

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: SCAP753A3111GAAD01

Catalog No: SCAP753A3111GAAD01

0.75kW, General Purpose Low Voltage IEC Motor, 3 phase, 6 Pole, 415V, B3, 50Hz, 75.9%, 90S Frame, TEFC
Cast Iron IE2 Efficiency Motors



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REGAL

Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	50 Hz	Voltage	415 V
Current	2.0 A	Speed	929 rpm
Service Factor	1	Phase	3
Efficiency	75.9 %	Power Factor	0.68
Duty	S1	Insulation Class	F
Frame	90S	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	50 °C	Drive End Bearing Size	6205
Opp Drive End Bearing Size	6205	UL	No
CSA	No	CE	Yes
IP Code	55		

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	6	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	307 mm	Frame Length	128 mm
Shaft Diameter	24 mm	Shaft Extension	50 mm
Assembly/Box Mounting	TOP		
Connection Drawing	8442000085	Outline Drawing	0209000827

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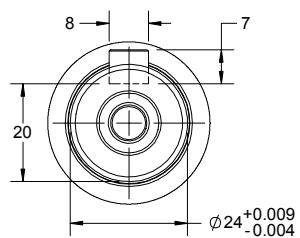
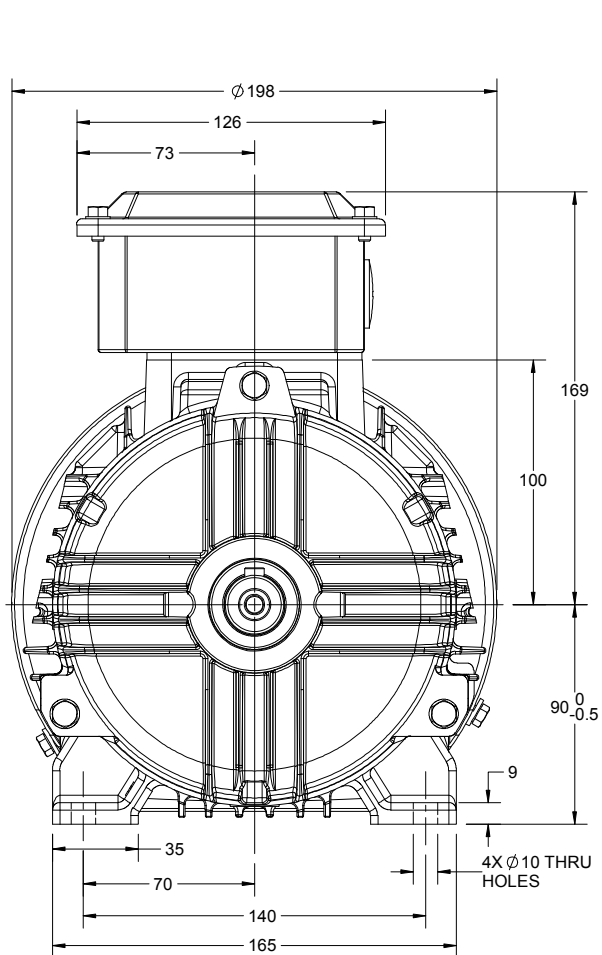
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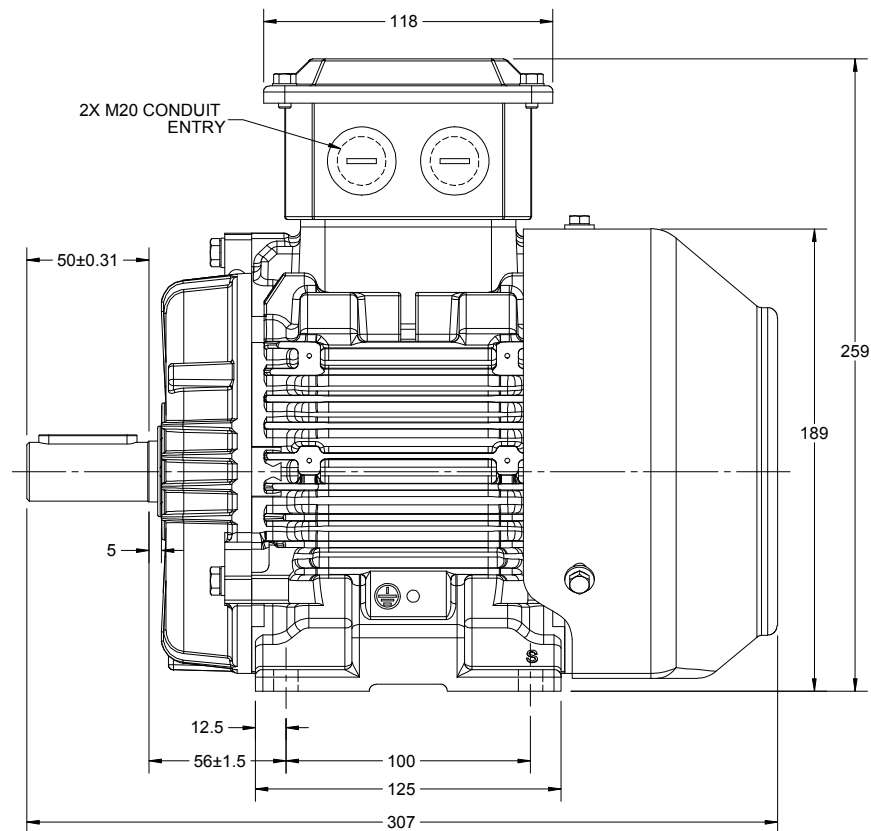
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B

B



2X M20 CONDUIT ENTRY



A

A

DRAWING REVISION C	REVISION BY LK	DATE 23/05/2019
ECO ECO-0167983	APPROVED BY SR	DATE 23/05/2019
ECO DESCRIPTION MODEL UPDATED AS PER NEW 3D STRUCTURE		
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DRAWN BY GNK
DATE 20/12/2017
APPROVED BY JAY
DATE 20/12/2017
REFERENCE

THIRD ANGLE
PROJECTION
marathon
Motors

 DESCRIPTION
OUTLINE
 90S FRAME- B3 MTG. MOTOR TYPE:SCA

 MATERIAL
 PROCESS/FINISH

 SIZE
B

 DRAWING NUMBER
0209000827

 SHEET
1 OF 1

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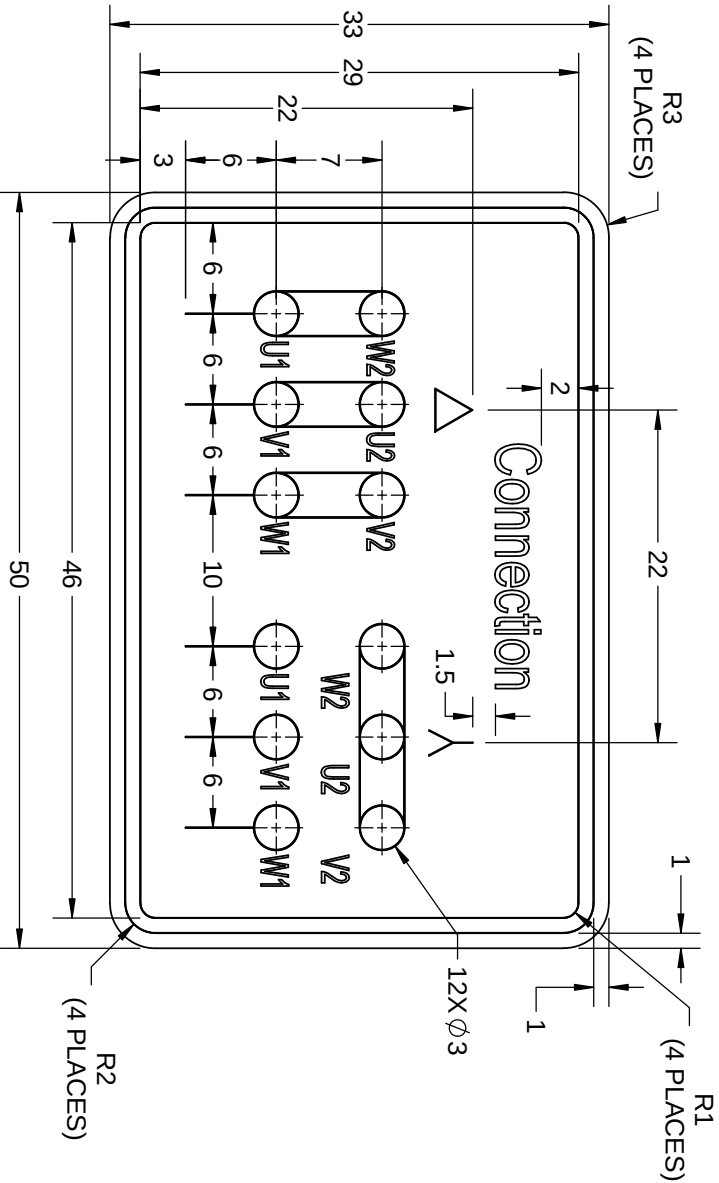
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DRAWING REVISION		REVISION BY	DATE
A		SN	13/01/2017
ECO	ECO-0116390	APPROVED BY	DATE
ECO DESCRIPTION		SBD	13/01/2017
NEW DRAWING RELEASE			

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.

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

Model No. SCAP753A3111GAAD01

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 _k /T _N [pu]	T _k /T _N [pu]
415	Y	50	0.75	1.0	2.0	929	7.83	IE2	S/4FL	FL	3/4FL	1/2FL	FL	3/4FL	1/2FL	3.9	2.5	2.6

Motor type	SCA	Degree of protection	IP 55
Enclosure	TEFC	Mounting type	IM B3
Frame Material	Cast Iron	Cooling method	IC 411
Frame size	90S	Motor weight - approx.	22.9 kg
Duty	S1	Gross weight - approx.	23.9 kg
Voltage variation *	± 10%	Motor inertia	0.0036 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)	55 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)	15/30 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	6205-2Z / 6205-2Z	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 CurrentT_k/T_N - Breakdown Torque / Rated TorqueT_k/T_N - Locked Rotor 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	-	-	-



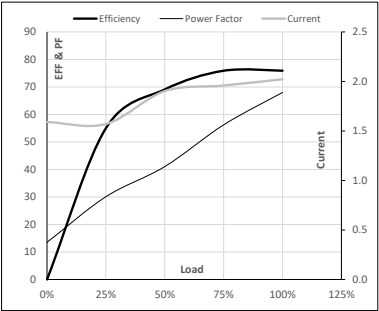
Model No. SCAP753A3111GAAD01

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	Y	50	0.75	1.0	2.0	929	0.80	7.83	IE2	50	S1	1000	0.0036	22.9

Motor Load Data

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	1.6	1.6	1.9	2.0	2.0	
Torque	Nm	0.0	1.8	3.7	5.6	7.8	
Speed	r/min	1000	983	967	949	929	
Efficiency	%	0.0	55.0	69.1	75.9	75.9	
Power Factor	%	13.5	30.1	41.0	56.2	68.0	

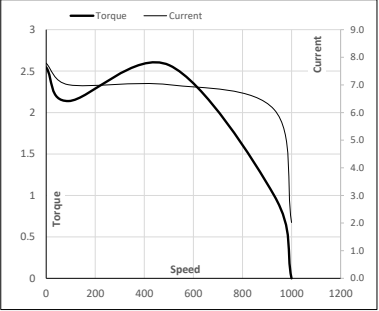
Performance vs Load Chart



Motor Speed Torque Data

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	91	502	929	1000
Current	A	7.8	7.0	6.1	2.0	1.6
Torque	pu	2.5	2.1	2.6	1	0

Starting Characteristics Chart



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

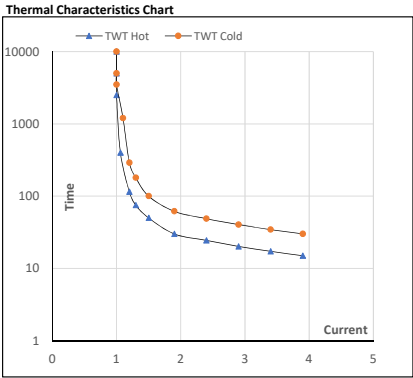
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Model No. SCAP753A3111GAAD01

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	Y	50	0.75	1.0	2.0	929	0.80	7.83	IE2	50	S1	1000	0.0036	22.9

Motor Speed Torque Data								
Load	FL	I ₁	I ₂	I ₃	I ₄	I ₅	LR	
TWT Hot	s 10000	50	32	24	19	16	15	
TWT Cold	s 10000	100	60	48	39	32	30	
Current	pu 1	1.5	2	2.5	3	3.5	3.9	



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

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