PRODUCT INFORMATION PACKET



Model No: TCA2502A1111GAC010 Catalog No: TCA2502A1111GAC010

250.0 kW General Purpose Low Voltage IEC Motor, 3 phase, 1500 RPM, 400 V, 355M Frame, TEFC

Cast Iron IE3 Efficiency Motors







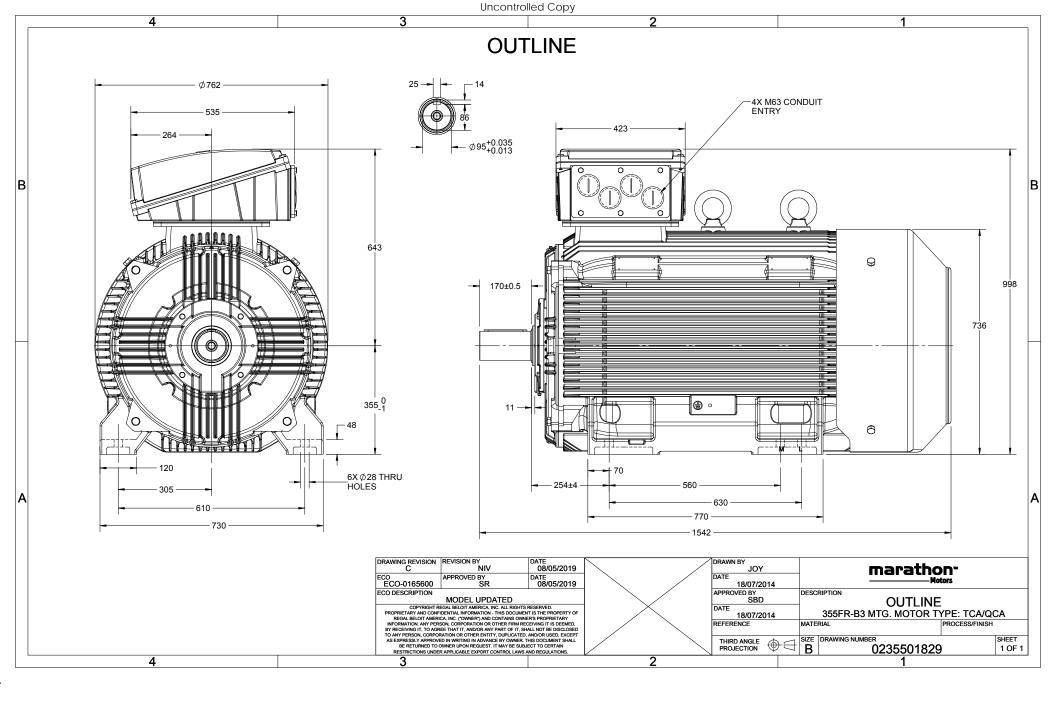
Nameplate Specifications

Output HP	335 Hp	Output KW	250.0 kW
Frequency	50 Hz	Voltage	400 V
Current	422.3 A	Speed	1490 rpm
Service Factor	1	Phase	3
Efficiency	96 %	Power Factor	0.89
Duty	S1	Insulation Class	F
Frame	355M	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	40 °C	Drive End Bearing Size	6322
Opp Drive End Bearing Size	6322	UL	No
CSA	No	CE	Yes
IP Code	55		

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Bi-Directional
Mounting	В3	Motor Orientation	Horizontal
Drive End Bearing	С3	Opp Drive End Bearing	СЗ
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	1542 mm	Frame Length	1010 mm
Shaft Diameter	95 mm	Shaft Extension	170 mm
Assembly/Box Mounting	Тор		
Outline Drawing	0235501829	Connection Drawing	8442000085

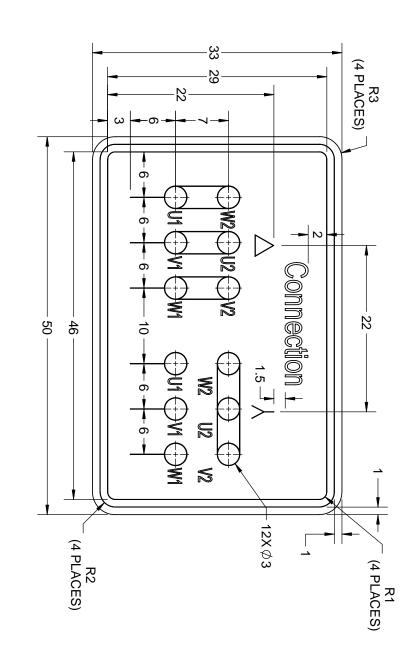
This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:07/07/2020



NEW DRAWING RELEASE

DATE 13/01/2017 DATE 13/01/2017

GEOM	GEOMENTRIC TOLERANCE	RANCE
	>0~6	±0.1
LINEAR DIM	>6~30	±0.2
	>30~120	±0.3



NOTES:

- $\omega \bowtie \neg$
- PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.

8WD.442.2017

THIRD ANGLE	REFERENCE	DATE 16/12/2016	APPROVED BY SBD	DATE 16/12/2016	DRAWN BY SN
A DRAWING NUMBER 8442000085			DESCRIPTION DIAGRAM-NA	Vedai peloit Ville	
SHEET 1 OF 1	PROCESS/FINISH		AMEDI ATE	ilica, ilic.	5

5 of 7



TerraMAX®

Model No. TCA2502A1111GAC010

	400	(٧)	U
	>	Conn	Δ / Y
	50	[Hz]	Y f P
	250	[Hz] [kW] [hp]	Р
	335	[hp]	Р
	422.3	[A]	_
	1490 1601.3 IE3	[A] [RPM] [Nm] Class 5/4FL FL 3/4FL 1/2FL FL 3/4FL 1/2FL	ם
	1601.3	[Nm]	-1
	IE3	Class	Е
		5/4FL	
	96	FL	% EFF a
	96	3/4FL	% EFF at load
		1/2FL	<u>u</u>
	95.8 0.89 0.88	FL	PF
	0.88	3/4FL	PF at load
	0.83	1/2FL	ad
	6.5	[pu]	I _A /I _N
	1.9	[pu]	T_A/T_N
	1.9 2.5	[pu]	T_A/T_N T_K/T_N

ee of protection titing type g method r weight - approx. weight - approx. weight - approx. r inertia inertia ition level level (1meter distance fro f starts hot/cold/Equally sp ng method of coupling hstand time (hot/cold) ition of rotation ard rotation ard rotation shade sories Accessory - 1 Accessory - 2 Accessory - 3	m motor) read	DE / NDE bearing 6322 C3 / 6322 C3 Terminal box position Lubrication method Regreasable Maximum cable size/conduit size	6322 C3 / 6322 C3		Bearing type Anti-friction ball Accessory - 3	Rotor type Aluminum Die cast Accessory - 2	Temperature class NA Accessory - 1	Gas group NA Accessories	Zone classification NA Paint shade	Hazardous area classification NA Standard rotation	Altitude above sea level 1000 meter Direction of rotation	Temperature rise (by resistance) 80 [Class B] K LR withstand time (hot/cold)	Ambient temperature -20 to +40 °C Type of coupling	Insulation class F Starting method	Service factor 1.0 No. of starts hot/cold/Equally spread	Design Noise level (1meter distance from motor)	Combined variation * 10% Vibration level	Frequency variation * ±5% Load inertia	Voltage variation * $\pm 10\%$ Motor inertia	Duty S1 Gross weight - approx.	Frame size 355M Motor weight - approx.	Frame Material Cast Iron Cooling method	Enclosure TEFC Mounting type	Motor type TCA Degree of protection
---	------------------	--	-------------------	--	---	--	------------------------------------	--------------------------	------------------------------------	--	---	--	--	------------------------------------	--	---	--	--	--	--------------------------------	--	---	------------------------------	-------------------------------------

~	≥
Ţ	z_
្ច - Locked Rotor Torque /	· Locked Rotor Current /
/ Rated Torque	Rated Current

 $T_{\rm k}/T_{\rm N}$ - 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.

Standards	Efficiency Eur
- GB 1	Europe
B 18613-2012 Grade 2	China
	India
	Aus/Nz
	Brazil
IEC: 60034-30	Global IEC

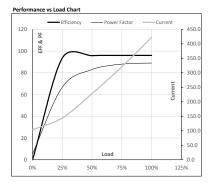




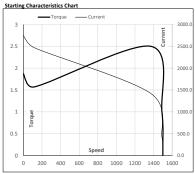
Model No. TCA2502A1111GAC010

Enclosure	U	Δ/Υ	f	P	Р	- 1	n	T	T	IE	Amb	Duty	Elevation	Inertia	Weight
	(V)	Conn	[Hz]	[kW]	[hp]	[A]	[RPM]	[kgm]	[Nm]	Class	[°C]		[m]	[kg-m ²]	[kg]
TEFC	400	Δ	50	250	335	422.3	1490	163.29	1601.30	IE3	40	S1	1000	8.4434	1742

Motor Load Da	ata						
Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	Α	103.5	144.3	228.2	320.6	422.3	
Torque	Nm	0.0	398.3	797.8	1198.7	1601.3	
Speed	r/min	1500	1498	1495	1493	1490	
Efficiency	%	0.0	93.6	95.8	96.0	96.0	
Power Factor	%	5.5	66.8	83.0	88.0	89.0	



Motor Speed Load Point	Torque Da	ıta LR	P-Up	BD	Rated	NL
Speed	r/min	0	115	1371	1490	1500
Current	Α	2745.2	2470.7	1420.8	422.3	103.5
Torque	nu	1.0	1.6	2.5	1	0



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

Issued By Issued Date

REGAL

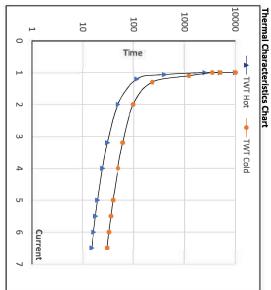


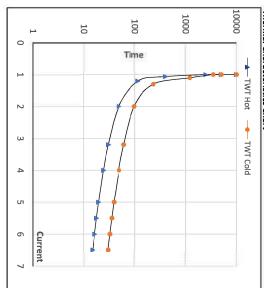


Model No. TCA2502A1111GAC010

i.	_			
		TEFC		Enclosure
		400	3	C
		D	Conn	Δ/Υ
1116		50	[Hz]	-
		50 250	[kW]	ъ
		335.0	[hp]	7
		422.3	Ξ	-
		335.0 422.3 1490	[rpm]	5
		163.29	[kgm]	4
		1601.30 IE3	[Nm]	4
		E3	Class	m
-02		40	[29]	Amb
		S1		Duty
		1000	[m]	Elevation
10.		8.4434	[kg-m²]	Inertia
118		1742	[kg]	Weight

Motor Speed Torque Data Load FL TWT Hot s 10000 TWT Cold s 10000 Current pu 1 2 98 33 25 49 5 5 5 18 36 5.5 15 30 6.5





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

Issued By Issued Date