

GC-250

Integrally Geared Centrifugal Compressor



LONE STAR
TURBO

MODEL GC-250

Standard Specifications

Gas	Air, CO ₂ , Biogas, Steam, H ₂ S, Fuel Gas, N ₂ , LNG, Custom
Flow Range	100% to 65% of Rated Flow*
Pressure Range	40 to 360 PSI / 3 to 25 bar, model specific
Maximum Case Pressure	500 PSIG / 35 bar
Stages	1 to 4 Stage Compression
Drive Type	Direct Coupled
Power Driver Options	Electric Motor, Steam Turbine, Combustion Engine
Gearbox	Helical Gear Set
Cooling Lubricant	Shell and Tube - Water Cooled
Cooling Intercooling	Shell and Tube - Water Cooled
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

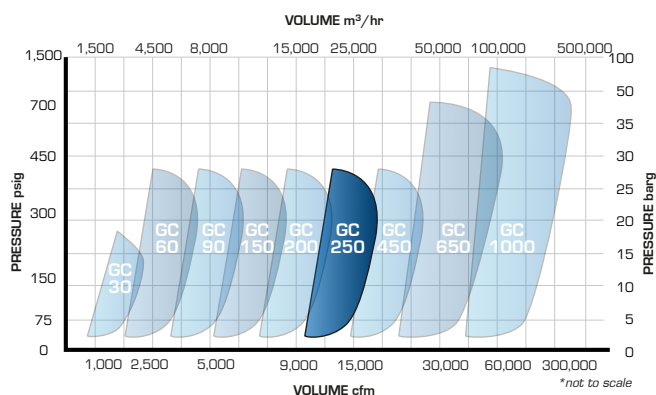
Casing	Grey Iron FC25, GG25, Ductile, ASTM A536, A48 or Equal
Bearings	SCM440, ANSI 5140 Steel, Babbited, 40CR Alloy Casing
Impeller	17-4PH SS, Titanium, Inconel
Inlet Guide Vanes	Stainless Steel 304
Discharge Diffuser Vanes	Aluminum Alloy or Stainless Steel 304
Gears	AISI 4140, Cr-Mo Alloy, Ni-Cr-Mo Alloy to AGMA 13
Shaft	AISI 4140, Steel 10CrNiMo
Seals Air	Aluminum Alloy
Lubricant Cooler	Copper (C1220T), Cu + Ni(C7060T), Stainless Steel ST304
Intercooler, Aftercooler	Ductile Housing with Copper (C1220T) Coils, Stainless Steel ST304
Blower Base Skid	(Optional) ASTM A36, SS440 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 2151:2005
Performance	ASME PTC-10, 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 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



* Information is approximate and can change without notice
* Air Performance Based on 1 Atm, 68F/20C, 36% RH and 3550 rpm

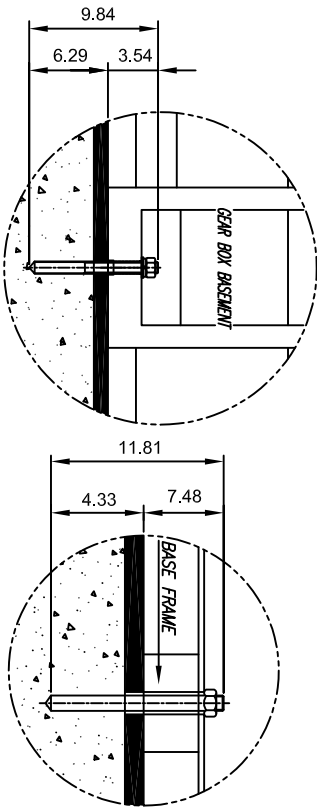
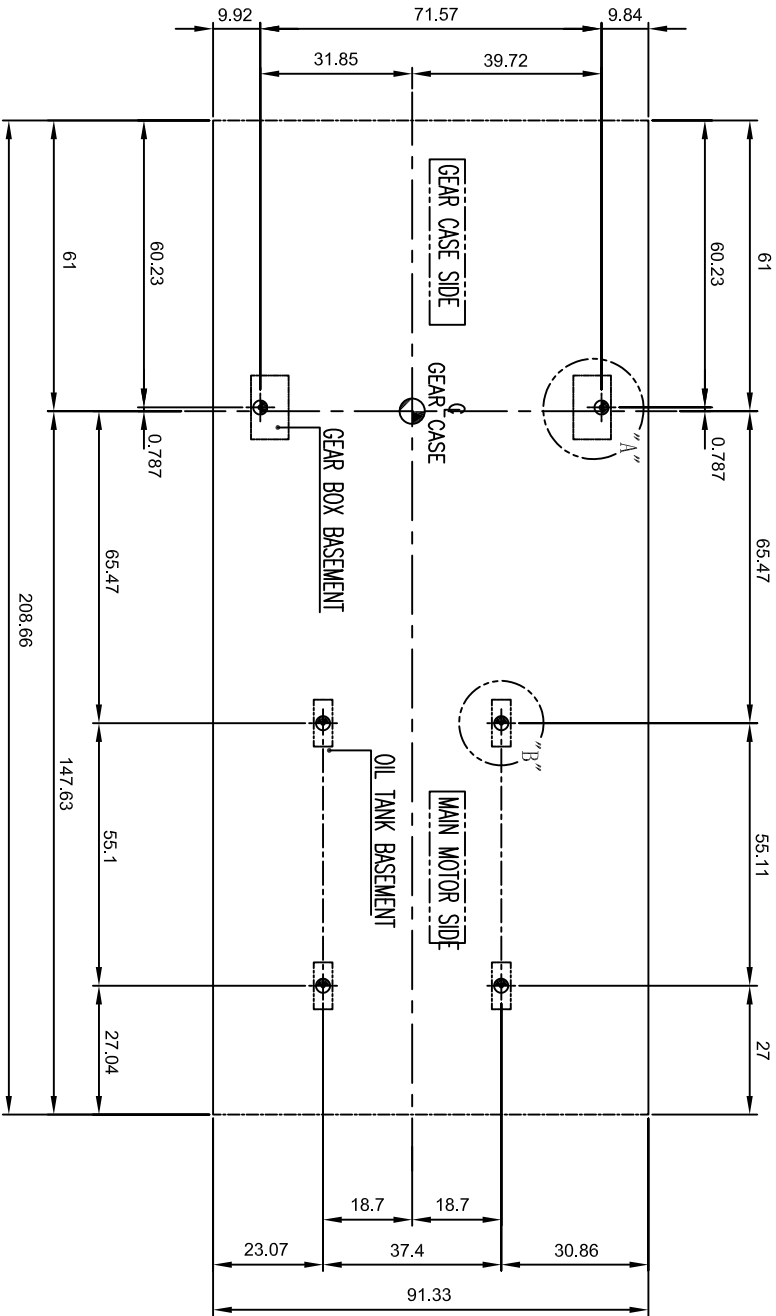
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REVISION HISTORY			
REFERENCE	DDC	REV	DESCRIPTION
DATE	APPROVED		

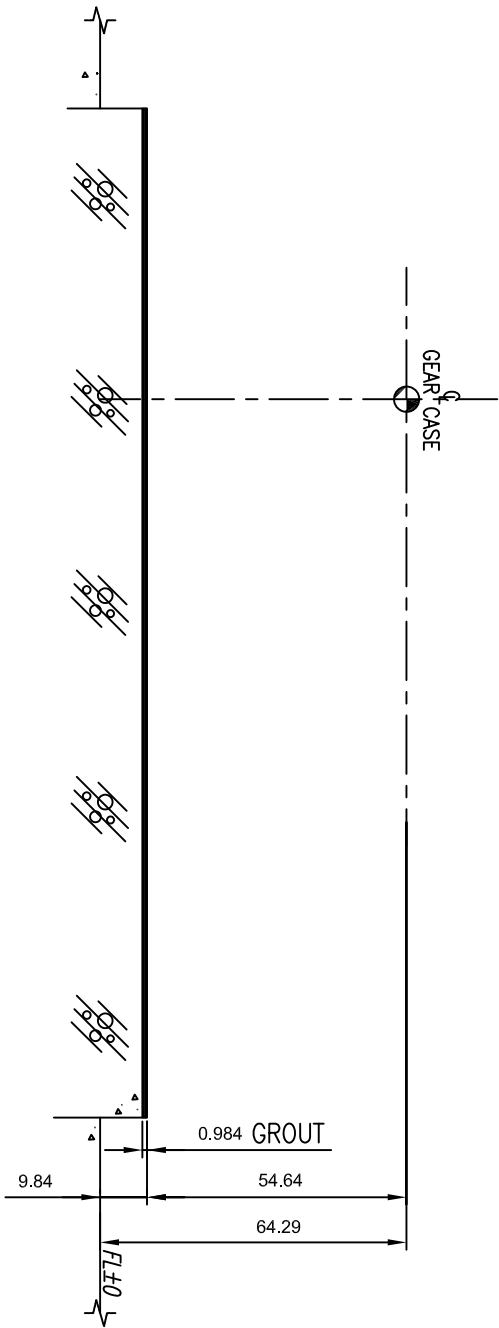


ANCHOR BOLT LIST

SYMBOL	ANCHOR BOLT SIZE	QTY	ANCHOR BOLT TYPE	REMARKS
	3/4" x 250L	2EA	"SFT" ANCHOR	
	3/4" x 300L	4EA	"SFT" ANCHOR	

LOAD/GIN DATA

STATIC LOAD [kg]	13,000
COMPRESSOR	
MAIN MOTOR	
APPROX. TOTAL WEIGHT	



PART #	MATERIAL SPECIFICATION	WEIGHT (lb)
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4

3

2

1

INTERPRET ALL GEOMETRIC DIMENSIONING AND TOLERANCING TO ASME Y14.5

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

STANDARD TOLERANCES
X ±.015
XX ±.010
XXX ±.005
X/X ±1/16
ANGLES ±1°

REMOVE BURRS AND BREAK ALL SHARP EDGES
MACHINED SURFACES

DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS APPROVED

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LONE STAR BLOWER. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF LONE STAR BLOWER IS PROHIBITED.

DRAWN BY
DATE

CHECKED BY
DATE

APPROVED BY
DATE

CHORU250 CENTRIFUGAL COMPRESOR FOUNDATION

SIZE B
SCALE: ##

DWG. NO. *
DD NOT SCALE

REV 0
SHEET 1 OF 1

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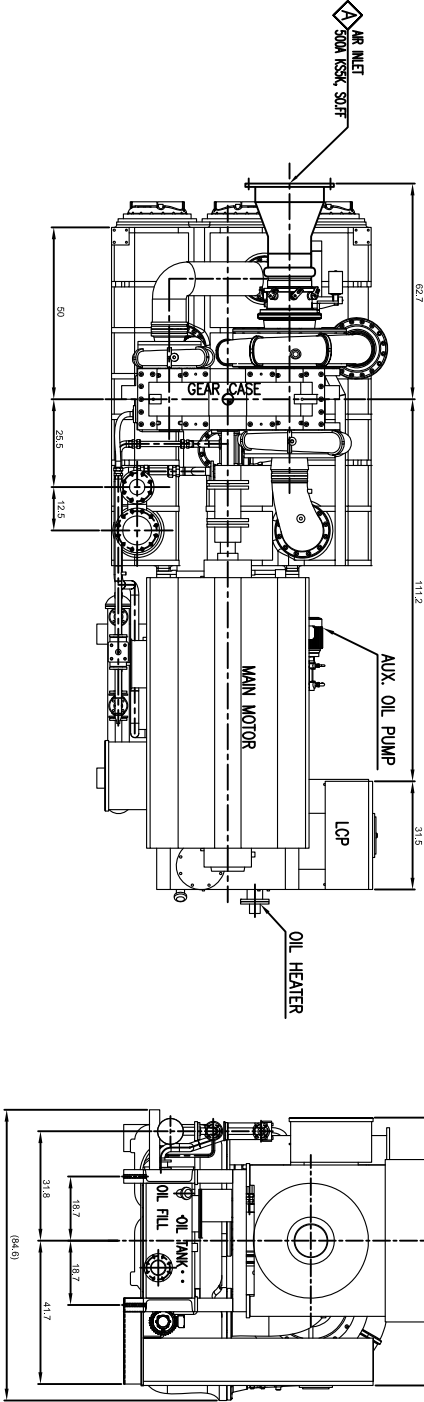
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NOZZLE & CONNECTION

No.	DESCRIPTION	SIZE	UNITS
1	AIR SECTION	20" ANSI Flange	IN
2	AIR OUTLET	8" ANSI Flange	IN
3	1st INTERCOOLER C/W (OUT)	3" ANSI Flange	IN
4	1st INTERCOOLER C/W (OUT)	3" ANSI Flange	IN
5	2nd INTERCOOLER C/W (IN)	3" ANSI Flange	IN
6	2nd INTERCOOLER C/W (OUT)	3" ANSI Flange	IN
7	3rd INTERCOOLER C/W (IN)	3" ANSI Flange	IN
8	3rd INTERCOOLER C/W (OUT)	3" ANSI Flange	IN
9	OIL COOLER C/W (IN)	1-1/2" NPT	IN
10	OIL COOLER C/W (OUT)	1-1/2" NPT	IN
11	OIL TANK DRAIN LINE	1/2" NPT, BALL VALVE	IN
12	COOLER DRAIN LINE	1/2" NPT, BALL VALVE	IN



B

B

A

A

PART #	MATERIAL SPECIFICATION	WEIGHT (lb)
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4

3

2

1

REVISION HISTORY			
REFERENCE DOC	REV	DESCRIPTION	DATE

INTERPRET ALL GEOMETRIC DIMENSIONING AND TOLERANCING TO ASME Y14.5		DRAWING IS FOR REFERENCE ONLY UNLESS SPECIFIED AS APPROVED	
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STANDARD TOLERANCES		DRAWN BY	DATE
.X ± .015		CHECKED BY	DATE
.XX ± .010		APPROVED BY	DATE
.XXX ± .005		THIRD ANGLE PROJECTION	
X/X ± 1/16			
ANGLES ± 1°			
REMOVE BURRS AND BREAK ALL SHARP EDGES			
MACHINED SURFACES			
		SCALE: #:#	DD NOT SCALE
			SHEET 1 OF 1



CHORU250 CENTRIFUGAL COMPRESOR GENERAL LAYOUT

SIZE	DWG. NO.	REV
B	*	0

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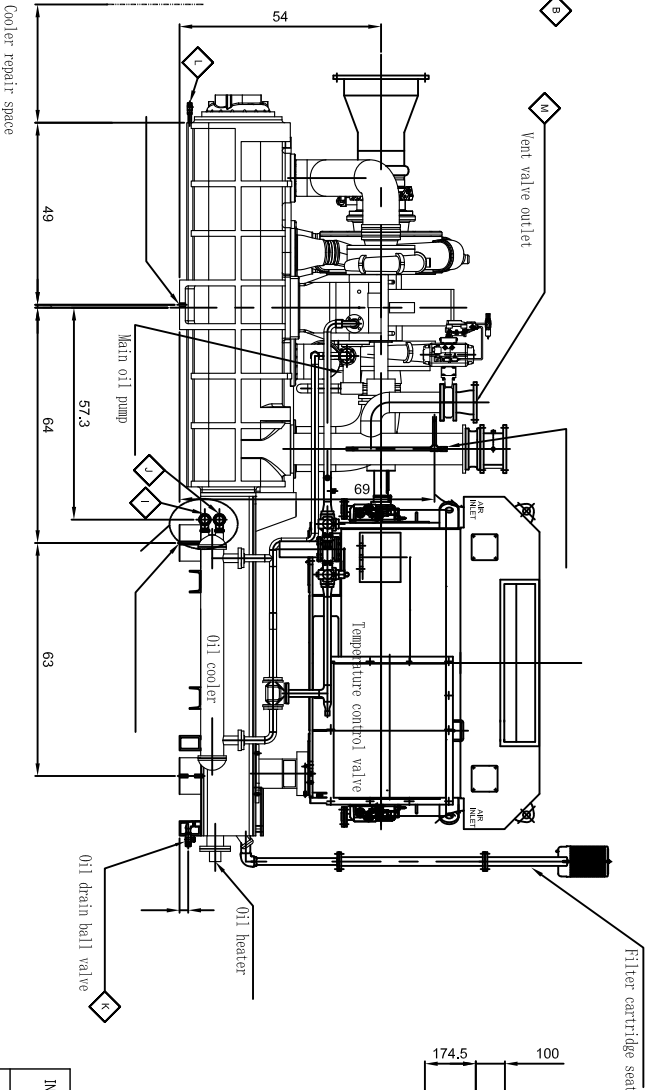
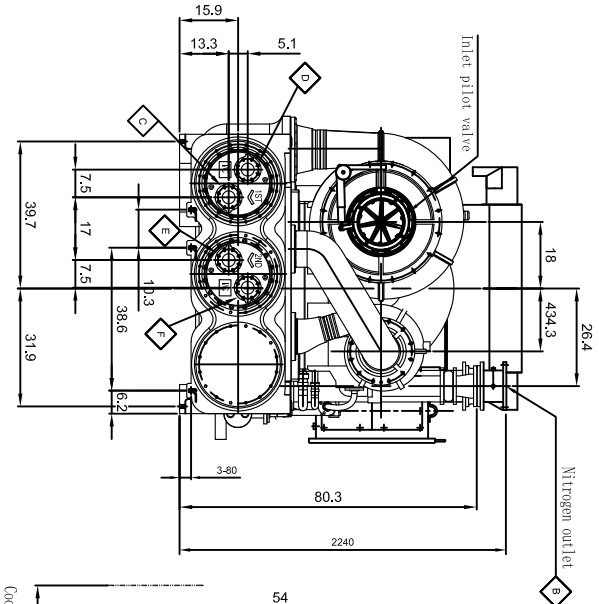
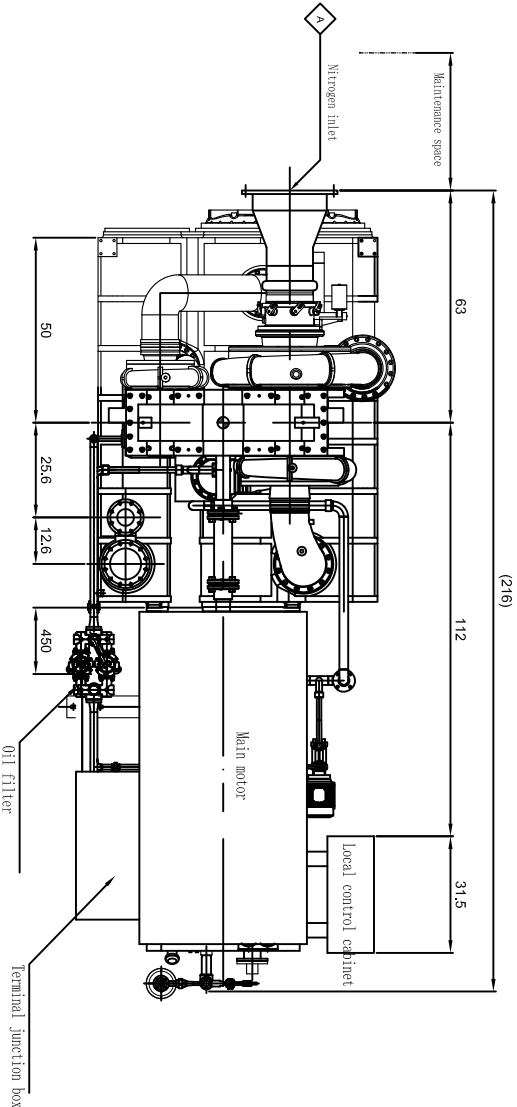
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1

NOZZLE & CONNECTION

No.	DESCRIPTION	SIZE	MARK
1	N2 SECTION	20" ANSI Flange	⬢
2	N2 OUTLET	8" ANSI Flange	⬢
3	1st INTERCOOLER C/W (N)	3" ANSI Flange	⬢
4	1st INTERCOOLER C/W (O)	3" ANSI Flange	⬢
5	2nd INTERCOOLER C/W (N)	3" ANSI Flange	⬢
6	2nd INTERCOOLER C/W (O)	3" ANSI Flange	⬢
7	OIL COOLER C/W (N)	1-1/2" NPT	⬢
8	OIL COOLER C/W (O)	1-1/2" NPT	⬢
9	OIL PANE MAIN LINE	1-1/2" NPT, Ball Valve	⬢
10	COOLER DRAIN LINE	1/2" NPT, Ball Valve	⬢
11	FORCE AIR OUTLET	6" ANSI Flange	⬢



REVISION HISTORY			
REFERENCE	DDC	REV	DATE

PART #	MATERIAL SPECIFICATION	WEIGHT (lb)

INTERPRET ALL GEOMETRIC DIMENSIONING AND TOLERANCING TO ASME Y14.5

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

STANDARD TOLERANCES
X ±.015
XX ±.010
XXX ±.005
X/XX ±1/16
ANGLES ± 1°

REMOVE BURRS AND BREAK ALL SHARP EDGES
MACHINED SURFACES

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DRAWN BY
CHECKED BY
APPROVED BY

DATE
DATE
DATE

SIZE
B

SCALE: #:#

DWG. NO.
18041MA01

REV
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GENERAL LAYOUT
CHORUS250

LONE STAR

DD NOT SCALE

SHEET 1 OF 1

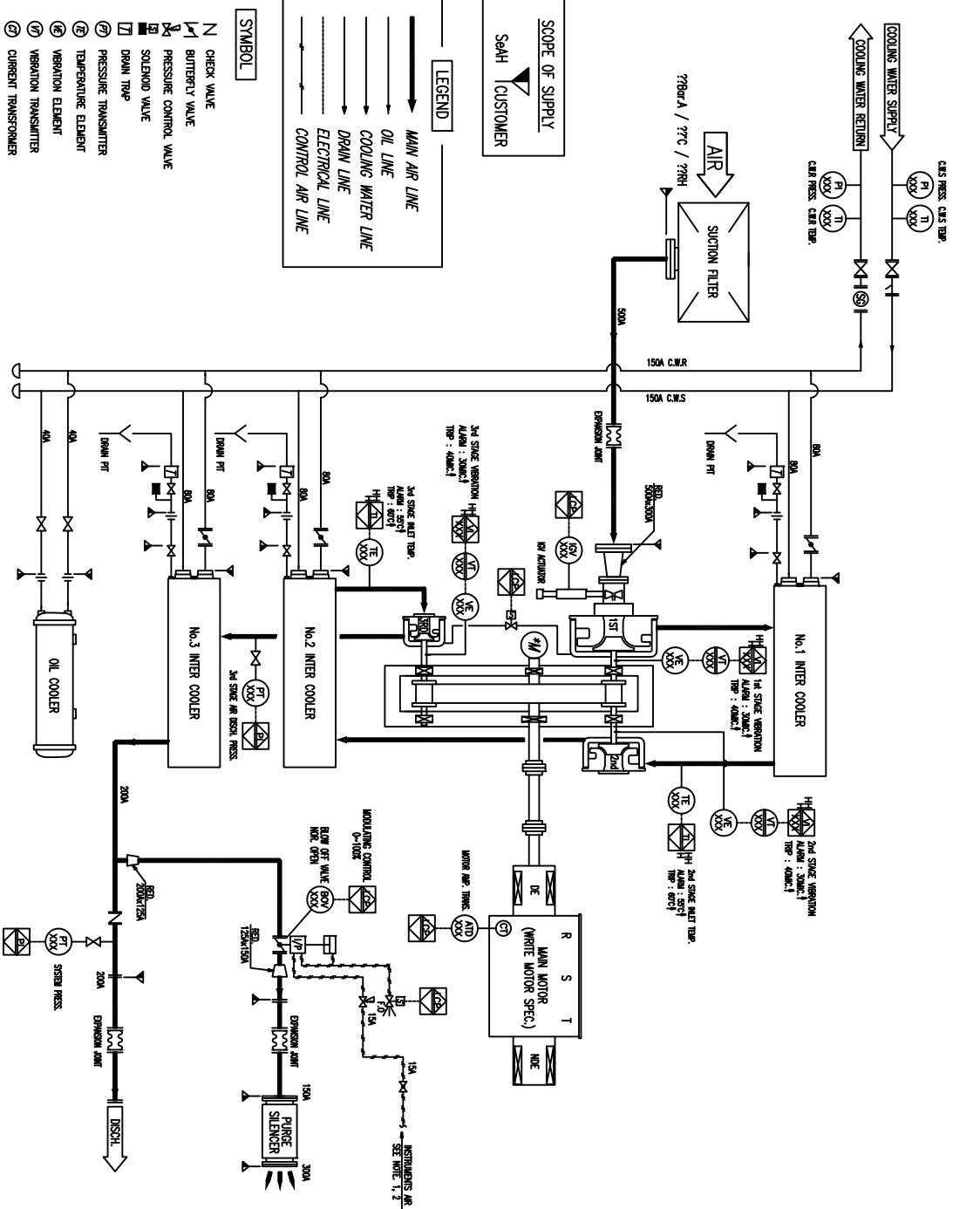
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REVISION HISTORY			
REFERENCE DOC	REV	DESCRIPTION	DATE
			APPROVED



- NOTE
1. INSTRUMENTS AIR IS REQUIRED TO 100% CLEAN AND DRY AIR.
 2. INSTRUMENTS AIR SUPPLY PRESSURE : ABOVE 5.0kg/cm²G

PART #	MATERIAL SPECIFICATION	WEIGHT (lb)
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CHORU250 CENTRIFUGAL COMPRESSOR/
PIPING & INSTRUMENTS DIAGRAM #1
(AIR, WATER FLOW)

APPROVED BY		DATE	SIZE B	DWG. NO. *	REV 0
THIRD ANGLE PROJECTION					
					
		SCALE: #:#	DO NOT SCALE	SHEET 1 OF 1	

