

GL-10

Integrally Geared Single Stage Blower



LONE STAR
TURBO

MODEL GL-10

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

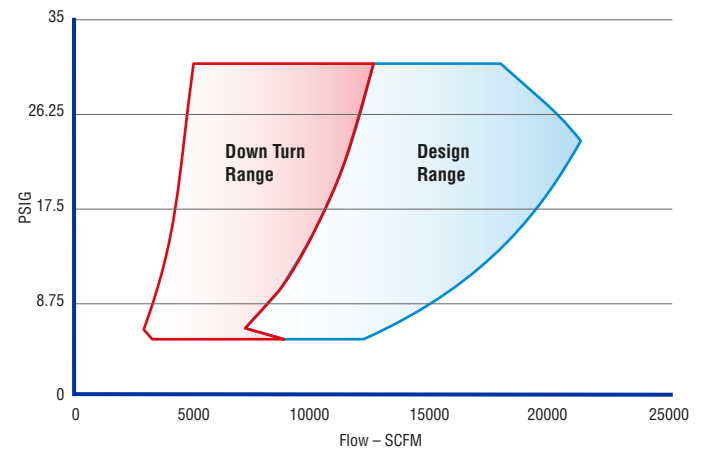
| | |
|--------------------------|---|
| Casing | Grey Iron GG25, Ductile, ASTM A536, A48 or Equal |
| Bearings | ANSI 5140 Steel, Babbitted, 40CR Alloy Casing |
| Impeller | AlCu2MgNi Alloy (annodized), 17-4PH, Titanium, Inconel |
| Inlet Guide Vanes | Stainless Steel 316 |
| Discharge Diffuser Vanes | 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

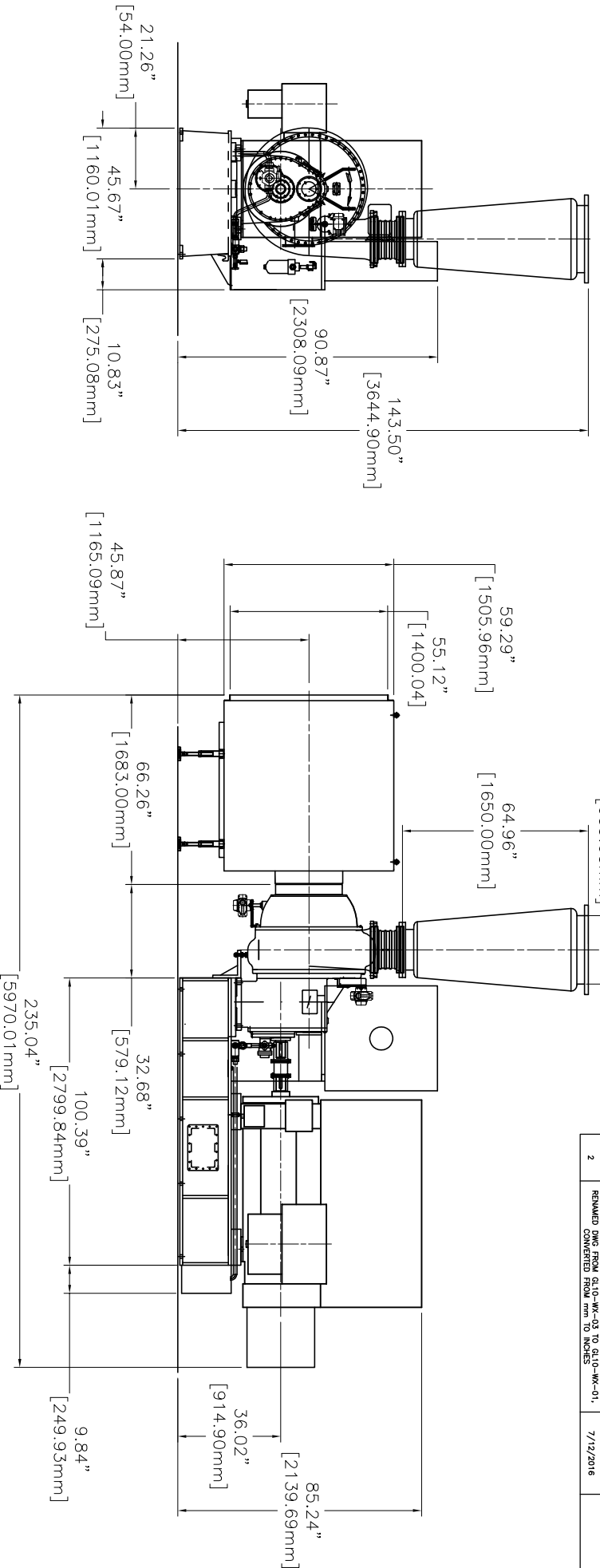


Control Options

| | |
|--------------------|--|
| 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 DIM FROM Q1.10-WX-03 TO S1.10-WX-01, CONVERTED FROM mm TO INCHES | 7/19/2016 | |



- NOTES:
1. BLOWER EQUIPPED WITH HIGH VOLTAGE MOTOR (SIEMENS).
 2. BLOWER INSTALLED BY EXPANSION BOLTS.

| DIMENSIONS & WEIGHTS BY MOTOR SIZE | | | | | |
|------------------------------------|--------|--------|-------|-------|--------------|
| MOTOR | "A" | "B" | "C" | "H" | WEIGHT (LBS) |
| 475HP-675HP | 100.39 | 235.04 | 72.05 | 85.24 | 14,837 |
| 750HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,058 |
| 800HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,499 |

THIRD ANGLE PROJECTION

| | |
|--|-------------|
| DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED. | |
| APPROVALS | 07/012/2016 |
| DRAWN | BW |
| CHECK | |
| ENGINEER | |
| MANUFACTURING | |
| CONTROL | |
| APPROVED | |

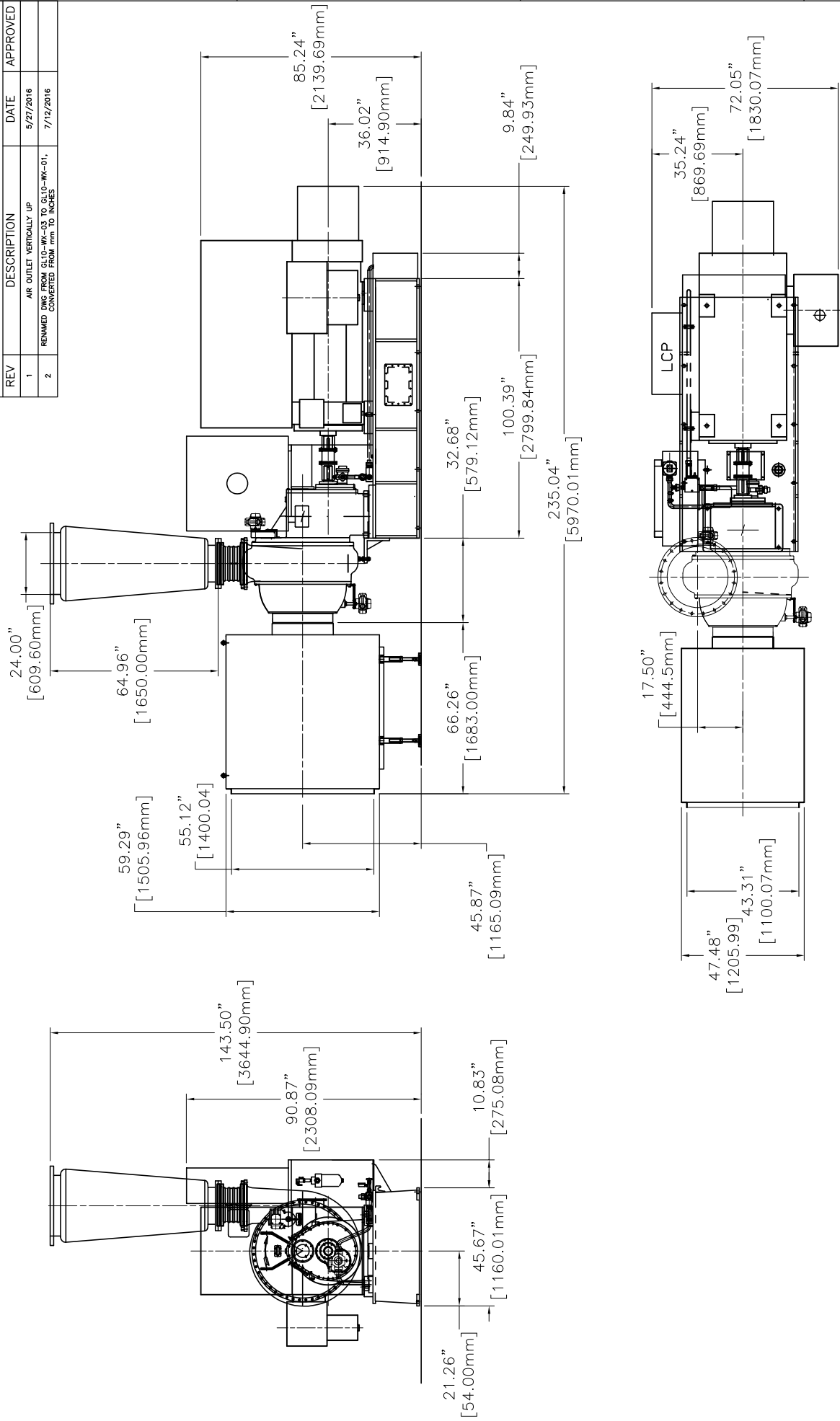
LONE STAR BLOWER

TITLE
GL-10 GEARED TURBO
GENERAL ASSEMBLY 24" CONE

SIZE DWG CODE DWG NUMBER
A - GL10-WX-01

SCALE SHEET 1 OF 1

| REVISION HISTORY | | | |
|------------------|--|-----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| 1 | AIR OUTLET VERTICALLY UP | 5/27/2016 | |
| 2 | REMOVED DIM FROM GL10-WX-03 TO GL10-WX-01, CONVERTED FROM MM TO INCHES | 7/12/2016 | |

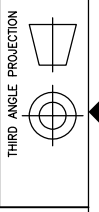


| | | | |
|---|----|-----------|-------------|
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| DRAWN | BW | TITLE | 07/012/2016 |
| CHECK | | | |
| ENGINEER | | | |
| MANUFACTURING | | | |
| CONTROL | | | |
| APPROVED | | | |

| | |
|---------------------------|--------------|
| LONE STAR BLOWER | |
| GL-10 GEARED TURBO | |
| GENERAL ASSEMBLY 24" CONE | |
| SIZE | CAGE CODE |
| A | GL10-WX-01 |
| SCALE | SHEET 1 OF 1 |

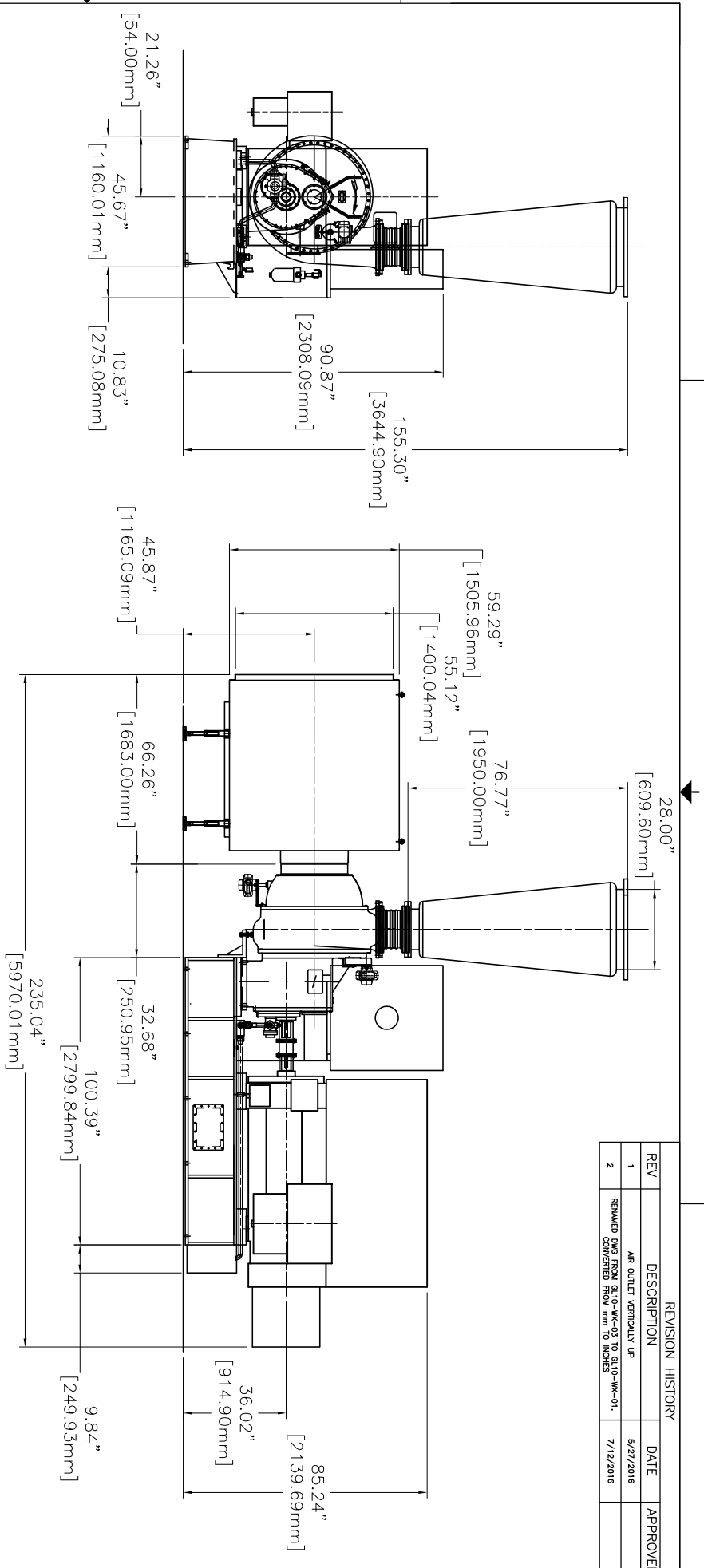
- NOTES:
- BLOWER EQUIPPED WITH HIGH VOLTAGE MOTOR (SIEMENS).
 - BLOWER INSTALLED BY EXPANSION BOLTS.

| MOTOR | "A" | "B" | "C" | "H" | WEIGHT (LBS) |
|-------------|--------|--------|-------|-------|--------------|
| 475HP-675HP | 100.39 | 235.04 | 72.05 | 85.24 | 14,837 |
| 700HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,058 |
| 850HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,499 |



REVISION HISTORY

| REV | DESCRIPTION | DATE | APPROVED |
|-----|--|-----------|----------|
| 1 | AIR OUTLET VERTICALLY UP | 5/27/2016 | |
| 2 | REMOVED DIM FROM Q110-WX-03 TO S110-WX-01, CONVERTED FROM mm TO INCHES | 7/19/2016 | |



- NOTES:
1. BLOWER EQUIPPED WITH HIGH VOLTAGE MOTOR (SIEMENS).
 2. BLOWER INSTALLED BY EXPANSION BOLTS.

| DIMENSIONS & WEIGHTS BY MOTOR SIZE | | | | | |
|------------------------------------|--------|--------|-------|-------|--------------|
| MOTOR | "A" | "B" | "C" | "H" | WEIGHT (LBS) |
| 475HP-675HP | 100.39 | 235.04 | 72.05 | 85.24 | 14,837 |
| 750HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,058 |
| 850HP | 100.39 | 235.04 | 72.05 | 85.24 | 15,499 |

THIRD ANGLE PROJECTION

APPROVALS

| | | |
|---------------|----|-------------|
| DRAWN | BW | 07/012/2016 |
| CHECK | | |
| ENGINEER | | |
| MANUFACTURING | | |
| CONTROL | | |
| APPROVED | | |

LONE STAR BLOWER

TITLE

GL-10 GEARED TURBO
GENERAL ASSEMBLY 28" CONE

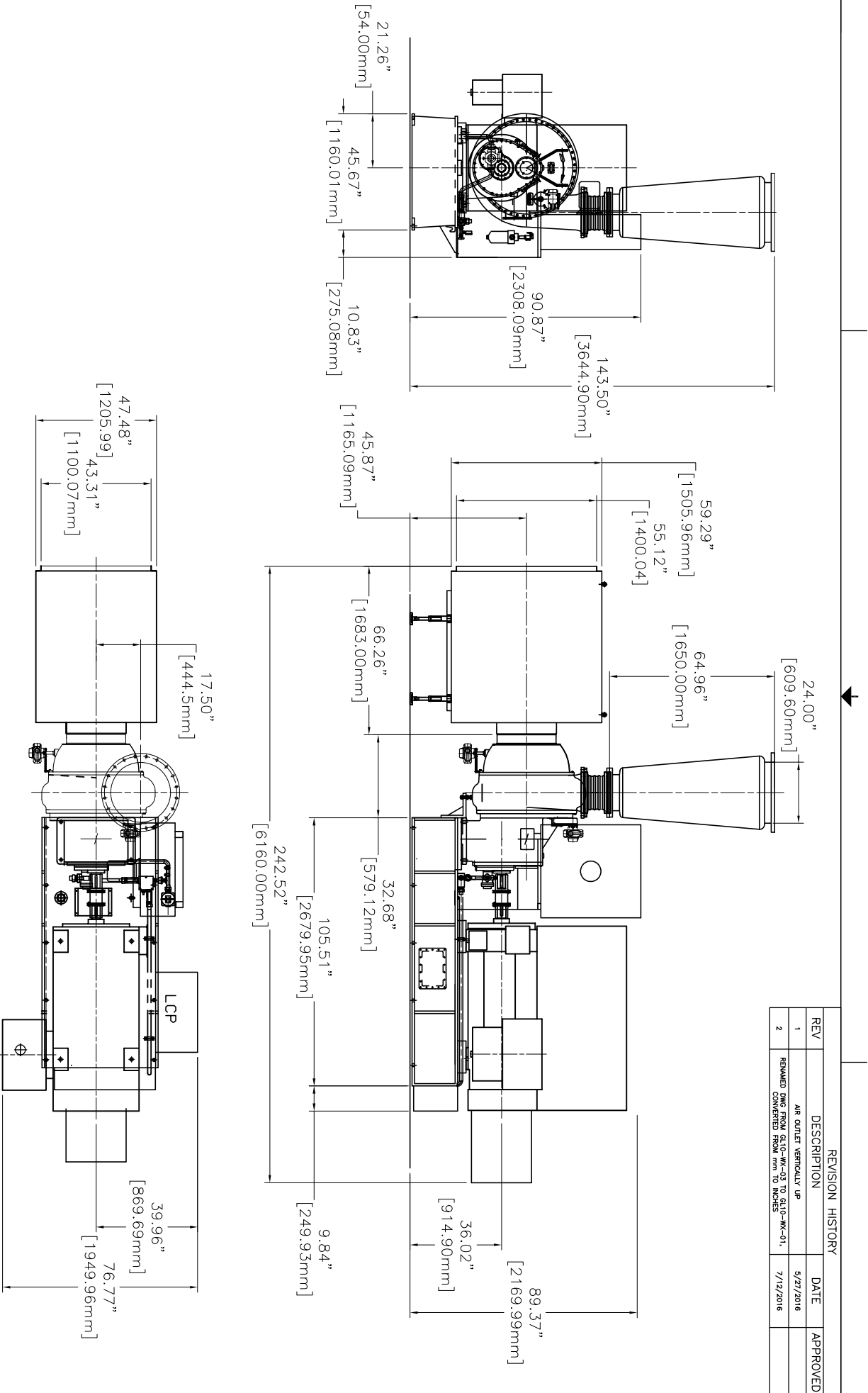
SIZE DWG CODE DWG NUMBER
A - GL10-WX-01

SCALE SHEET 1 OF 1

DRAWING IS FOR REFERENCE ONLY
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REV 02

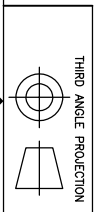
| REVISION HISTORY | | | |
|------------------|--|-----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| 1 | AIR OUTLET VERTICALLY UP | 5/27/2016 | |
| 2 | REMOVED DIM FROM Q10-WX-03 TO S10-WX-01, CONVERTED FROM mm TO INCHES | 7/19/2016 | |



NOTES:
 1. BLOWER EQUIPPED WITH HIGH VOLTAGE MOTOR (SIEMENS).
 2. BLOWER INSTALLED BY EXPANSION BOLTS.

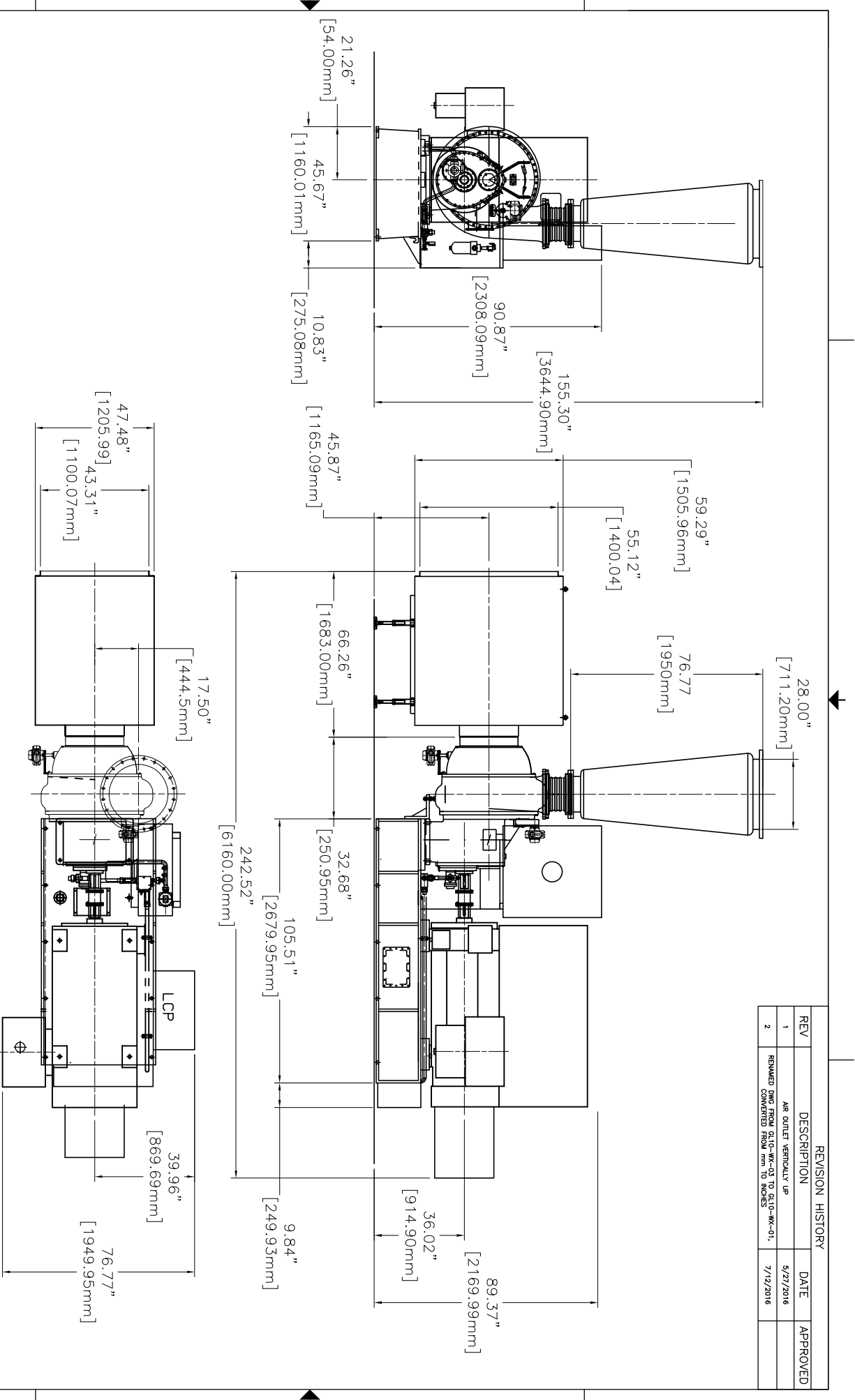
DIMENSIONS & WEIGHTS BY MOTOR SIZE

| MOTOR | "A" | "B" | "C" | "H" | WEIGHT (LBS) |
|--------|--------|--------|-------|-------|--------------|
| 950HP | 105.51 | 242.52 | 76.77 | 89.37 | 16,821 |
| 1000HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,042 |
| 1200HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,372 |
| 1350HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,593 |



| | | | | | |
|--|----|-------------|--|---------------------------|--------------|
| DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED. | | APPROVALS | | TITLE | |
| DRAWN | BW | 07/012/2016 | | LONE STAR BLOWER | |
| CHECK | | | | GL-10 GEARED TURBO | |
| ENGINEER | | | | GENERAL ASSEMBLY 24" CONE | |
| MANUFACTURING | | | | SIZE | DWG NUMBER |
| CONTROL | | | | A | GL10-WX-01 |
| APPROVED | | | | SCALE | SHEET 1 OF 1 |
| | | | | | REV 02 |

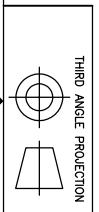
| REVISION HISTORY | | | |
|------------------|--|-----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| 1 | AIR OUTLET VERTICALLY UP | 5/27/2016 | |
| 2 | REVISED DIM FROM 0.125 INCH TO 0.125 INCH CONVERTED FROM MM TO INCHES | 7/19/2016 | |



- NOTES:
 1. BLOWER EQUIPPED WITH HIGH VOLTAGE MOTOR (SIEMENS).
 2. BLOWER INSTALLED BY EXPANSION BOLTS.

DIMENSIONS & WEIGHTS BY MOTOR SIZE

| MOTOR | "A" | "B" | "C" | "H" | WEIGHT (LBS) |
|--------|--------|--------|-------|-------|--------------|
| 950HP | 105.51 | 242.52 | 76.77 | 89.37 | 16,821 |
| 1075HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,042 |
| 1200HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,372 |
| 1350HP | 105.51 | 242.52 | 76.77 | 89.37 | 17,593 |



| | | | | | |
|--|----|-------------|--|----------|---|
| DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS RELEASED. | | APPROVALS | | | LONE STAR BLOWER TITLE GL-10 GEARED TURBO GENERAL ASSEMBLY 28" CONE |
| DRAWN | BW | 07/012/2016 | | | |
| CHECK | | | | ENGINEER | |
| MANUFACTURING | | | | CONTROL | |
| APPROVED | | | | SCALE | |

SIZE TAG CODE: A
 DWG NUMBER: GL10-WX-01
 SHEET 1 OF 1