

GL-5

Integrally Geared Single Stage Blower



LONE STAR
TURBO

MODEL GL-5

Standard Specifications

Gas	Air, Steam, H2S, Biogas, Fuel Gas, CO2, N2, LNG, Custom
Flow Range	100% to 35% of Rated Flow with Combination Control
Pressure Range	Up to 30 PSIG / 2 bar
Maximum Case Pressure	50 PSIG / 3.5 bar
Stages	Single Stage
Drive Type	Direct Coupled
Power Driver Options	Electric Motor, Steam Turbine, Combustion Engine
Gearbox	Helical Gear Set
Cooling Lubricant	Lubricant Cooling (Air or Liquid)
Lubrication Options	Pressurized Oil
Bearings	Pinion - Tilt Pad Journal, Drive Journal
Enclosure	Optional
Sound Level	Job Specific
Sound Level with Enclosure	Job Specific
Filtration Rating (std)	99% at 2 micron, or as required
Seals Air	Labyrinth Type

Standard Materials of Construction

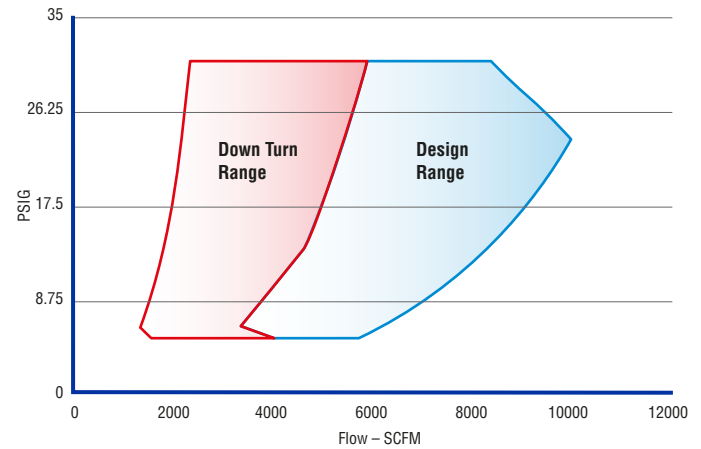
Casing	Grey Iron GG25, Ductile, ASTM A536, A48 or Equal
Bearings	ANSI 5140 Steel, Babbited, 40CR Alloy Casing
Impeller	AlCu2MgNi Alloy (annodized), 17-4PH, Titanium, Inconel
Inlet Guide Vanes	Stainless Steel 316
Discharge Diffuser Vanes	Stainless Steel 316
Gears	AISI 8620, Steel 10CrNiMo to AGMA 12/13
Shaft	Steel 10CrNiMo
Seals Air	ASTM B86 Z25631 Zinc Alloy Aluminum
Seals Gas	ASTM C695 Molded Graphite
Blower Base Skid	ASTM A36 Structural Steel
Isolation Pads	St. SIS 1312 inertial dampening with rubber hardness 60
Finish	2 Part Epoxy Lone Star Blue RAL5005
Enclosure	Aluminum, Galvanized Steel, Stainless

Optional Testing & Certifications

API	API 617, API 672, API 614
Electrical	UL 508A, CE, CSA
Hazardous Location	ATEX, Class1 - Division 1- Division 2, Zone 0-2
Balancing	ISO 1940 - G2.5, ~4W/N API
Noise Level	OSHA 1910.95, ISO 2151:2004
Performance	ASME PTC-10, PTC-13, ISO 5389
Hydro Testing	1.5 Time MAWP
Overspeed Testing	Optional
Positive Material ID	XRF, OES, Material Certification
NACE Compliance	Optional
Special Coatings	Optional

Service

Air, Gas, Pressure, Vacuum

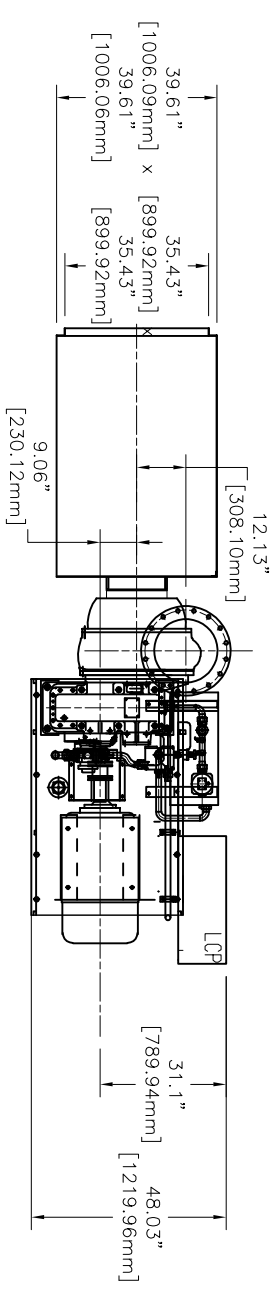
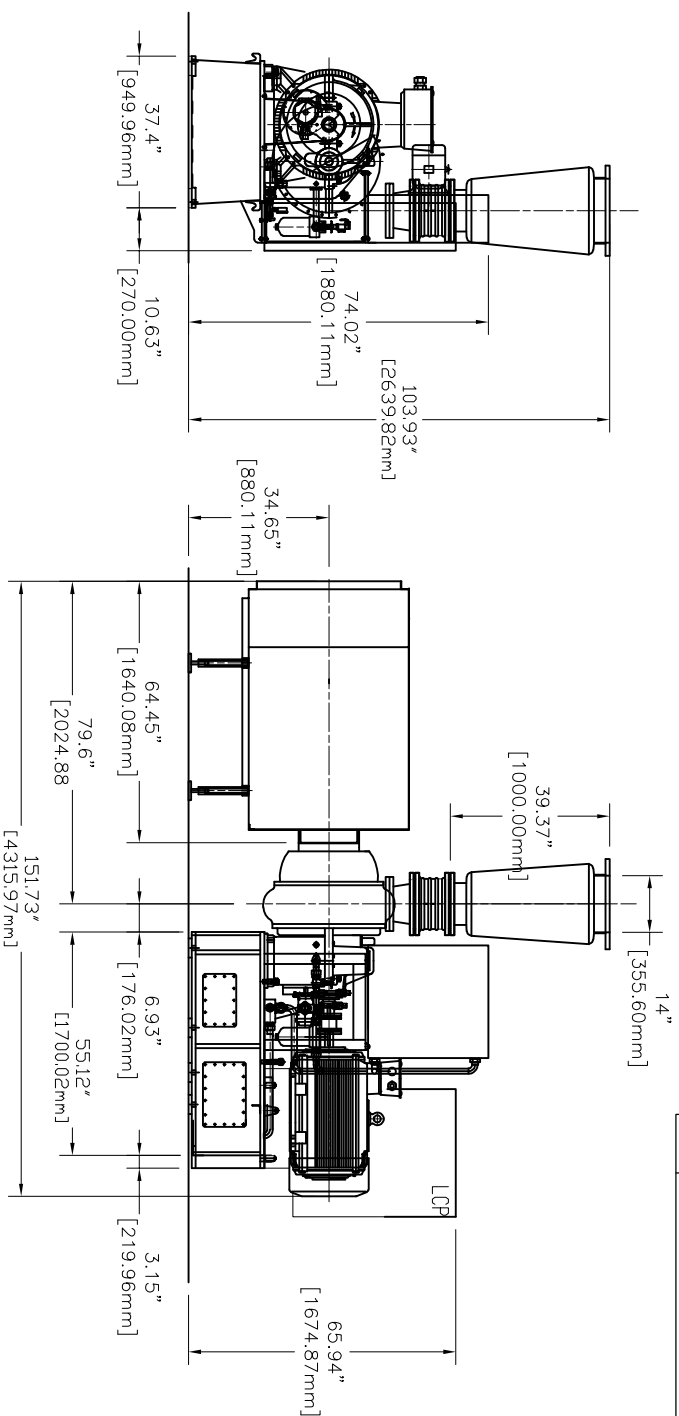


Control Options

Control Methods	Variable Inlet and Discharge Guide Vane, speed control, blow off, or combination
Local Controller	sLOC™ Standard - Custom for Allen Bradley, Modicon, Siemens or Other
HMI	sLOC™ Standard or Custom HMI
Remote Monitoring	sLINK™ or Custom
Control Set Points	Pressure, Flow, Power, Custom Input



REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
1	AIR OUTLET VERTICALLY UP	5/27/2016	
2	REMOVED FROM GL5-WX-03 TO GL5-WX-01: CONVERTED FROM mm TO INCHES	7/9/2016	

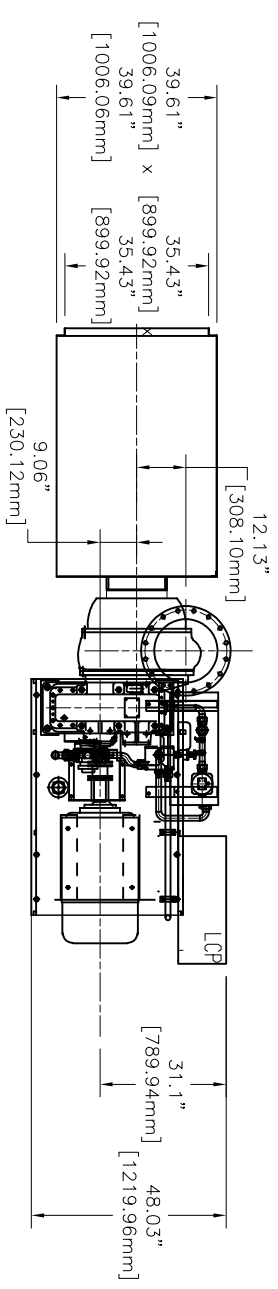
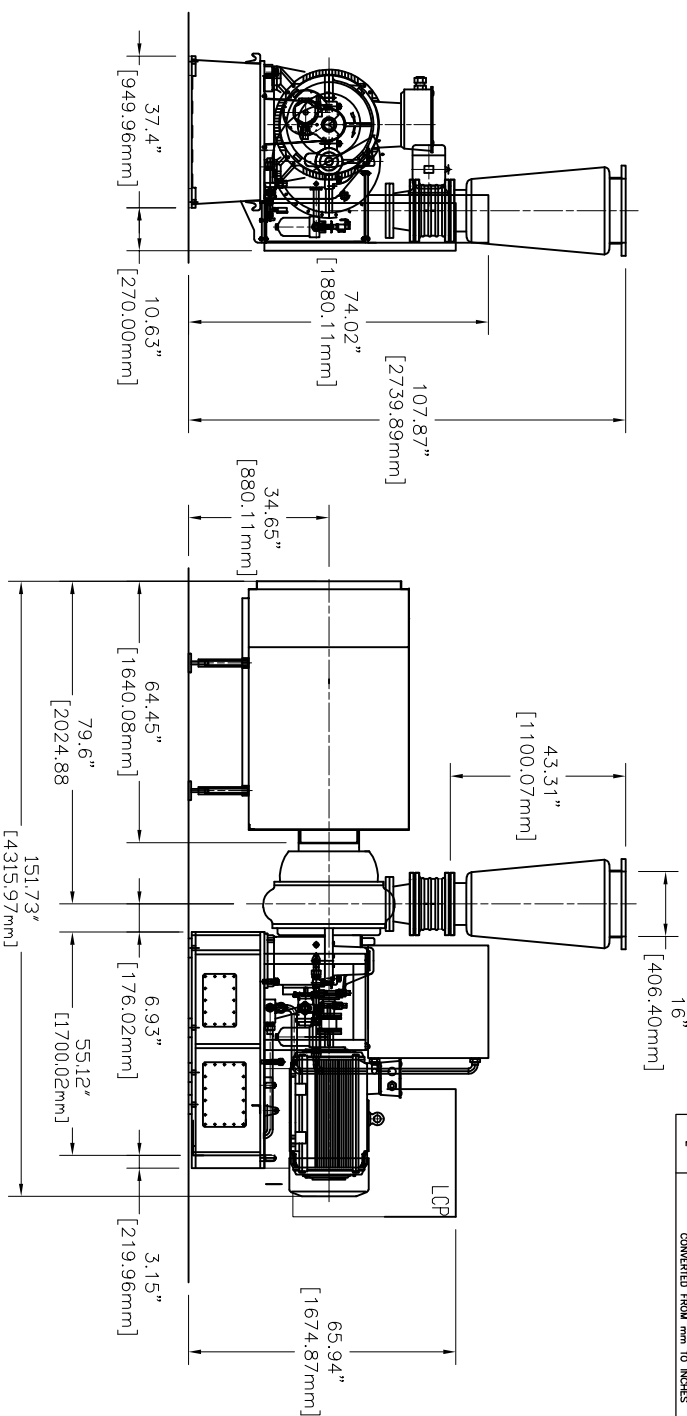


- NOTES:
- BLOWER OUTLET ANGLE ADJUSTABLE
 - EVERY 15° RADIALLY.
 - BLOWER INSTALLED BY EXPANSION BOLTS.

DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
125HP	55.12	151.73	6,228

DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED.		APPROVALS	
DRAWN	BW	07/08/2016	
CHECK			
ENGINEER			
MANUFACTURING CONTROL			
APPROVED			
TITLE		LONE STAR BLOWER	
GL-5 GEARED TURBO			
GENERAL ASSEMBLY 14" CONE			
SIZE	CAGE CODE	DWG NUMBER	REV
A	-	GL5-WX-01	02
SCALE		SHEET 1 OF 1	

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APPROVALS

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THIRD ANGLE PROJECTION

GL-5 GEARED TURBO
GENERAL ASSEMBLY 16" CONE

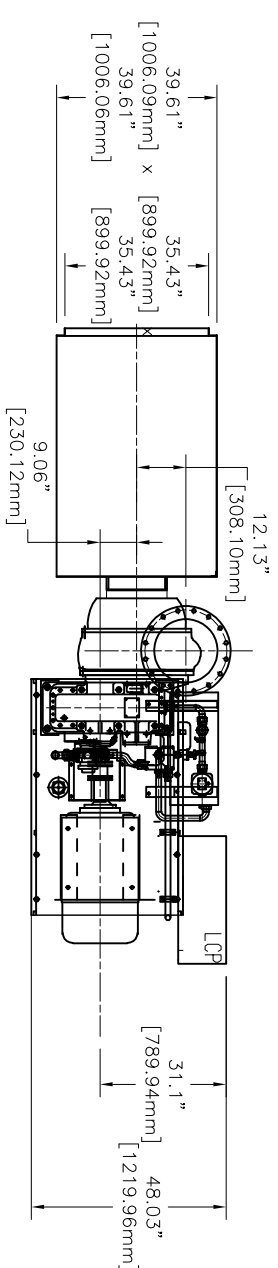
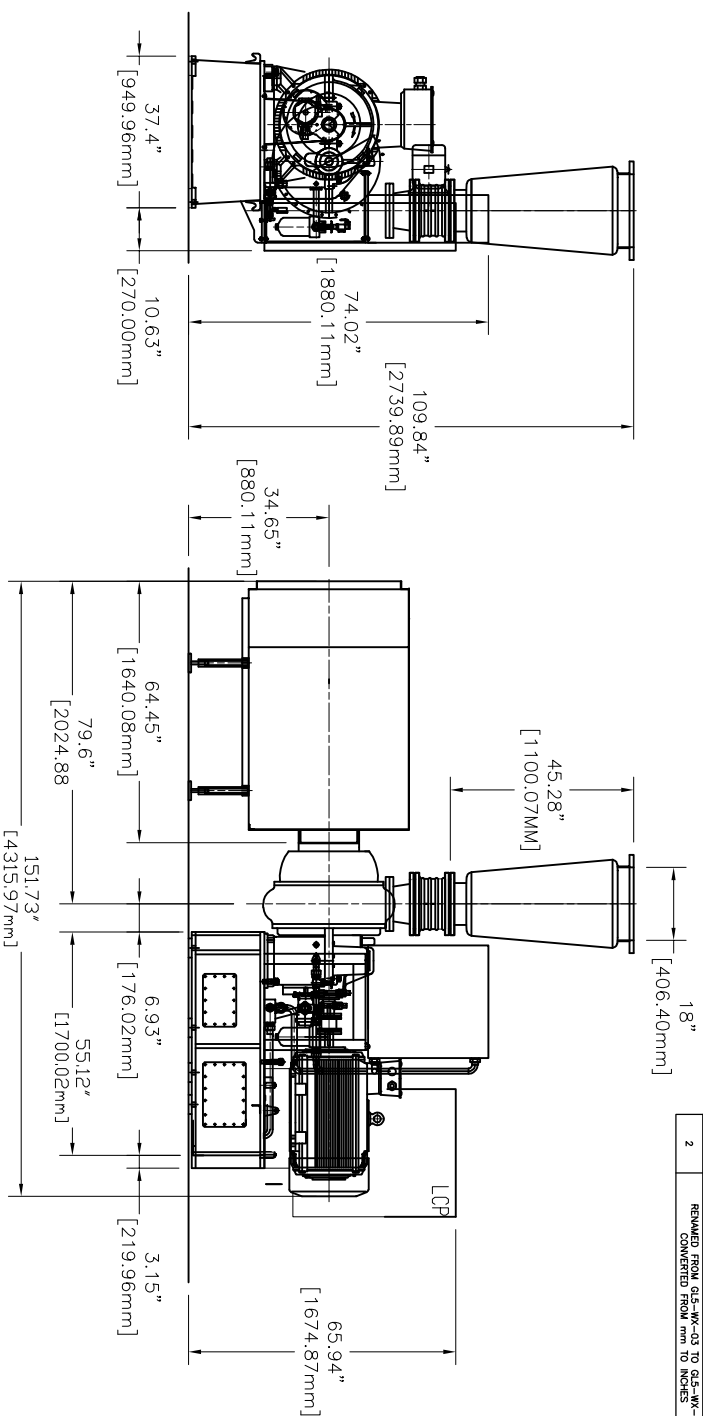
SIZE CAGE CODE DWG NUMBER
A - GL5-WX-01

SCALE SHEET 1 OF 1

REV 02

LONE STAR BLOWER

REVISION HISTORY			
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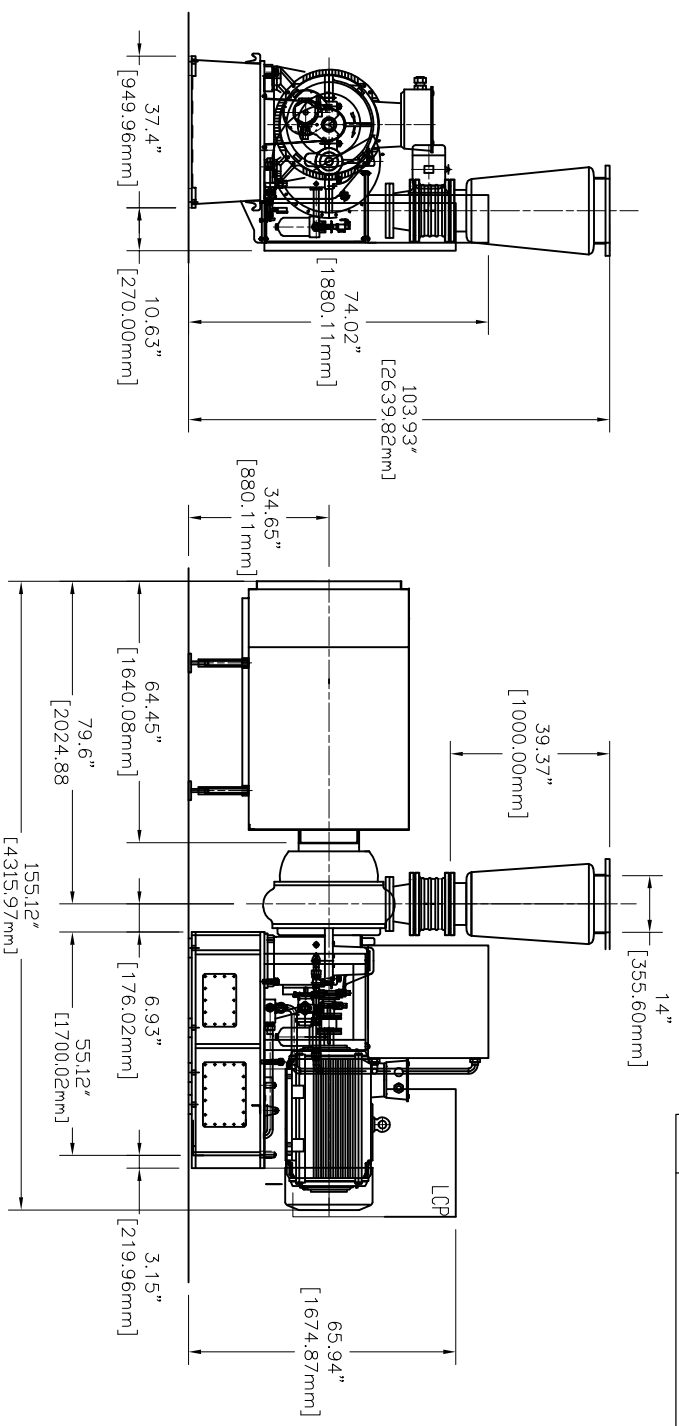
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THIRD ANGLE PROJECTION

TITLE		LONE STAR BLOWER	
GL-5 GEARED TURBO			
GENERAL ASSEMBLY 18" CONE			
SIZE	CAGE CODE	DWG NUMBER	REV
A	-	GL5-WX-01	02
SCALE	SHEET 1 OF 1		

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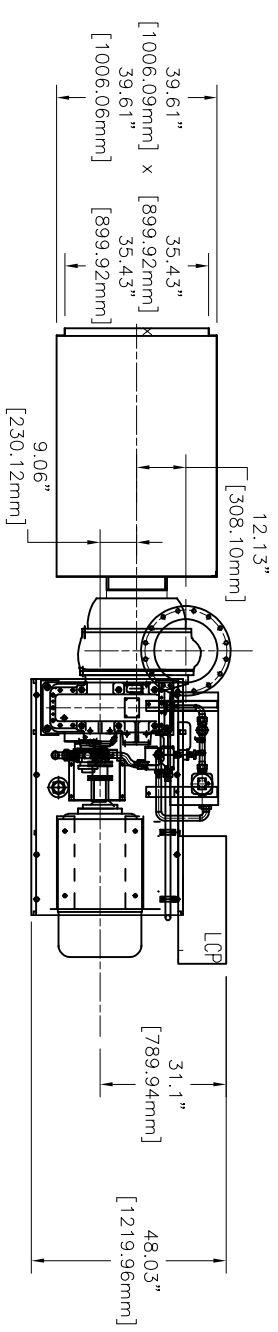
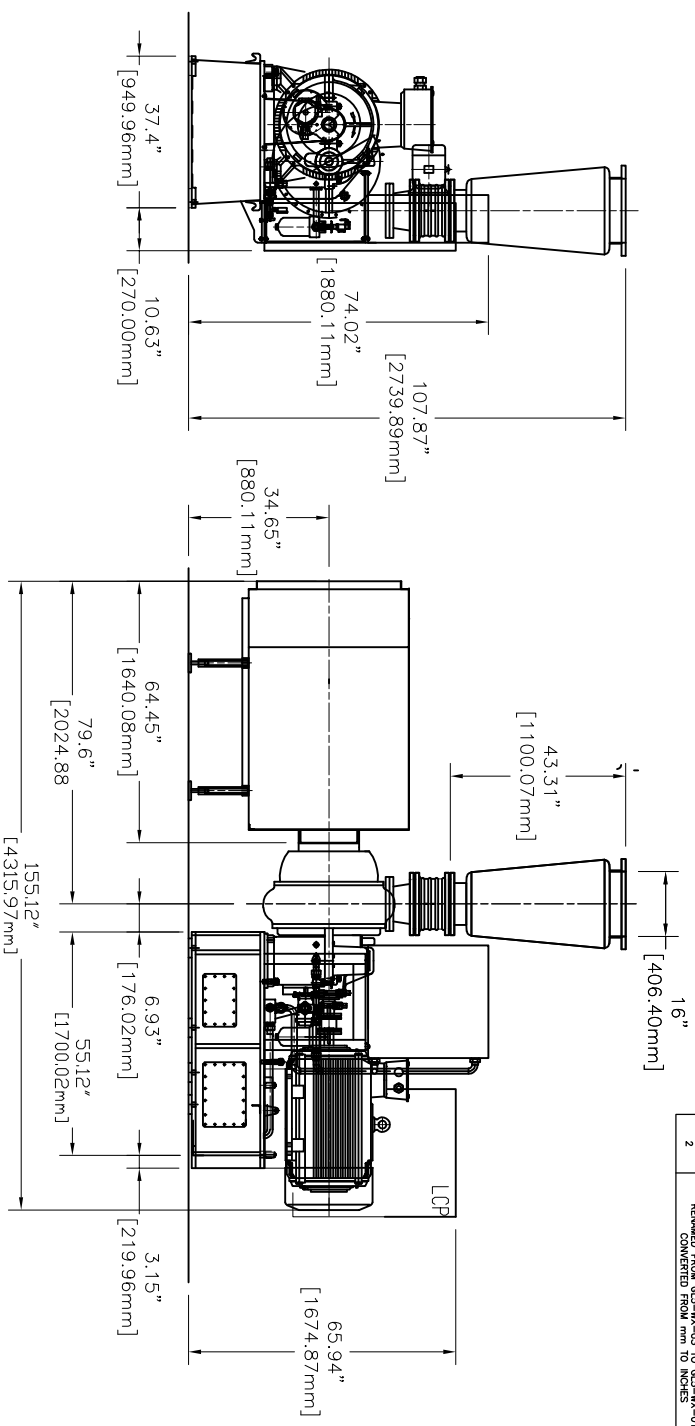
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DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
150HP	55.12	155.12	6,603



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CHECK			
ENGINEER			
MANUFACTURING CONTROL			
APPROVED			
		LONE STAR BLOWER	
TITLE		GL-5 GEARED TURBO GENERAL ASSEMBLY 14" CONE	
SIZE	CAGE CODE	DWG NUMBER	REV
A	-	GL5-WX-01	02
SCALE	SHEET 1 OF 1		

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THIRD ANGLE PROJECTION

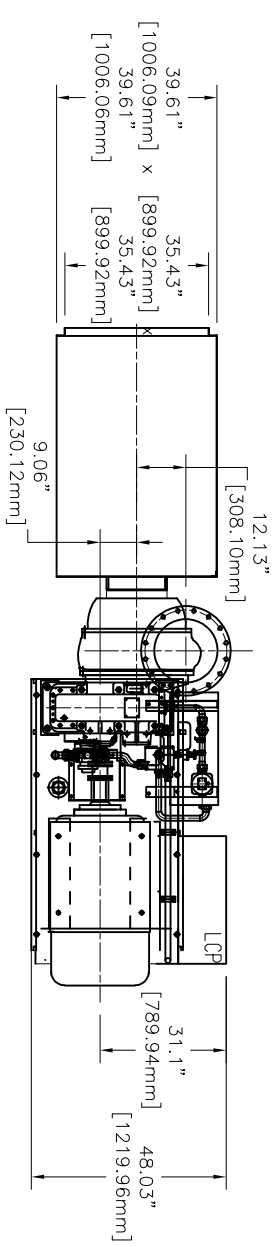
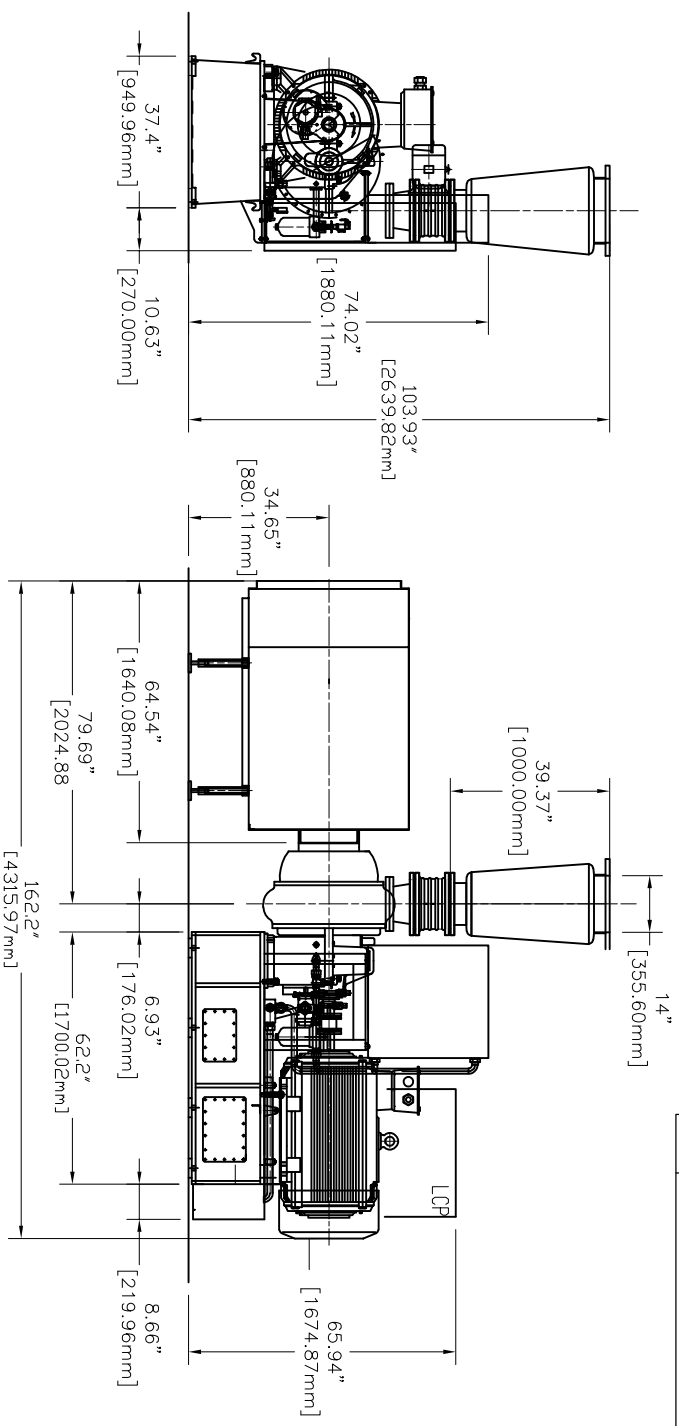
GL-5 GEARED TURBO
GENERAL ASSEMBLY 16" CONE

SIZE CAGE CODE DWG NUMBER
A - GL5-WX-01

SCALE SHEET 1 OF 1

LONE STAR BLOWER

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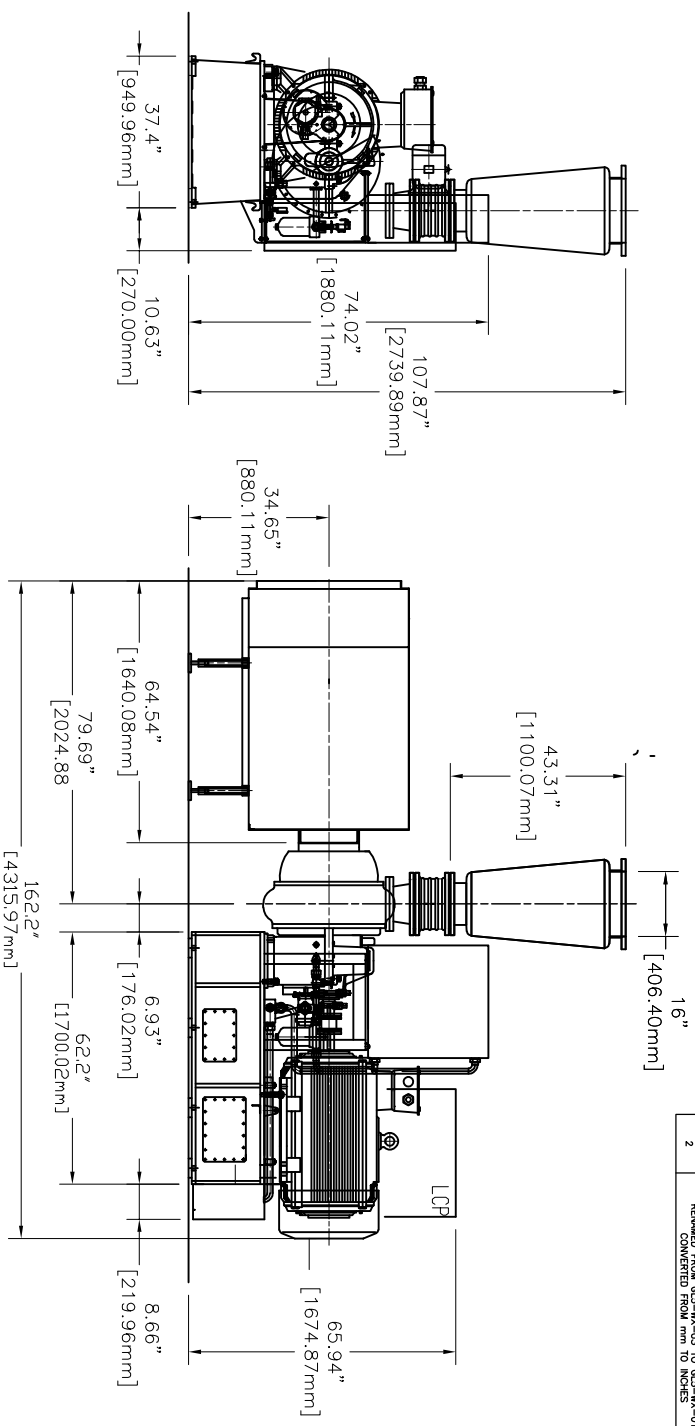


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DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
200HP	62.20	162.20	7,330
250HP	62.20	162.20	7,573

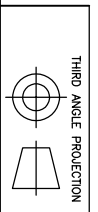
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GL-5 GEARED TURBO			
GENERAL ASSEMBLY 14" CONE			
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SCALE		SHEET 1 OF 1	

REVISION HISTORY			
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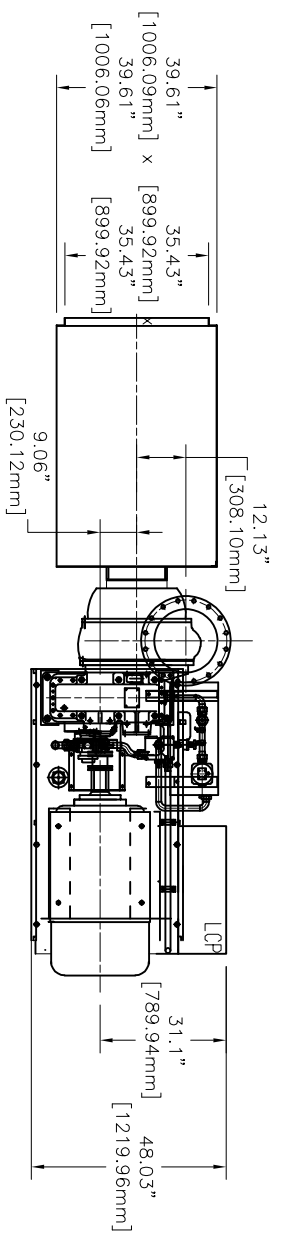
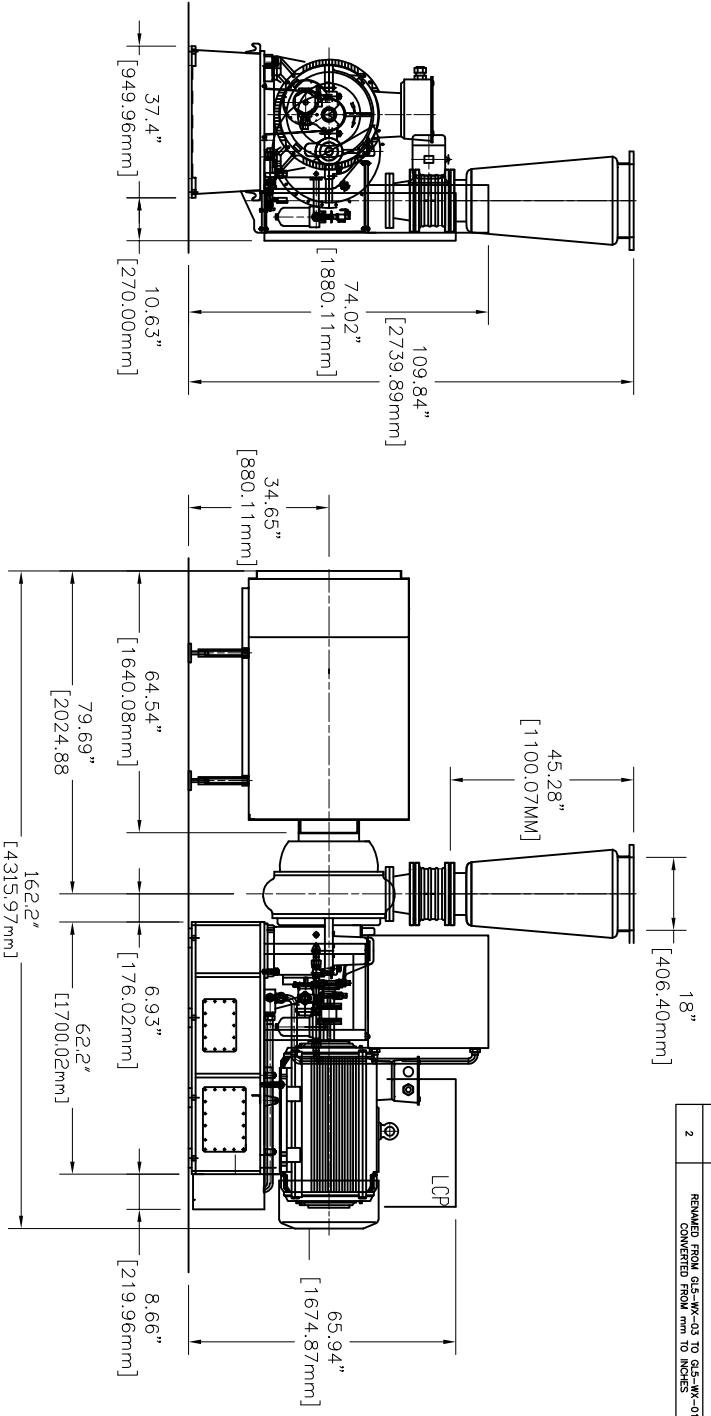
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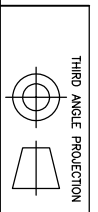
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GL-5 GEARED TURBO			
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SCALE		SHEET 1 OF 1	

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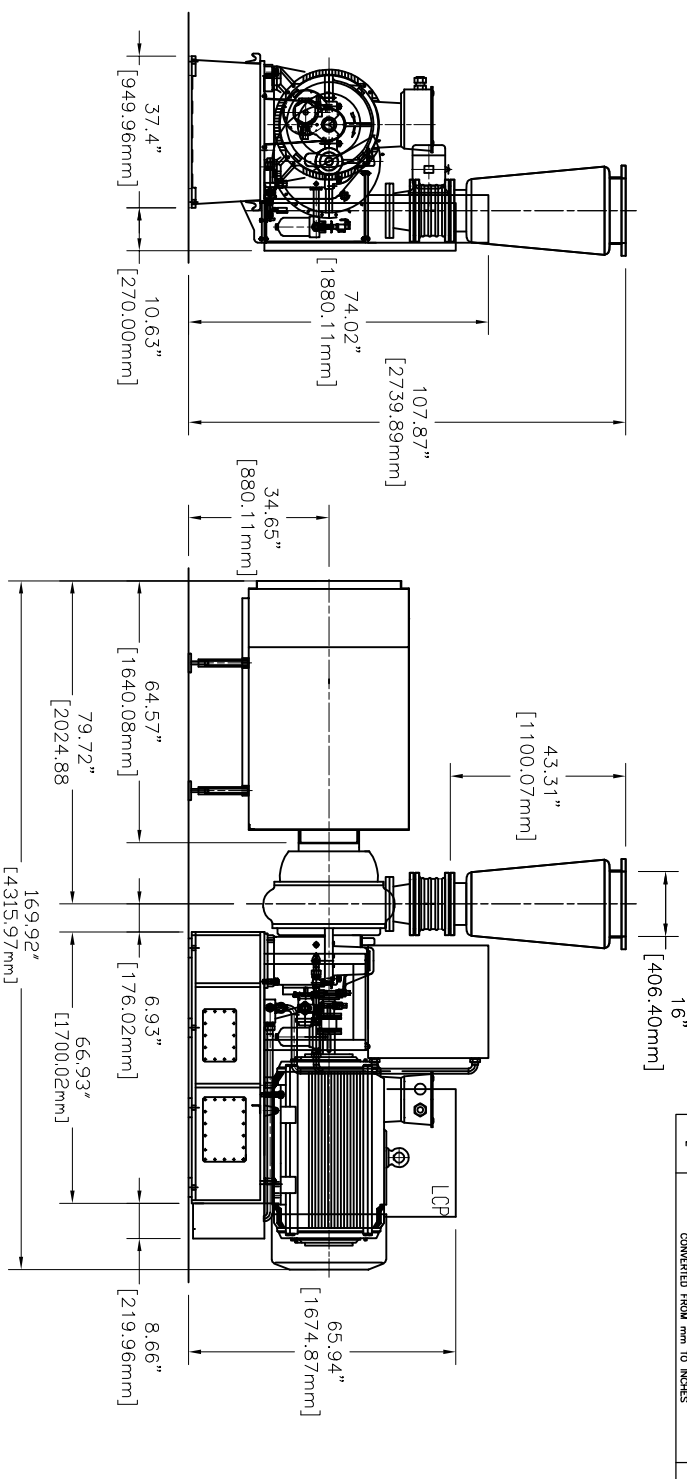
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DRAWN	BW	07/08/2016			
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ENGINEER					
MANUFACTURING CONTROL	APPROVED				
TITLE		SIZE		DWG NUMBER	
GL-5 GEARED TURBO GENERAL ASSEMBLY 18" CONE		A		GL5-WX-01	
SCALE		SHEET		REV	
		1 OF 1		02	

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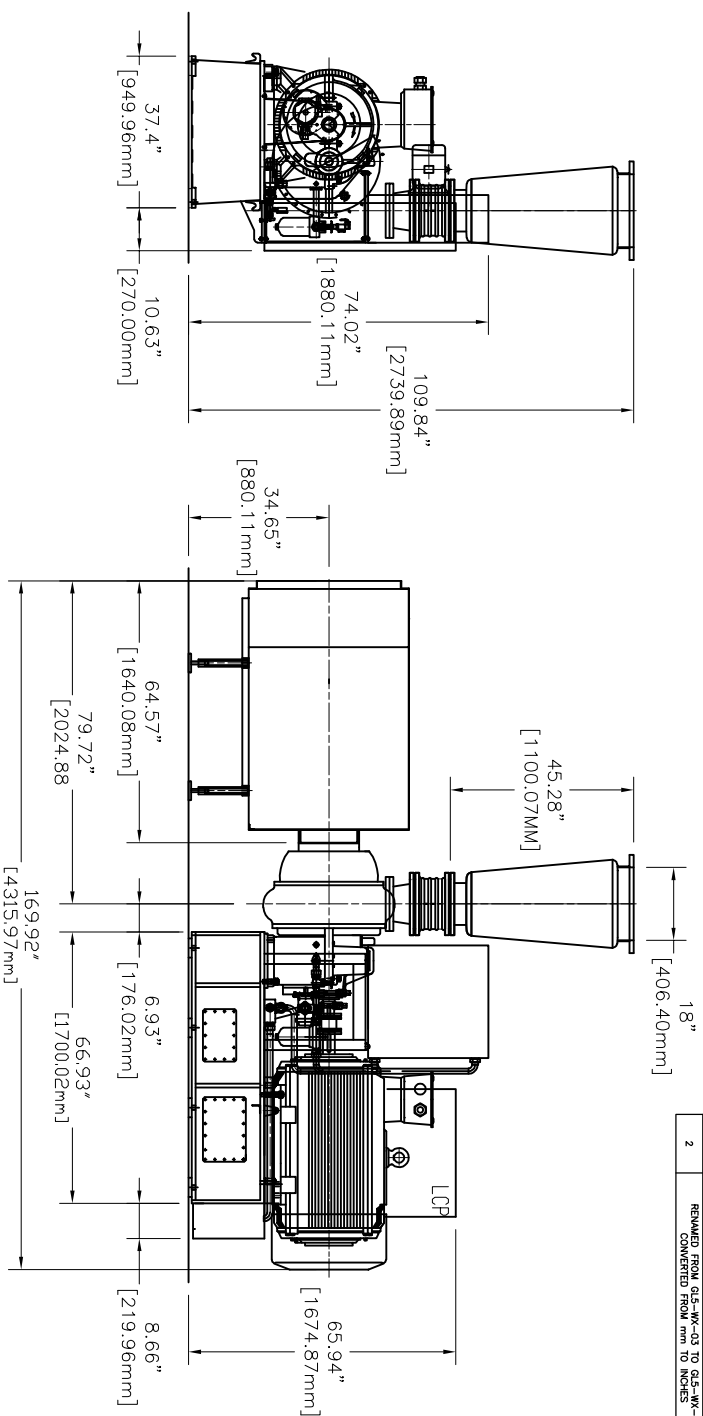
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MOTOR	"A"	"B"	WEIGHT (LBS)
300HP	66.93	169.92	8,422
350HP	66.93	169.92	8,532
400HP	66.93	169.92	TBD

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DRAWN	BW	DATE	07/08/2016
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 THIRD ANGLE PROJECTION	
 N	
LONE STAR BLOWER	
TITLE GL-5 GEARED TURBO GENERAL ASSEMBLY 16" CONE	
SIZE	DWG NUMBER
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SCALE	SHEET 1 OF 1
REV	02

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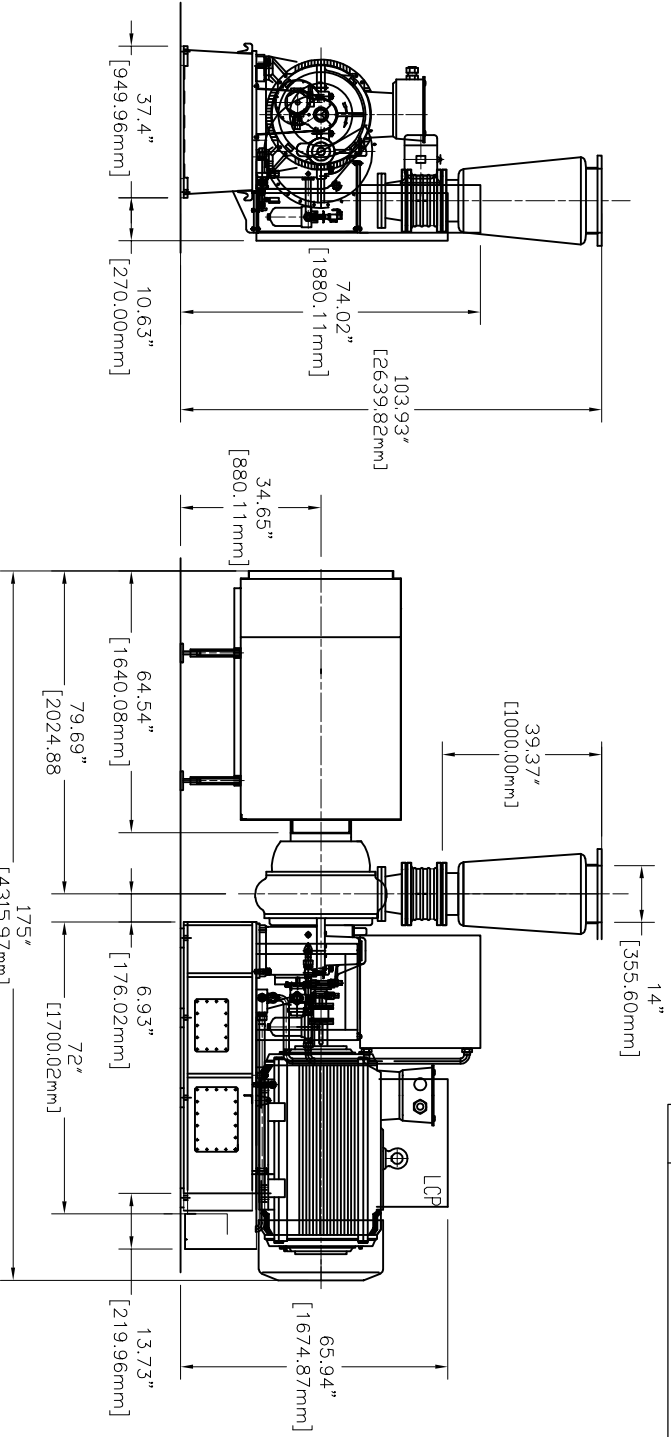
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LONE STAR BLOWER

TITLE	SIZE	DWG NUMBER	REV
GL-5 GEARED TURBO GENERAL ASSEMBLY 18" CONE	A	GL5-WX-01	02

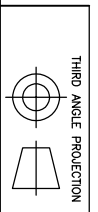
SCALE SHEET 1 OF 1

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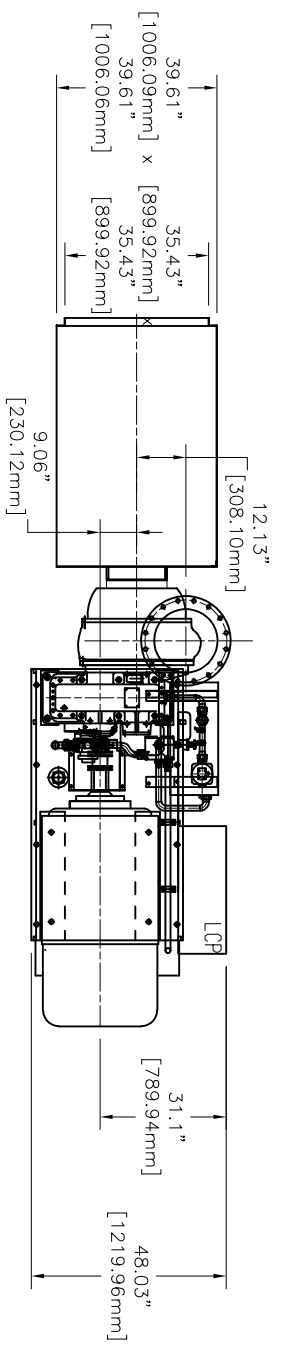
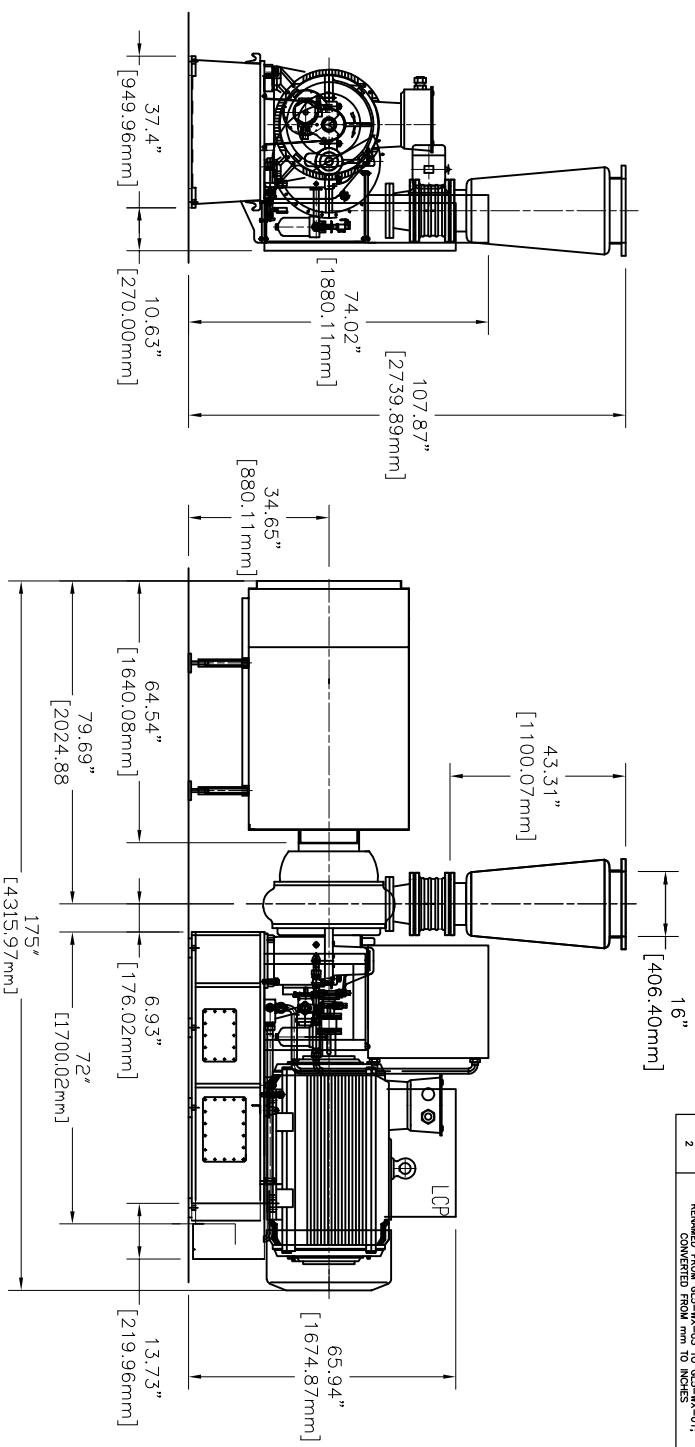
DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
500HP	72	175.00	TBD
600HP	72	175.00	TBD



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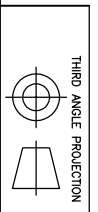
TITLE	
GL-5 GEARED TURBO	
GENERAL ASSEMBLY 14" CONE	
SIZE	DWG NUMBER
A	GL5-WX-01
SCALE	SHEET 1 OF 1
REV	02

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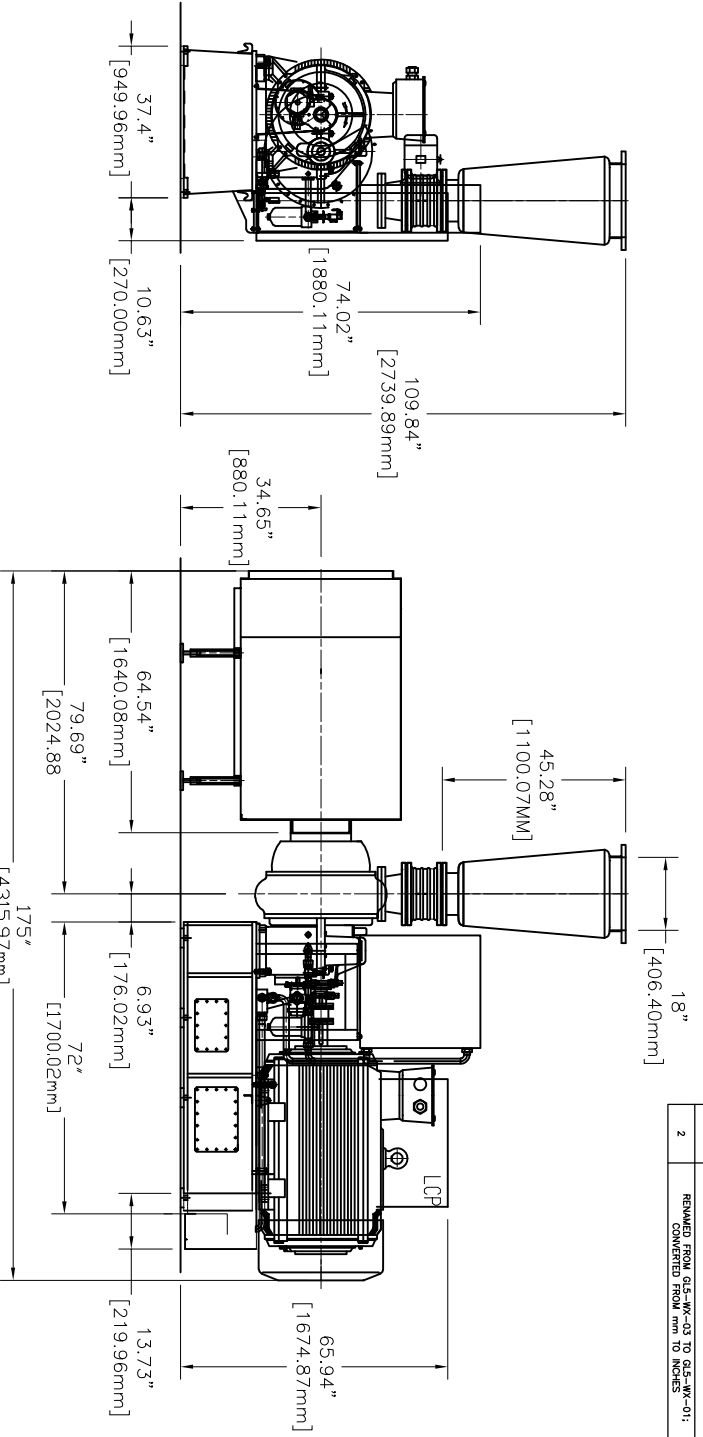
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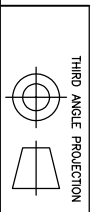
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SCALE		SHEET 1 OF 1	

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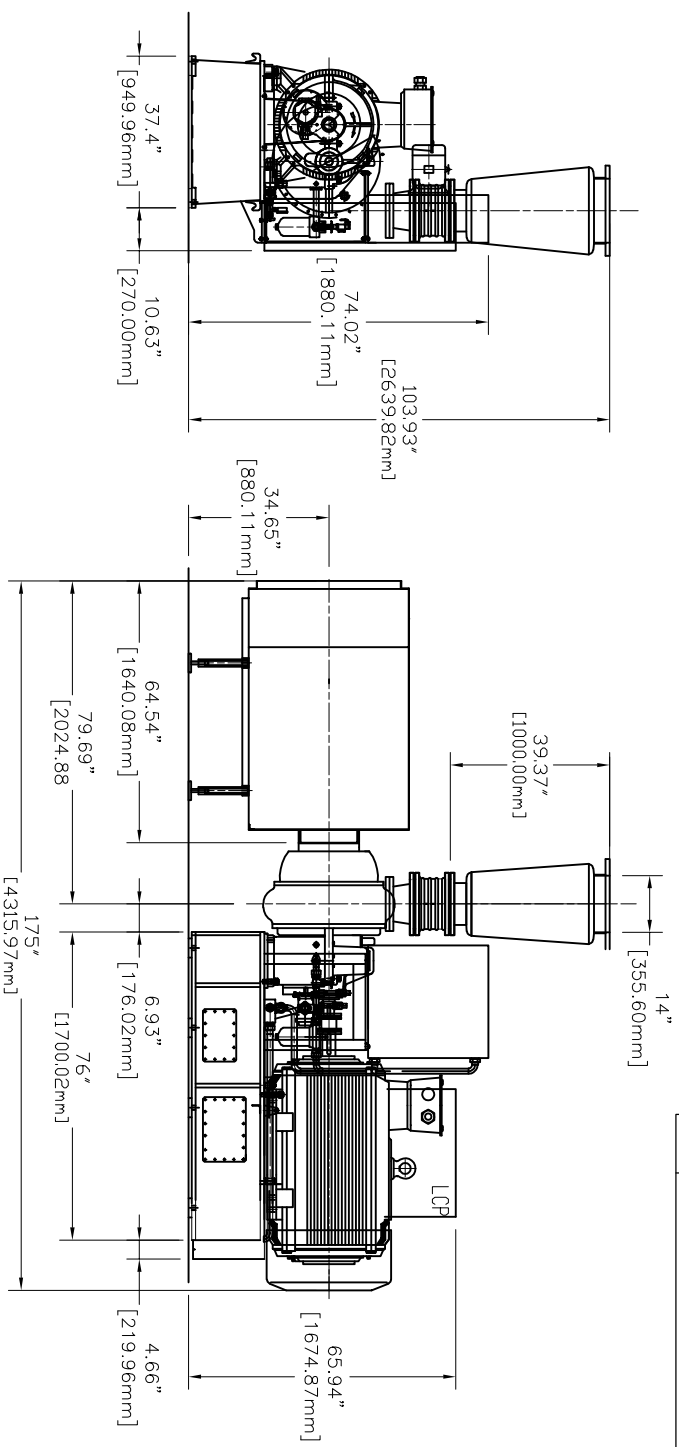
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		LONE STAR BLOWER	
TITLE GL-5 GEARED TURBO GENERAL ASSEMBLY 18" CONE		SIZE (CAGE CODE) A - GL5-WX-01	
DWG NUMBER GL5-WX-01		REV 02	
SCALE SHEET 1 OF 1			

REVISION HISTORY			
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MOTOR	"A"	"B"	WEIGHT (LBS)
700HP	76	175.00	TBD

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CHECK			
ENGINEER			
MANUFACTURING CONTROL			
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THIRD ANGLE PROJECTION

GL-5 GEARED TURBO
GENERAL ASSEMBLY 14" CONE

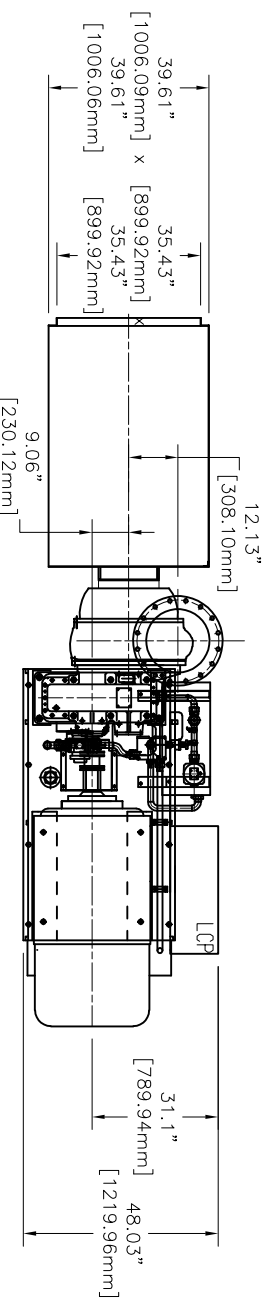
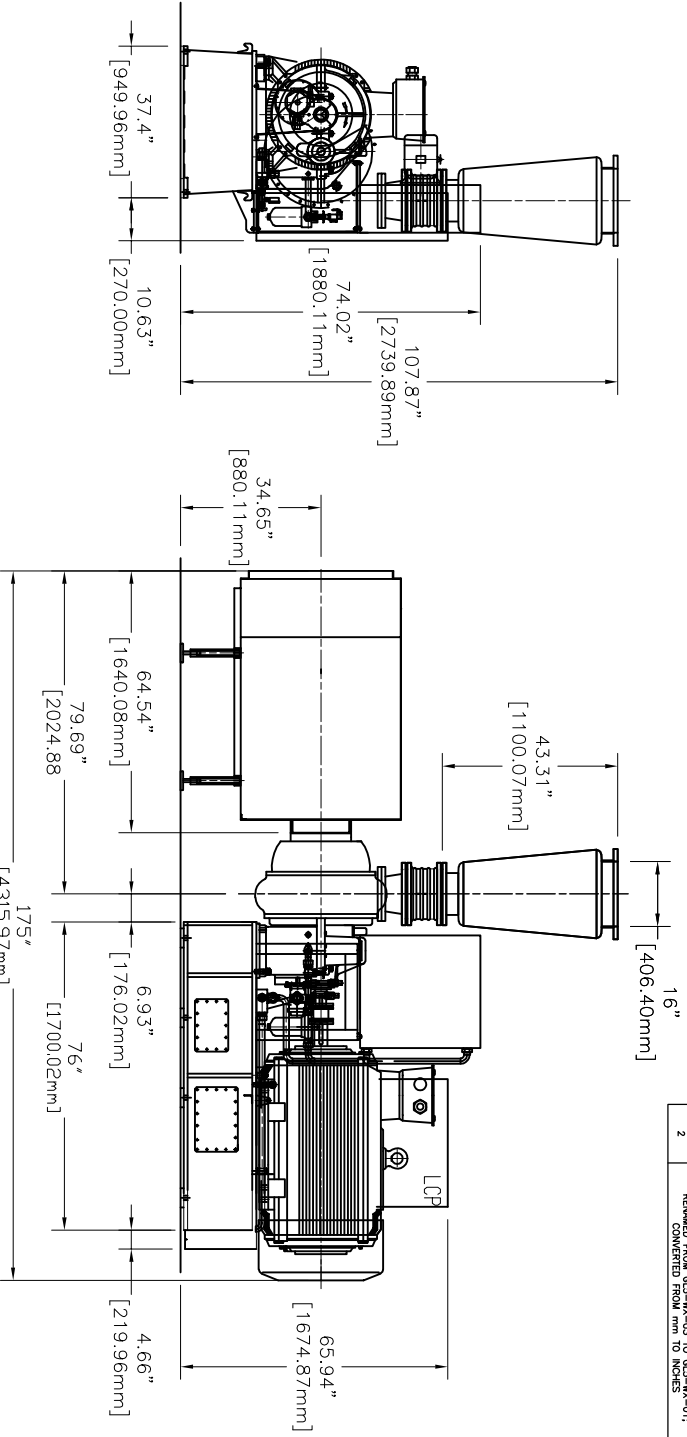
GL5-WX-01

LONE STAR BLOWER

SIZE: A
SCALE: 1 OF 1

REV: 02

REVISION HISTORY			
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2	REMOVED FROM GL5-WX-03 TO GL5-WX-01: CONVERTED FROM MM TO INCHES	7/9/2016	



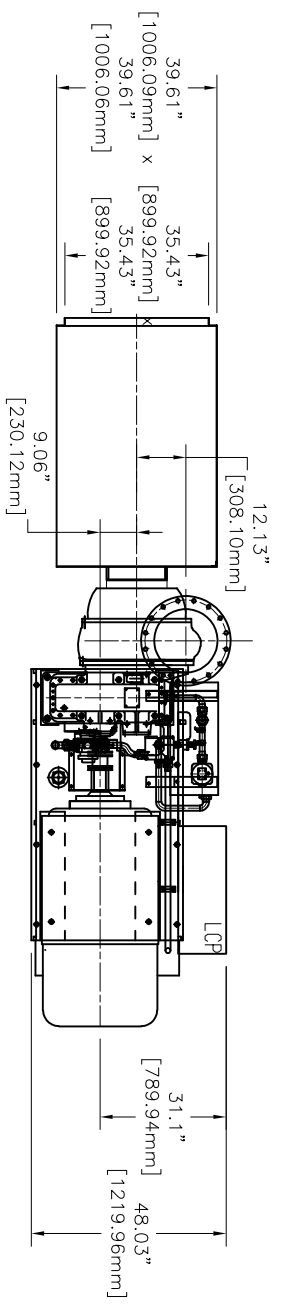
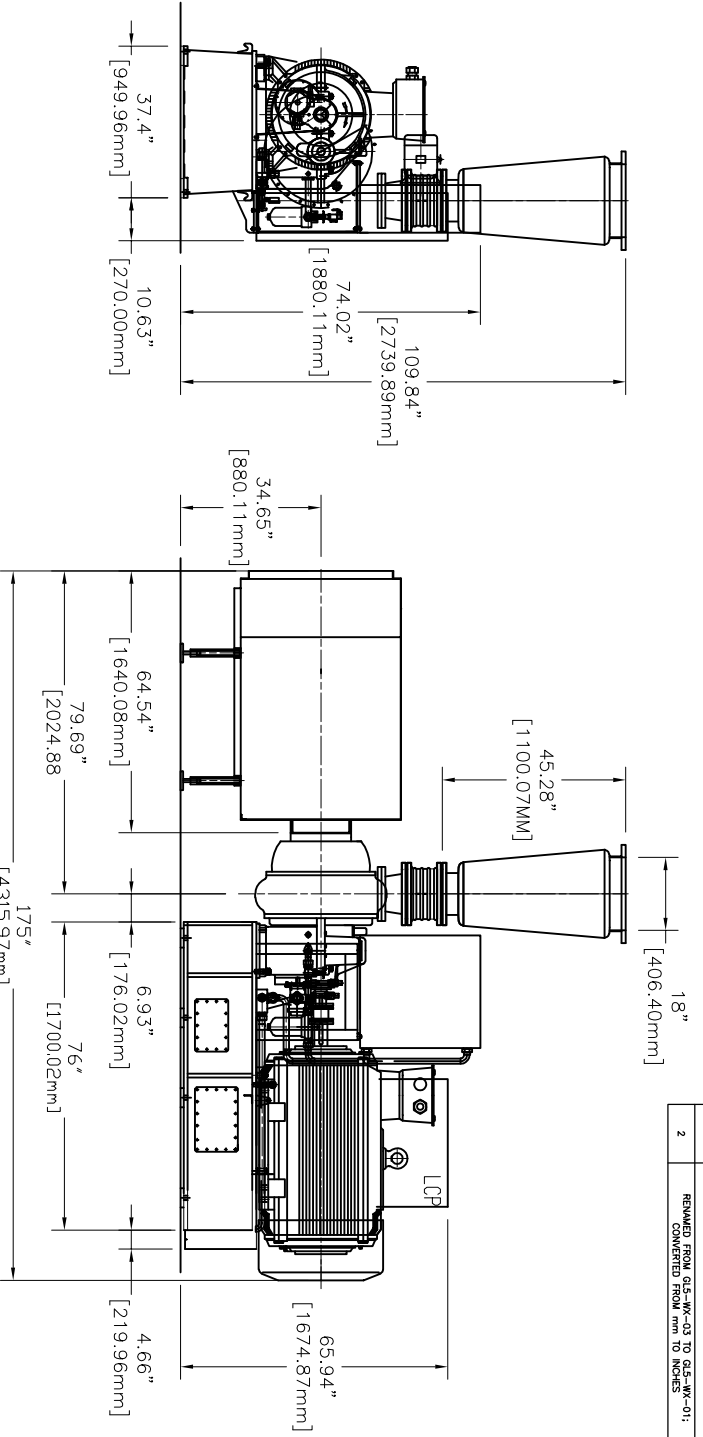
- NOTES:
- BLOWER OUTLET ANGLE ADJUSTABLE
 - EVERY 15° RADially.
 - BLOWER INSTALLED BY EXPANSION BOLTS.

DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
700HP	76	175.00	TBD



DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED.		APPROVALS	
DRAWN	BW	07/08/2016	
CHECK			
ENGINEER			
MANUFACTURING CONTROL			
APPROVED			
TITLE		LONE STAR BLOWER	
GL-5 GEARED TURBO			
GENERAL ASSEMBLY 16" CONE			
SIZE	CAGE CODE	DWG NUMBER	REV
A	-	GL5-WX-01	02
SCALE		SHEET 1 OF 1	

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
1	AIR OUTLET VERTICALLY UP	5/27/2016	
2	REMOVED FROM GL5-WX-03 TO GL5-WX-01: CONVERTED FROM mm TO INCHES	7/9/2016	



- NOTES:
- BLOWER OUTLET ANGLE ADJUSTABLE
 - EVERY 15° RADIALY.
 - BLOWER INSTALLED BY EXPANSION BOLTS.

DIMENSIONS & WEIGHTS BY MOTOR SIZE			
MOTOR	"A"	"B"	WEIGHT (LBS)
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DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED.		APPROVALS	
DRAWN	BW	07/08/2016	
CHECK			
ENGINEER			
MANUFACTURING CONTROL			
APPROVED			

THIRD ANGLE PROJECTION

LONE STAR BLOWER

TITLE: GL-5 GEARED TURBO GENERAL ASSEMBLY 18" CONE

SIZE: A
DWG NUMBER: GL5-WX-01
SCALE: SHEET 1 OF 1

REV: 02