

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTDR16037

Catalog No: E1009

XRI® General Purpose General Purpose Motor, 30 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,
1800 & 1500 RPM, 286T Frame, DP



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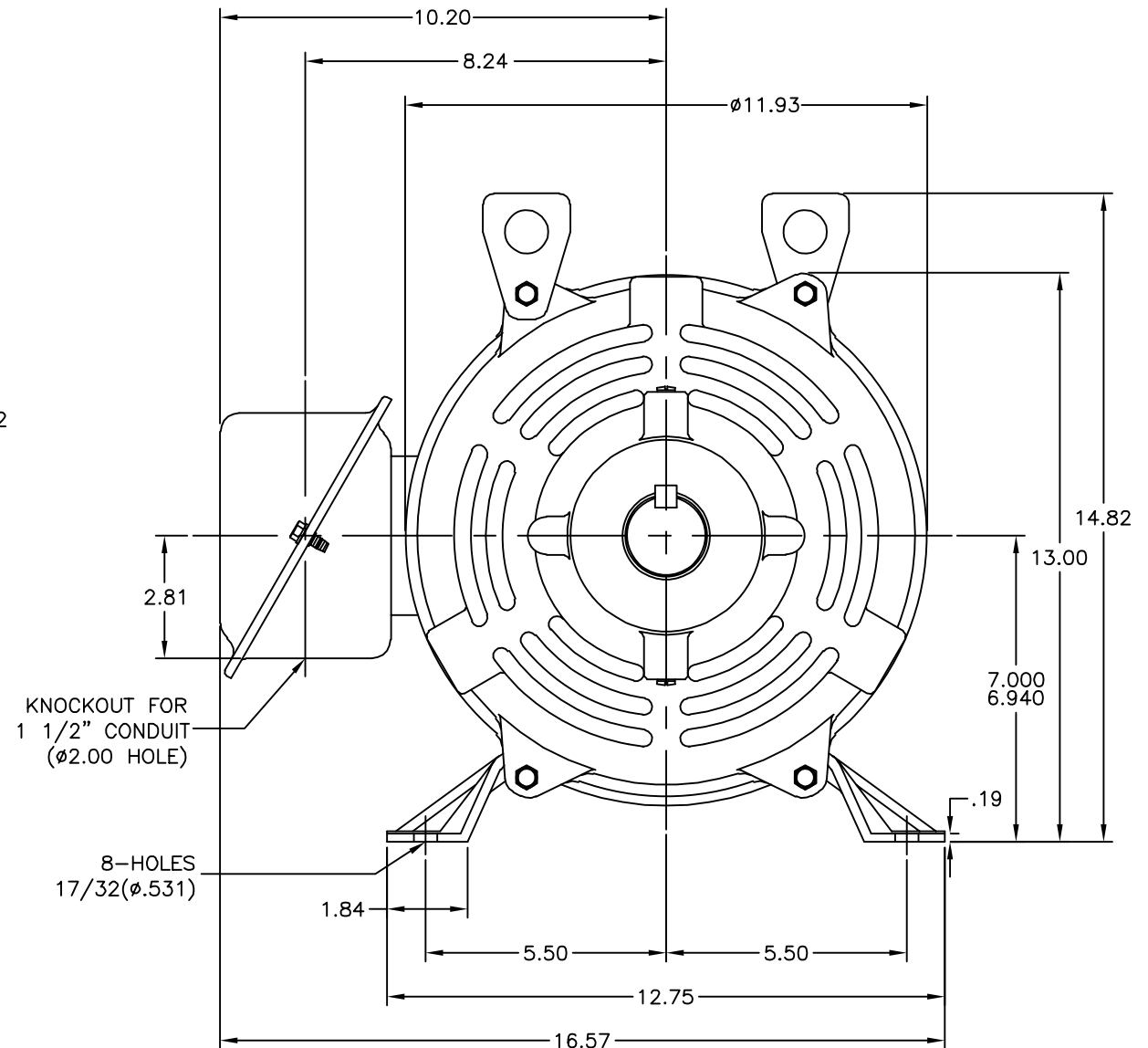
RegalRexnord

Nameplate Specifications


Phase	3	Output HP	30 & 30 Hp
Output KW	22.4 & 22.4 kW	Voltage	230/460 & 200/400 V
Speed	1770 & 1450 rpm	Service Factor	1.15 & 1.15
Frame	286T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.1 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	73/36.5 & 85/42.5 A	Power Factor	82.4
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6207
UL	Recognized	CSA	Y
CE	N	IP Code	22
Number of Speeds	1		


Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.211 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	25.75 in
Shaft Diameter	1.875 in	Shaft Extension	4.62 in
Assembly/Box Mounting	F1 ONLY		
Connection Drawing	80022801	Outline Drawing	18771201-001-S01

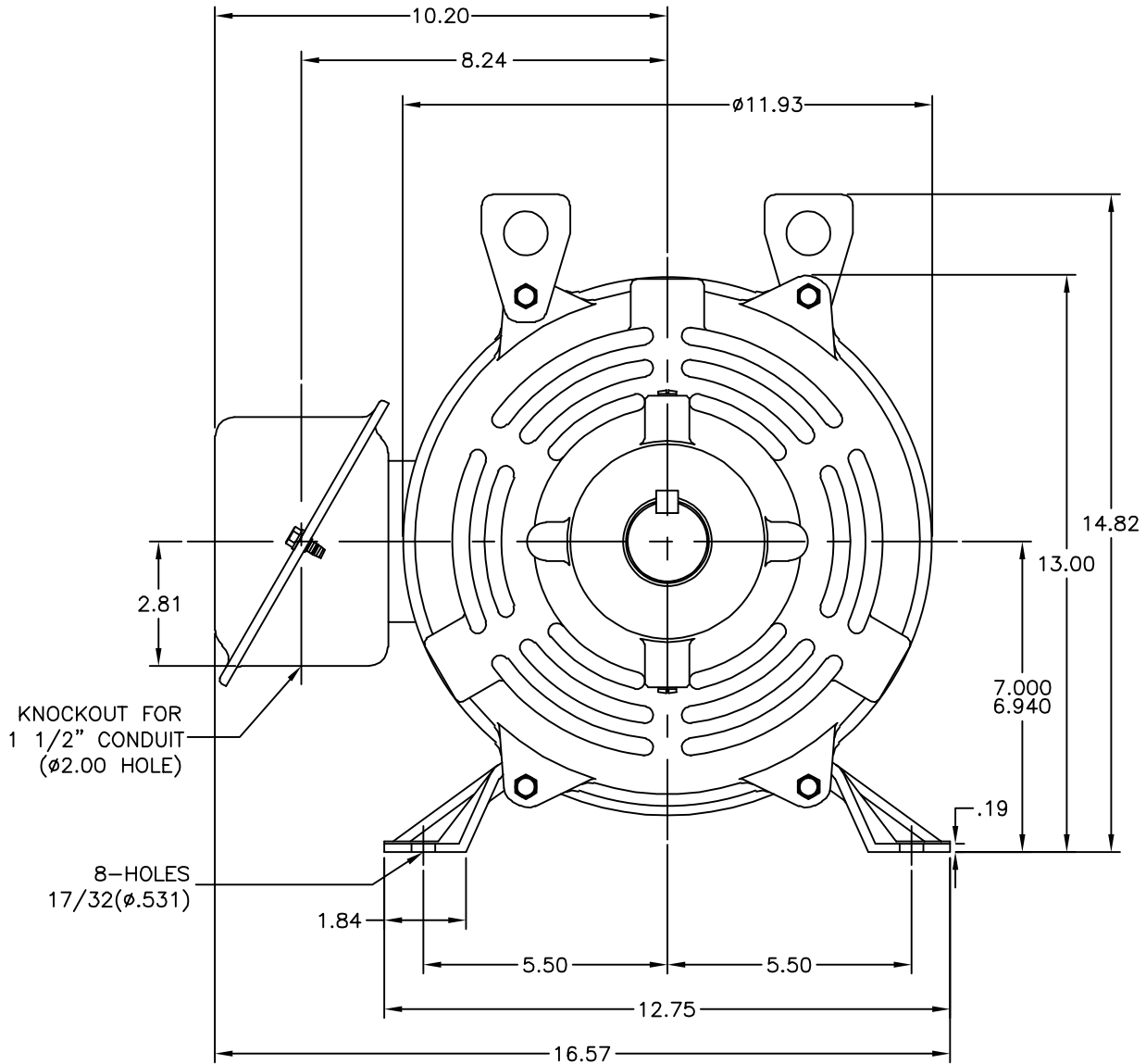
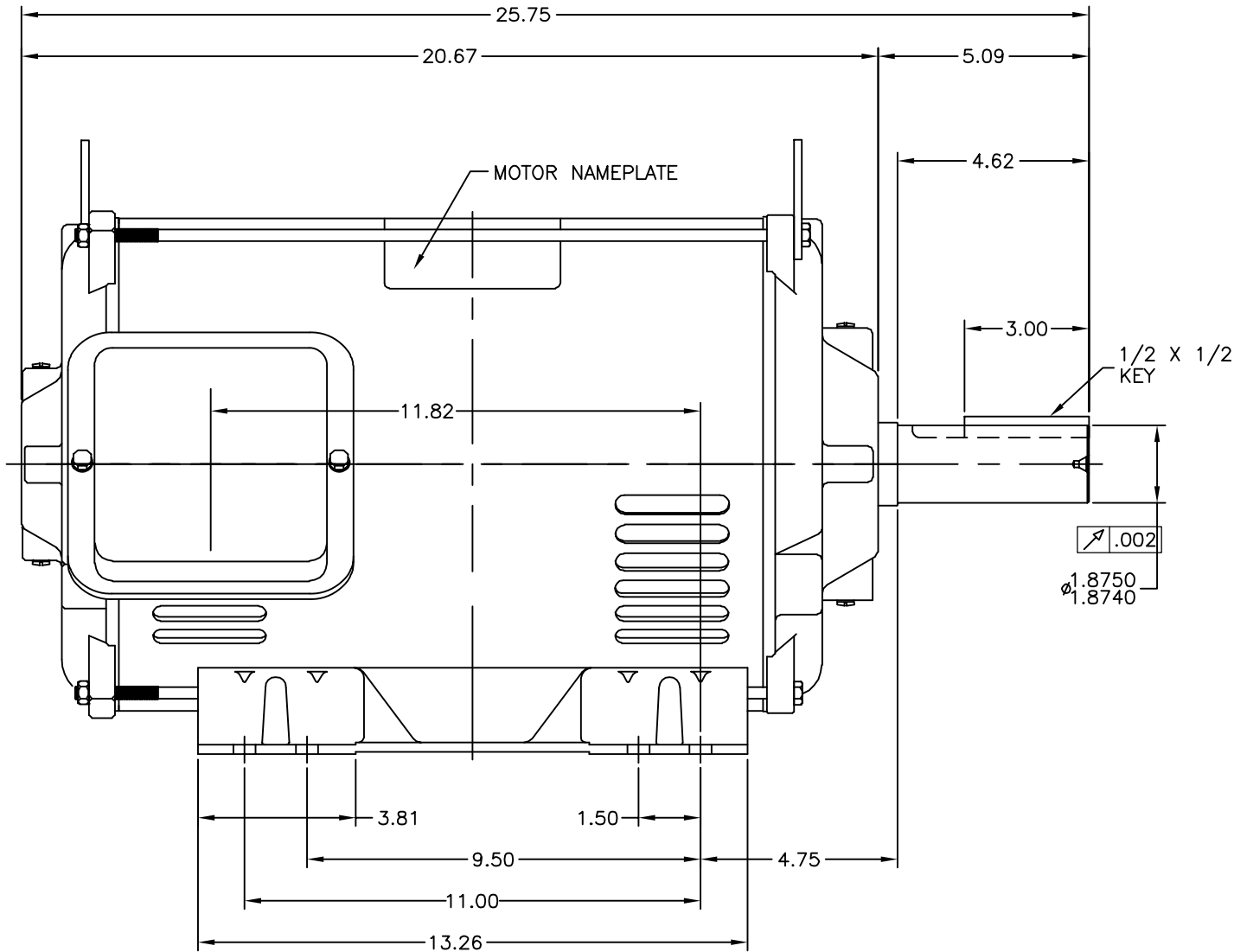


CERTIFICATION OF A.C. MOTORS		
CERTIFIED FOR _____		
SPEC. NO. _____	ORDER NO. _____	
ORDER I.D. _____	EMI _____	
TYPE _____	FRAME _____	H.P. _____
R.P.M. _____	VOLTS _____	PHASE _____
HERTZ _____	AMPS _____	CODE _____
REMARKS _____		
APPROVED BY _____		DATE: _____

DR BY:	RJB	03-31-2004
APPD:	JAS	03-31-2004
S:	THIRD ANGLE PROJECTION	EDS DATE 02-22-2008
		FORMAT REV F
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 AC Smith <i>innovation has a name.</i>		ELECTRICAL PRODUCTS COMPANY A DIVISION OF A. O. SMITH CORPORATION	
DESCRIPTION		OUTLINE	
S284T/S286T ODP SPL EE STD		S284T/S286T ODP SPL EE STD	
SIZE	D	DWG NO 18771201-001	
SCALE	NONE	SHEET 1	

REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
B	0015756	AJB	08-25-2010	AJB	08-25-2010



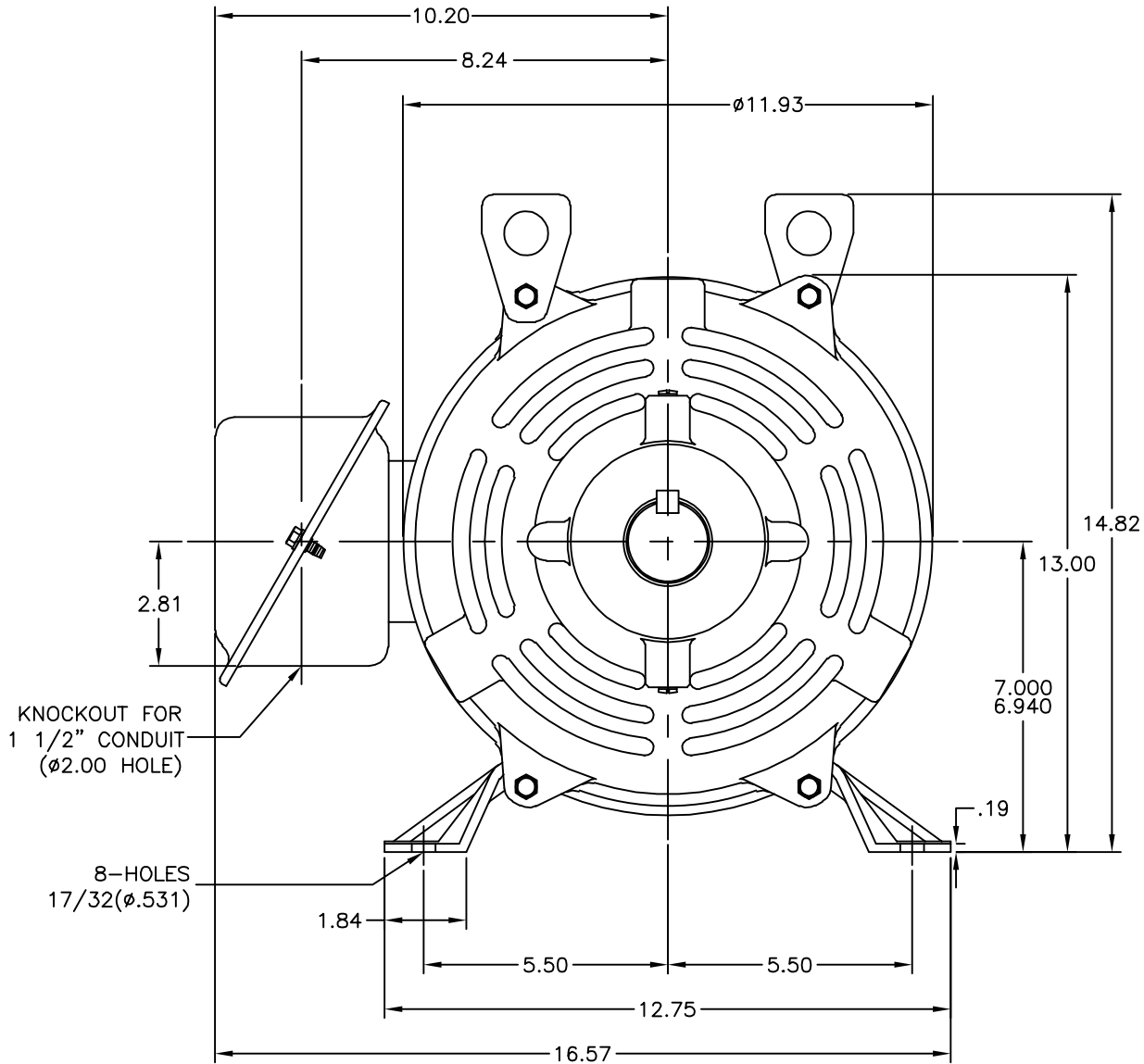
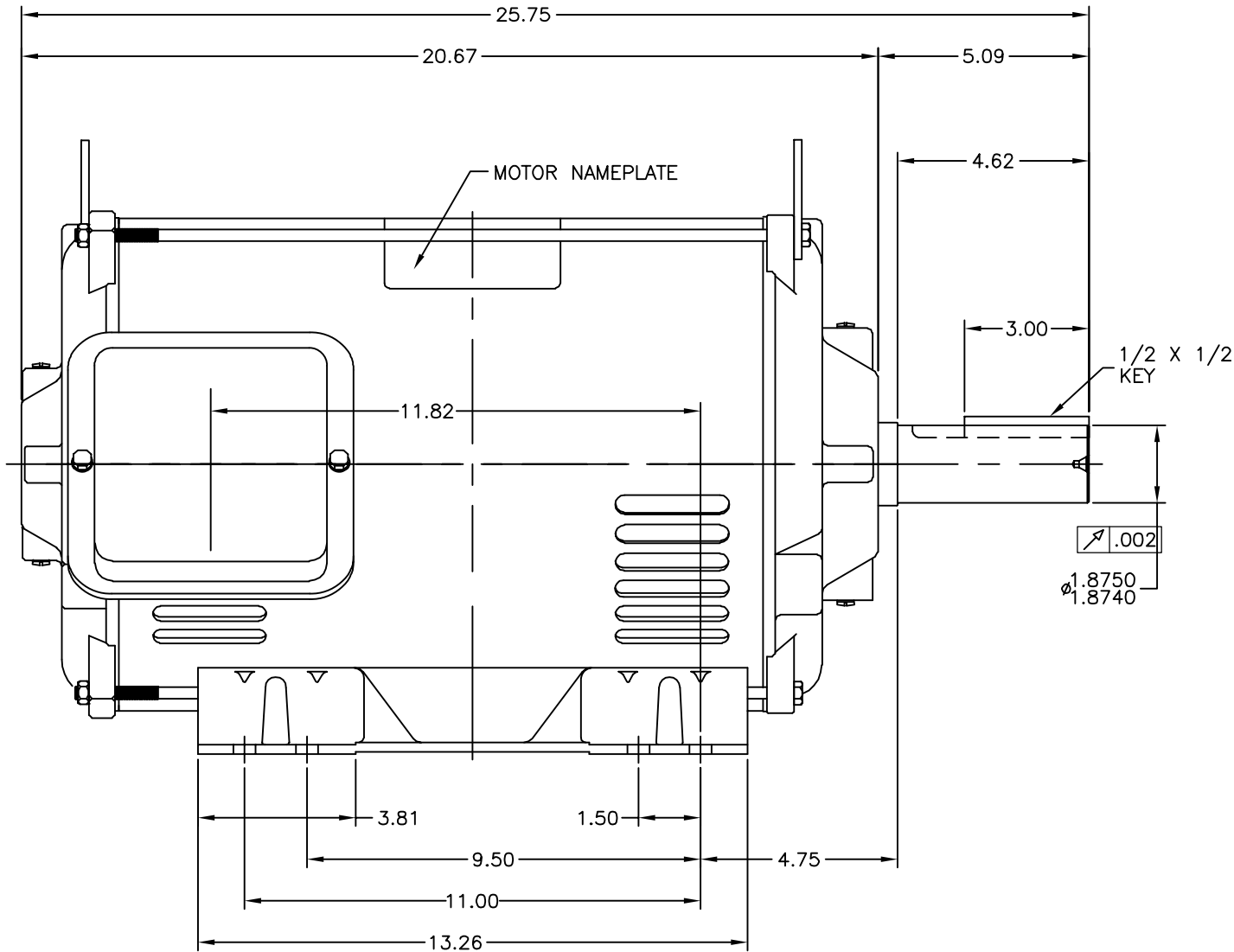
- NOTES:
- 1- SPECIAL CONDUIT BOX MOUNTING.
 - 2- MOTOR VENTILATION: AIR INTAKE THROUGH OPENINGS IN THE FACE OF EACH BRACKET AND EXHAUSTED THROUGH THE VENT SLOTS ON EACH END OF THE SHELL.
 - 3- NOT FIELD CONVERTIBLE TO F2

MOTOR DESCRIPTION:
3 PHASE OPEN DRIPPROOF STEEL SHELL 284T OR 286T MOUNTING.
OTHER MOUNTING ORIENTATIONS ARE ACCEPTABLE; HOWEVER WHEN MOUNTED OTHER THAN HORIZONTAL; MOTOR WILL NOT BE DRIPPROOF AS DEFINED BY NEMA.

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HERTZ _____	AMPS _____
REMARKS _____	CODE _____
APPROVED BY _____ DATE: _____	

CARACTERÍSTICAS DE GEOMETRIA Y SIMBOLOS	A MENOS QUE SE ESPECIFIQUE DE OTRA MANERA, LAS TOLERANCIAS DE LAS DIMS; SON LAS SIGUIENTES:	DIBUJADO POR:	03-31-2004	ACSmith Innovation has a name. ELECTRICAL PRODUCTS COMPANY A DIVISION OF A. O. SMITH CORPORATION
□ PLANICIDAD	OTRA MANERA, LAS TOLERANCIAS DE LAS DIMS; SON LAS SIGUIENTES:	APROBADO POR:	03-31-2004	
— RECTITUD	PULG ±.1 ±.02 ±.005 ±.0005	TERCER ANGULO DE PROYECCION	FECHA EDS: 02-22-2008	DESCRIPCION:
∠ ANGULARIDAD	mm ±0.5 ±0.13 ±0.013	CONFIDENCIAL: ESTE DIBUJO Y SU INFORMACION SON PROPIEDAD DE USO EXCLUSIVO Y CONFIDENCIAL DE A.O.SMITH CORP. Y NO DEBERAN SER REVELADOS, Duplicados, distribuidos o usarse de otra manera SIN EL CONSENTIMIENTO ESCRITO DE A.O. SMITH CORP. -TODOS LOS DERECHOS RESERVADOS. ASME Y14.5M 1994	REV. FORMATO: F	TAMAÑO: D
⊥ PERPENDICULARIDAD (A ESCUADRA)				NUMERO DE DIBUJO: 18771201-001
∥ PARALELISMO				ESCALA: NONE
○ REDONDEZ (CIRCULARIDAD)				HOJA: 1
⊖ CILINDRICIDAD				
⊖ PERFIL DE CUALQUIER SUPERFICIE				
⊖ PERFIL DE CUALQUIER LINEA				
↑ VARIACION				
⊕ POSICION REAL				
⊙ CONCENTRICIDAD				
≡ SIMETRIA				

版本	ECO	编制	日期	批准	日期
B	0015756	AJB	08-25-2010	AJB	08-25-2010



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R.P.M. _____	VOLTS _____	PHASE _____
HERTZ _____	AMPS _____	CODE _____
REMARKS _____		
APPROVED BY _____ DATE: _____		

<p>形位公差 尺寸公差如下: X XX XXX XXXX 英寸 ±.1 ±.02 ±.005 ±.0005 毫米 ±0.5 ±0.13 ±0.013 角度 ±.50 度 清理毛刺和尖棱 英寸 .003-.015 毫米 0.1-0.4 内圆角 英寸 .020 毫米 0.5 表面粗糙度 英制 325 米制 3.2 米制尺寸显示在[]</p>	除另有注明 尺寸公差如下: X XX XXX XXXX 英寸 ±.1 ±.02 ±.005 ±.0005 毫米 ±0.5 ±0.13 ±0.013 角度 ±.50 度 清理毛刺和尖棱 英寸 .003-.015 毫米 0.1-0.4 内圆角 英寸 .020 毫米 0.5 表面粗糙度 英制 325 米制 3.2 米制尺寸显示在[]	绘图: RJB 批准: JAS 第三角投影 机密: 本图纸及相关信息所有权归A. O. SMITH公司所有。 未经A. O. SMITH公司书面授权, 不得泄露、复制、传播或作其他用途。--版权所有	03-31-2004 03-31-2004 图纸格式发布日期 02-22-2008 图纸格式版本 F	名称 OUTLINE S284T/S286T ODP SPL EE STD 图幅 D 图号 18771201-001 比例 NONE 页号 1
	ASME Y14.5M 1994			

CERTIFICATION DATA SHEET

Model#: 286TTDR16037 AA
 CONN. DIAGRAM: 80022801
 OUTLINE: 18771201-001

WINDING#: BJR4T07 NONE 3
 ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&30	22.4&22.4	1800	1770&1450	286T	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	73/36.5&85/42 .5	ACROSS THE LINE	CONTINUOU S	F4	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&91.7	3/4 LOAD EFF: 94.7	1/2 LOAD EFF: 94	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82.4&83	3/4 LOAD PF: 80.7	1/2 LOAD PF: 73.2	90.2	SQ CAGE IND RUN	24.4 / 12.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89.6 LB-FT	432 / 216	149 LB-FT 166	238 LB-FT 264	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
69 dBA	79 dBA	0 LB-FT^2	0 LB-FT^2	20 SEC.	0	0 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL
6311	6207						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
 INV. HP SPEED RANGE: NONE

ENCODER: NONE
 NONE NONE
 NONE NONE PPR

BRAKE: NONE NONE
 NONE P/N NONE
 NONE NONE
 NONE FT-LB NONE V NONE Hz

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DATE: 06/27/2017 03:36:15 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet									
Date:	1/25/2019				286TTDR16037				
Customer:					marathon[®]				
Attention:					Motors				
Submitted by:	FAREEDA DUDEKULA				Submittal				
					Data @ 460 V				
Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.2	14.9	20.5	27.7	36.5	41.4	45.5	216	
Torque (ft-lb)	0.00	22.0	44.3	66.8	89.6	104	112	149	
RPM	1800	1792	1785	1777	1770	1,760	1758	0	
Efficiency (%)		92.2	94.0	94.7	94.1	93.9	92.9		
P.F. (%)	4.1	51.2	73.2	80.7	82.4	83.7	83.0	0.0	
Motor Speed Data									
	LR	Pull-Up	BD	Rated	Idle	Information Block			
Speed (RPM)	0	250	1600	1770	1800				
Current (Amps)	216	215	115	36.5	12.2				
Torque (ft-lb)	149	145	238	89.6	0.00				
						HP		30.0	
						Sync. RPM		1800	
						Frame		286	
						Enclosure		DP	
						Construction		TDR	
						Voltage		230/460#200/400 V	
						Frequency		60 Hz	
						Design		B	
						LR Code letter		G	
						Service Factor		1.15	
						Temp Rise @ FL		50 °C	
						Duty		CONT	
						Ambient		40 °C	
						Elevation		3,300 feet	
						Rotor/Shaft wk ²		0.00 Lb-Ft ²	
						Ref Wdg		BJR4T07 NONE	
						Sound Pressure @ 1M		69 dBA	
						VFD Rating		NONE	
						Outline Dwg		18771201-001	
						Conn. Diag		80022801	
Additional Specifications:									
0									
0									
EQUIV CKT (OHMS / PHASE)									
R1		R2		X1		X2		Xm	
0.0000		0.0000		0.0000		0.0000		0.0000	

Speed -Torque Curve