

PRODUCT INFORMATION PACKET

Model No: SCA0222A3111GAAD01

Catalog No: SCA0222A3111GAAD01

22kW, General Purpose Low Voltage IEC Motor, 3 phase, 4 Pole, 415V, B3, 50Hz, 91.6%, 180L Frame, TEFC
Cast Iron IE2 Efficiency Motors



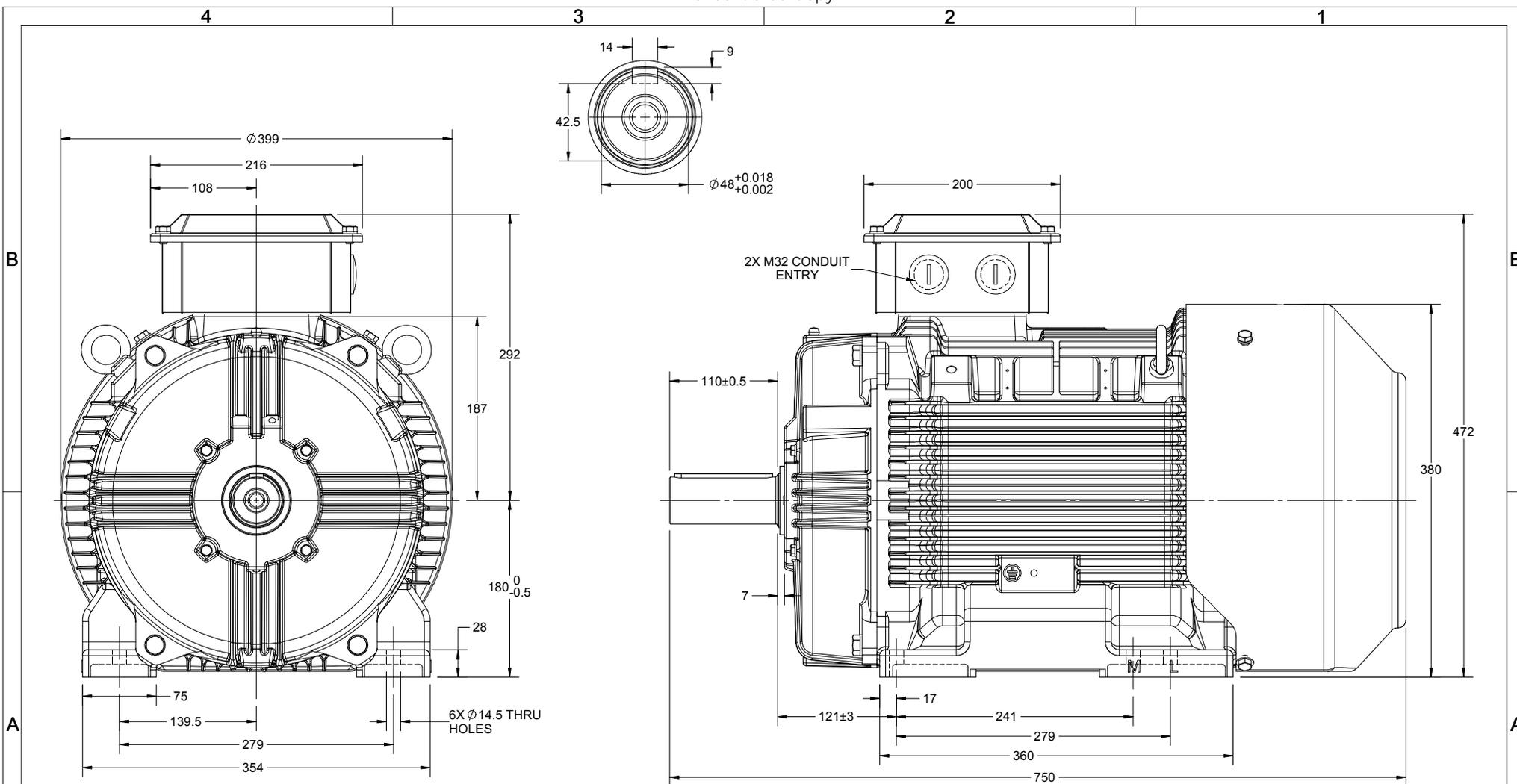
Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	50 Hz	Voltage	415 V
Current	38.8 A	Speed	1471 rpm
Service Factor	1	Phase	3
Efficiency	91.6 %	Power Factor	0.86
Duty	S1	Insulation Class	F
Frame	180L	Enclosure	Totally Enclosed Fan Cooled
Ambient Temperature	50 °C	Drive End Bearing Size	6311
Opp Drive End Bearing Size	6211	UL	No
CSA	No	CE	Yes
IP Code	55		

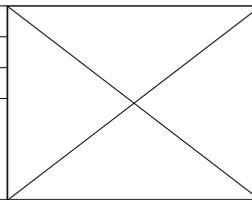
Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	2z-C3	Opp Drive End Bearing	2z-C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	750 mm	Frame Length	366 mm
Shaft Diameter	48 mm	Shaft Extension	110 mm
Assembly/Box Mounting	TOP		
Connection Drawing	8442000085	Outline Drawing	0218000833

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DRAWING REVISION B	REVISION BY LK	DATE 27/06/2019
ECO ECO-0169536	APPROVED BY SR	DATE 27/06/2019
ECO DESCRIPTION MODEL UPDATED AS PER NEW 3D STRUCTURE <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. (OWNER) AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		



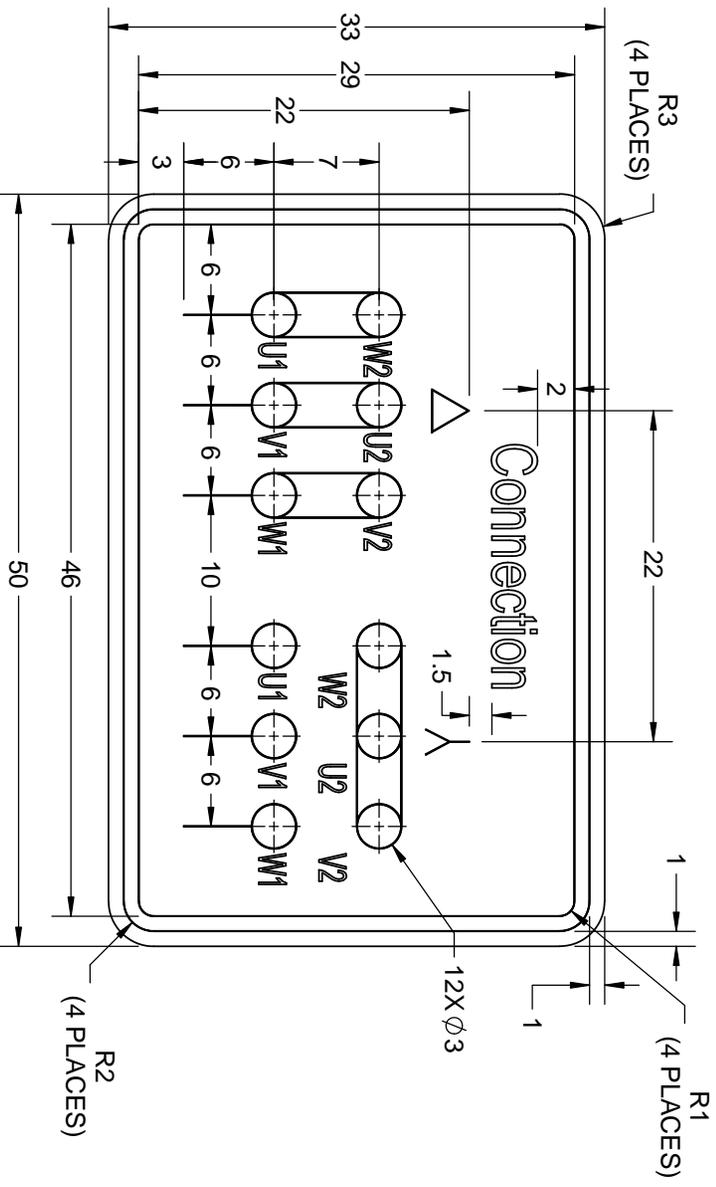
DRAWN BY NIV
DATE 20/03/2018
APPROVED BY JAY
DATE 20/03/2018
REFERENCE
THIRD ANGLE PROJECTION

marathon Motors	
DESCRIPTION OUTLINE 180L-FR-B3 MTG. MOTOR TYPE: SCA	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 0218000833
	SHEET 1 OF 1

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DRAWING REVISION	REVISION BY	DATE
A	SN	13/01/2017
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:
- 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

DRAWN BY SN		REGAL TM 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

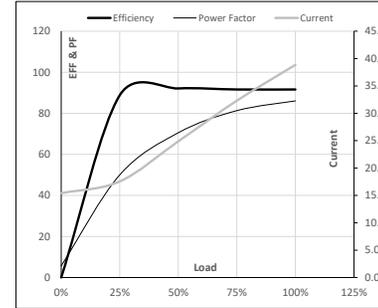
Model No. SCA0222A3111GAAD01

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	22	30	38.8	1471	14.84	145.53	IE2	50	S1	1000	0.1694	218

Motor Load Data

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	15.4	17.6	24.9	32.3	38.8	
Torque	Nm	0.0	35.8	71.9	108.3	145.5	
Speed	r/min	1500	1493	1486	1479	1471	
Efficiency	%	0.0	88.8	92.1	91.6	91.6	
Power Factor	%	5.7	50.0	70.5	81.3	86.0	

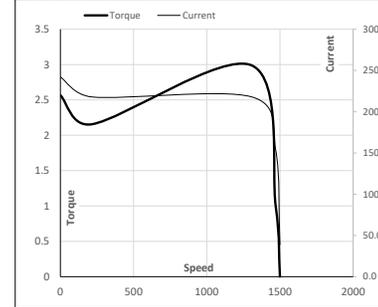
Performance vs Load Chart



Motor Speed Torque Data

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	214	1308	1471	1500
Current	A	242.1	217.9	153.8	38.8	15.4
Torque	pu	2.6	2.2	3.0	1	0

Starting Characteristics Chart



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

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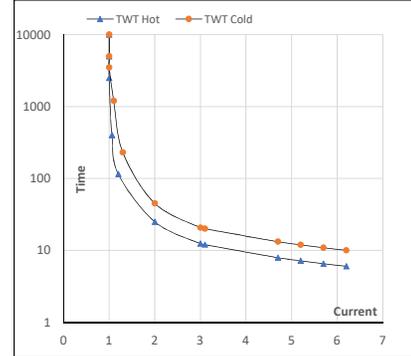
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TEFC	415	Δ	50	22	30	38.8	1471	14.84	145.53	IE2	50	S1	1000	0.1694	218

Motor Speed Torque Data

Load	FL	I ₁	I ₂	I ₃	I ₄	I ₅	LR	
TWT Hot	s 10000	25	12	11	8	7	6	
TWT Cold	s 10000	45	21	18	12	11	10	
Current	pu	1	2	3	4	5	5.5	6.2

Thermal Characteristics Chart



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

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