

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCE1P11A5111GAA001

Catalog No: TCE1P11A5111GAA001

TerraMAX® Increased Safety Motors Ex eb, Totally Enclosed Fan Cooled, 1.5 HP, 3 Ph, 50 Hz, 400 V,
2883 RPM, 80M Frame



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RegalRexnord

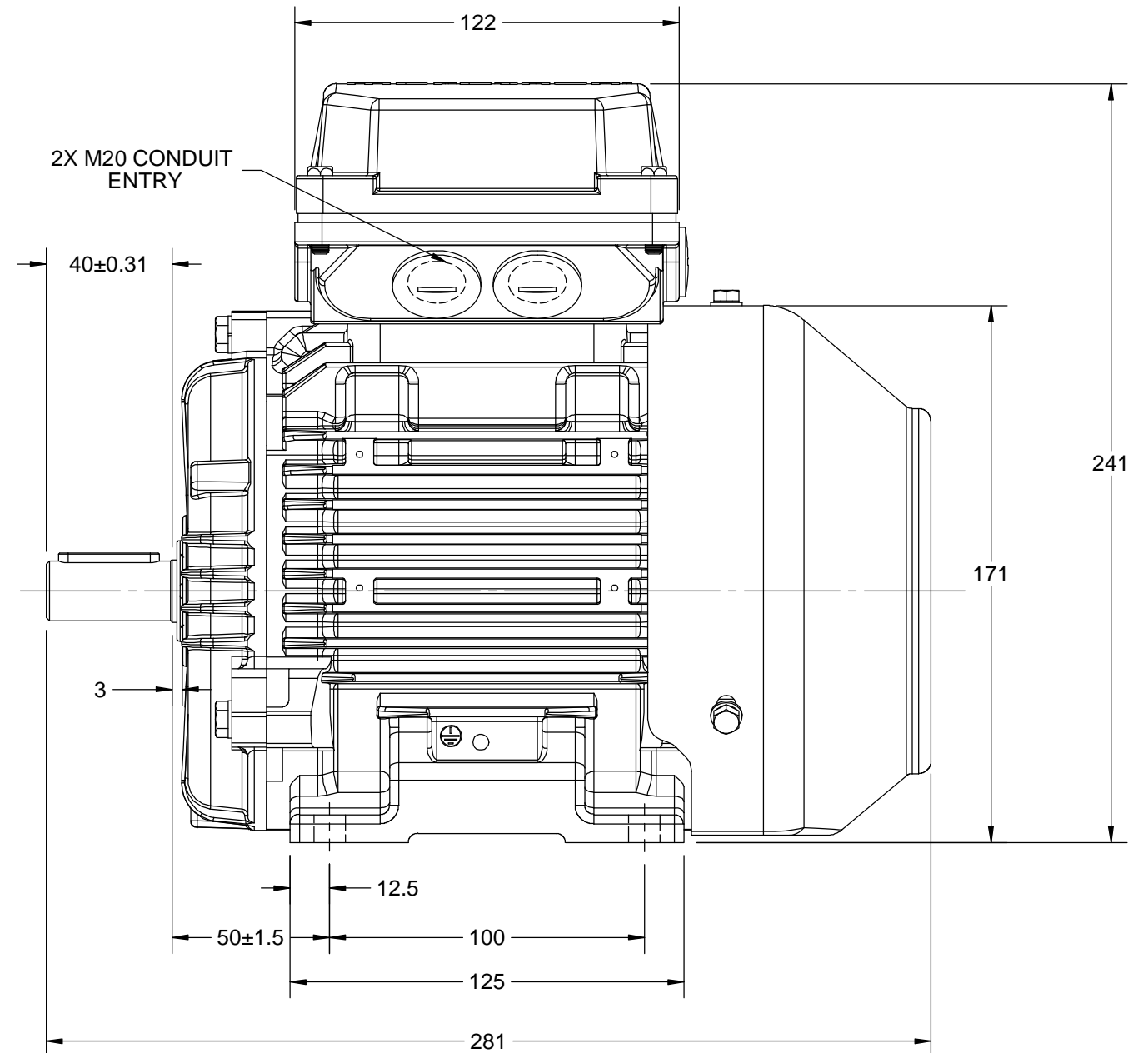
Nameplate Specifications

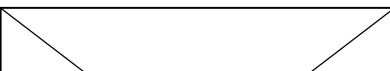


Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	50 Hz	Voltage	400 V
Current	2.4 A	Speed	2883 rpm
Service Factor	1	Phase	3
Efficiency	82.7 %	Power Factor	0.81
Duty	S1	Insulation Class	F
Frame	80M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6204	Opp Drive End Bearing Size	6204
UL	No	CSA	No
CE	Yes	IP Code	IP55
Number of Speeds	3		

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	2	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	2z-C3	Opp Drive End Bearing	2z-C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	281 mm	Frame Length	140 mm
Shaft Diameter	19.000 mm	Shaft Extension	40 mm
Assembly/Box Mounting	Top		
Outline Drawing	0208000179	Connection Drawing	8442000085

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DRAWING REVISION C		REVISION BY S.MUDDA		DATE 20/06/2018			DRAWN BY SMAR								
ECO ECO-0147359		APPROVED BY JAY		DATE 20/06/2018			DATE 21/06/2013								
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							DATE 30/08/2013								
													REFERENCE		MATERIAL
						THIRD ANGLE PROJECTION				SIZE B		DRAWING NUMBER 0208000179		SHEET 1 OF 1	

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ECO DESCRIPTION

GEOMETRIC TOLERANCE

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



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

Model No. TCE1P11A5111GAA001

U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [Nm]	IE Class	% EFF at __ load				PF at __ load			I_A/I_N [pu]	T_A/T_N [pu]	T_K/T_N [pu]
400	Y	50	1.1	1.5	2.4	2883	3.70	IE3	5/4FL	FL	3/4FL	1/2FL	FL	3/4FL	1/2FL	7.6	4.1	4.0

Motor type	TCE	Degree of protection	IP 55
Enclosure	TEFC	Mounting type	IM B3
Frame Material	Cast Iron	Cooling method	IC 411
Frame size	80M	Motor weight - approx.	20 kg
Duty	S1	Gross weight - approx.	21 kg
Voltage variation *	± 10%	Motor inertia	0.0016 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)	56 dB(A)
Service factor	1.0	No. of starts hot/cold/Equally spread	2/3/4
Insulation class	F	Starting method	DOL
Ambient temperature	-15 to +40 °C	Type of coupling	Direct
Temperature rise (by resistance)	70 [Class B] K	tE time	20 s
Altitude above sea level	1000 meter	Direction of rotation	Bi-directional
Hazardous area classification	Ex eb	Standard rotation	Clockwise form DE
Zone classification	Zone 2	Paint shade	RAL 7016
Gas group	IIC	Accessories	
Temperature class	T3	Accessory - 1	PTC 150°C
Rotor type	Aluminum Die cast	Accessory - 2	-
Bearing type	Anti-friction ball	Accessory - 3	-
DE / NDE bearing	6204-2Z / 6204-2Z	Terminal box position	TOP
Lubrication method	Greased for life	Maximum cable size/conduit size	1R x 3C x 10mm ² /2 x M20 x 1.5
Type of grease	NA	Auxiliary terminal box	NA

 I_A/I_N - Locked Rotor Current / Rated Current

 T_K/T_N - Breakdown Torque / Rated Torque

 T_A/T_N - Locked Rotor Torque / Rated Torque

NOTE

ATEX/IEC Ex certified as per IEC/EN 60079-0; IEC/EN 60079-7

All performance values at rated voltage and frequency.

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

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

Technical data are subject to change. There may be slight variations between calculated values in this datasheet and the motor nameplate figures.

Efficiency Standards	Europe IEC:60034-30-1	China	India -	Aus/Nz -	Brazil -	Global IEC IEC:60034-30-1
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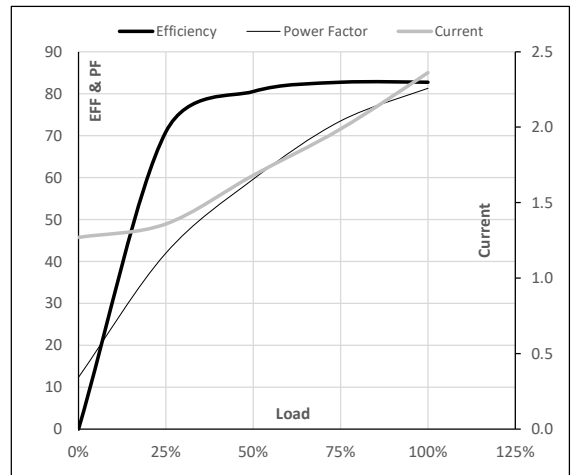
Model No. TCE1P11A5111GAA001

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	400	Y	50	1.1	1	2.4	2883	0.38	3.70	IE3	40	S1	1000	0.0016	20

Motor Load Data

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	1.3	1.4	1.7	2.0	2.4	
Torque	Nm	0.0	1.2	2.5	3.7	3.7	
Speed	r/min	3000	2970	2944	2915	2883	
Efficiency	%	0.0	70.9	80.5	82.7	82.7	
Power Factor	%	12.4	42.0	59.6	73.5	81.3	

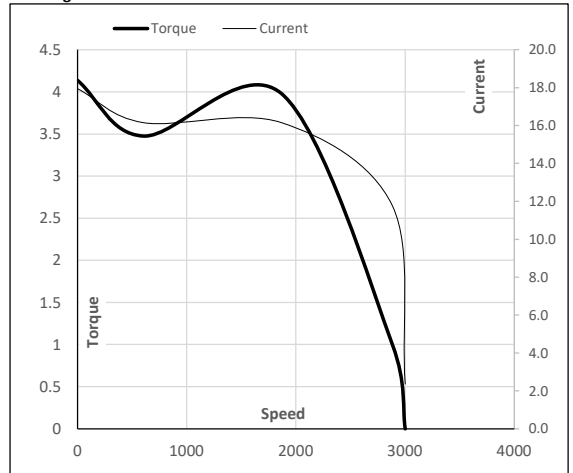
Performance vs Load Chart



Motor Speed Torque Data

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	600	1867	2883	3000
Current	A	17.9	16.2	11.8	2.4	1.3
Torque	pu	4.1	3.5	4.0	1	0

Starting Characteristics Chart



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

Issued By

Issued Date