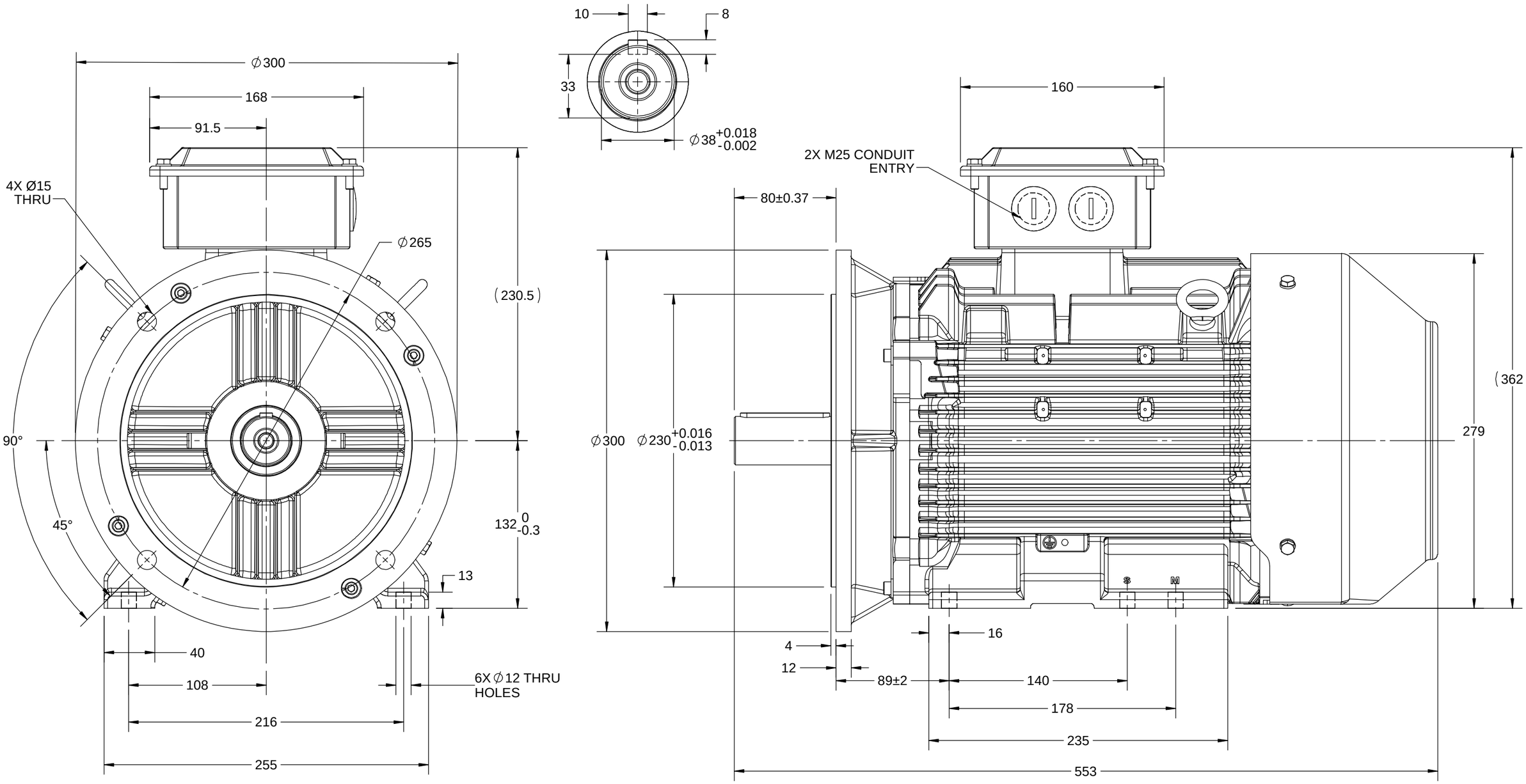
Model No: SCA7P52A3131GAAD01
Catalog No: SCA7P52A3131GAAD01
TerraMAX® Cast Iron Motor, 10 HP, 3 Ph, 50 Hz, 415 V, 1500 RPM, 132M Frame, TEFC

Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	50 Hz	Voltage	415 V
Current	13.9 A	Speed	1454 rpm
Service Factor	1	Phase	3
Efficiency	88.7 %	Power Factor	0.85
Duty	S1	Insulation Class	F
Frame	132M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	50 °C
Drive End Bearing Size	6308	Opp Drive End Bearing Size	6208
UL	No	CSA	No
CE	Yes	IP Code	55
Number of Speeds	1	Efficiency Class	IE2

Technical Specifications

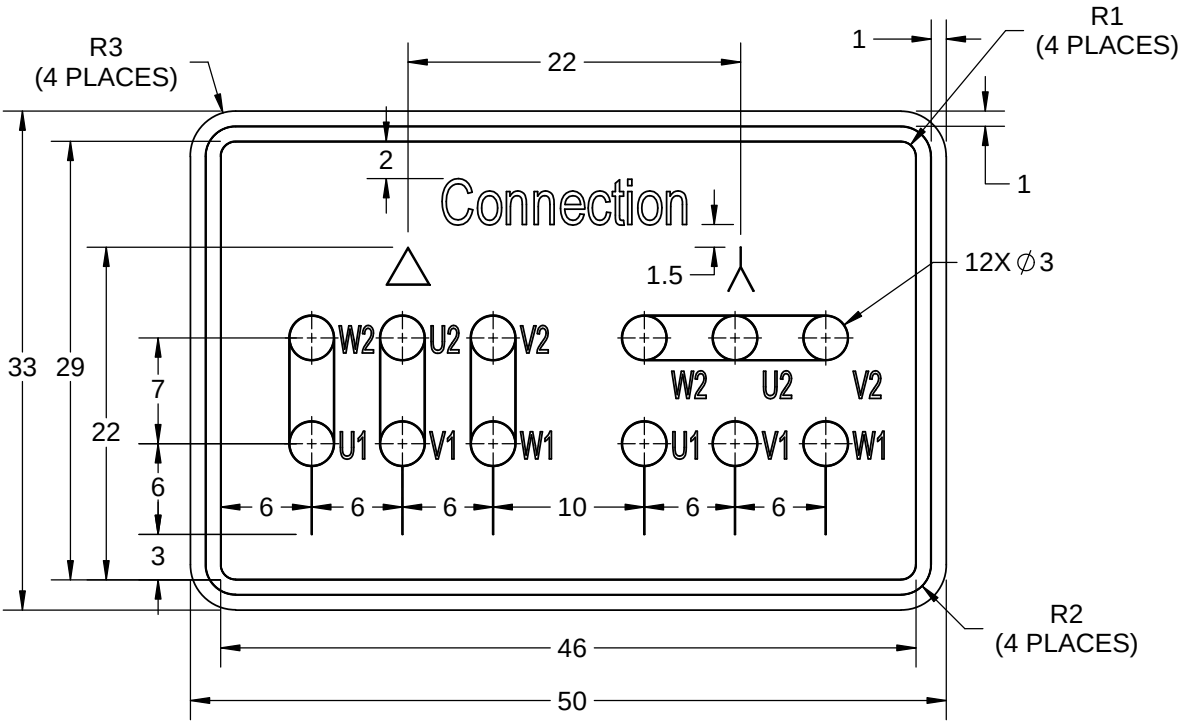
Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Bi-Directional
Mounting	B35	Motor Orientation	Horizontal
Drive End Bearing	2z-C3	Opp Drive End Bearing	2z-C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	553 mm	Frame Length	290 mm
Shaft Diameter	38 mm	Shaft Extension	80 mm
Assembly/Box Mounting	TOP		
Outline Drawing	0213201164	Connection Drawing	8442000085



DRAWING REVISION A	REVISION BY A. KEETHA	DATE 12/10/2018		DRAWN BY A. KEETHA	marathon™ Motors
ECO ECO-0153779	APPROVED BY JAY	DATE 12/10/2018		DATE 12/10/2018	
ECO DESCRIPTION NEW DRAWING RELEASE				APPROVED BY JAY	DESCRIPTION OUTLINE 132M FRAME-B35 MTG. MOTOR TYPE:SCA
				DATE 12/10/2018	
				REFERENCE	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE B / DRAWING NUMBER 0213201164 / SHEET 1 OF 1

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

GEOMENTRIC 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.

8WD.442.2017

DRAWN BY: SN	REGAL™ 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

marathon® Motors

TerraMAX®

Model No. SCA7P52A3131GAAD01

U	Δ / Y	f	P	P	I	n	T	IE	% EFF at __ load				PF at __ load			I_A/I_N	T_A/T_N	T_K/T_N
(V)	Conn	[Hz]	[kW]	[hp]	[A]	[RPM]	[Nm]	Class	5/4FL	FL	3/4FL	1/2FL	FL	3/4FL	1/2FL	[pu]	[pu]	[pu]
415	Δ	50	7.5	10	13.9	1454	49.24	IE2	-	88.7	88.7	89.3	0.85	0.80	0.69	7.8	3.4	3.5

Motor type	SCA		Degree of protection	IP 55	
Enclosure	TEFC		Mounting type	IM B35	
Frame Material	Cast Iron		Cooling method	IC 411	
Frame size	132M		Motor weight - approx.	100	kg
Duty	S1		Gross weight - approx.	103	kg
Voltage variation *	± 10%		Motor inertia	0.0320	kgm^2
Frequency variation *	± 5%		Load inertia	Customer to Provide	
Combined variation *	10%		Vibration level	1.6	mm/s
Design	N		Noise level (1meter distance from motor)	67	dB(A)
Service factor	1.0		No. of starts hot/cold/Equally spread	2/3/4	
Insulation class	F		Starting method	DOL	
Ambient temperature	-20 to +50	°C	Type of coupling	Direct	
Temperature rise (by resistance)	70 [Class B]	K	LR withstand time (hot/cold)	8/13	s
Altitude above sea level	1000	meter	Direction of rotation	Bi-directional	
Hazardous area classification	NA		Standard rotation	Clockwise form DE	
Zone classification	NA		Paint shade	RAL 5014	
Gas group	NA		Accessories		
Temperature class	NA		Accessory - 1	-	
Rotor type	Aluminum Die cast		Accessory - 2	-	
Bearing type	Anti-friction ball		Accessory - 3	-	
DE / NDE bearing	6308-2Z / 6208-2Z		Terminal box position	TOP	
Lubrication method	Greased for life		Maximum cable size/conduit size	1R x 3C x 16mm²/2 x M25 x 1.5	
Type of grease	NA		Auxiliary terminal box	NA	

I_A/I_N - Locked Rotor Current / Rated Current

T_A/T_N - Locked Rotor Torque / Rated Torque

T_K/T_N - Breakdown Torque / Rated Torque

NOTE

All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

* Voltage, Frequency and combine variation are as per IEC60034-1

Technical data are subject to change. There may be discrepancies between calculated and name plate values.

Efficiency	Europe	China	India	Aus/Nz	Brazil	Global IEC
Standards	-	-	IS 12615 : 2018	-	-	-

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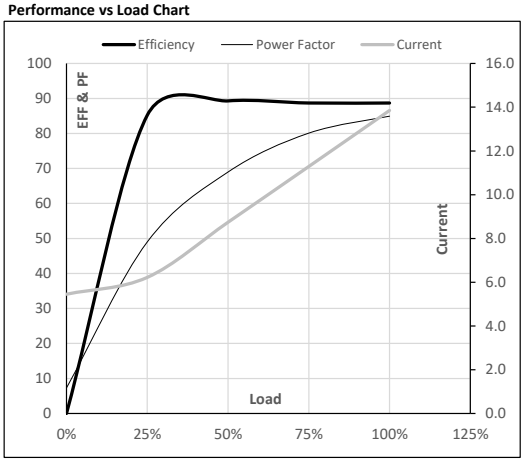
Enclosure	U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [kgm]	T [Nm]	IE Class	Amb [°C]	Duty	Elevation [m]	Inertia [kg-m^2]	Weight [kg]
TEFC	415	Δ	50	7.5	10	13.9	1454	5.02	49.24	IE2	50	S1	1000	0.0320	100

Motor Load Data

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	5.5	6.2	8.7	11.3	13.9	
Torque	Nm	0.0	12.0	24.1	36.4	49.2	
Speed	r/min	1500	1489	1478	1467	1454	
Efficiency	%	0.0	85.2	89.3	88.7	88.7	
Power Factor	%	7.3	49.0	69.0	80.1	84.9	

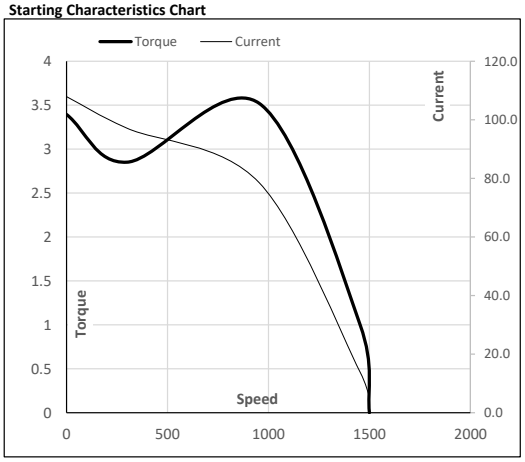
Performance vs Load Chart



Motor Speed Torque Data

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	300	954	1454	1500
Current	A	107.9	97.1	78.6	13.9	5.5
Torque	pu	3.4	2.9	3.5	1	0

Starting Characteristics Chart



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

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marathon® Motors

TerraMAX®

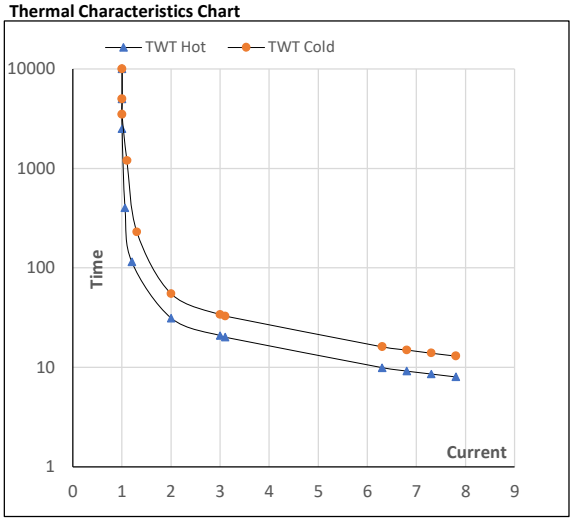
Model No. SCA7P52A3131GAAD01

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	7.5	10	13.9	1454	5.02	49.24	IE2	50	S1	1000	0.0320	100

Motor Speed Torque Data

Load		FL	I_1	I_2	I_3	I_4	I_5	LR
TWT Hot	s	10000	31	21	16	12	9	8
TWT Cold	s	10000	55	34	27	20	15	13
Current	pu	1	2	3	4	5	6	7.8

Thermal Characteristics Chart



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

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EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : SCA7P52A3131GAAD01

(Model No. may contain prefix and/or suffix characters)

Catalog No : SCA7P52A3131GAAD01

Rework No : N/A

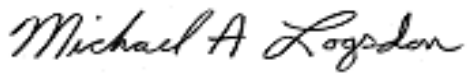
Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)
EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:

Julian Clark
Marketing Engineer

Created on 09/01/2022

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