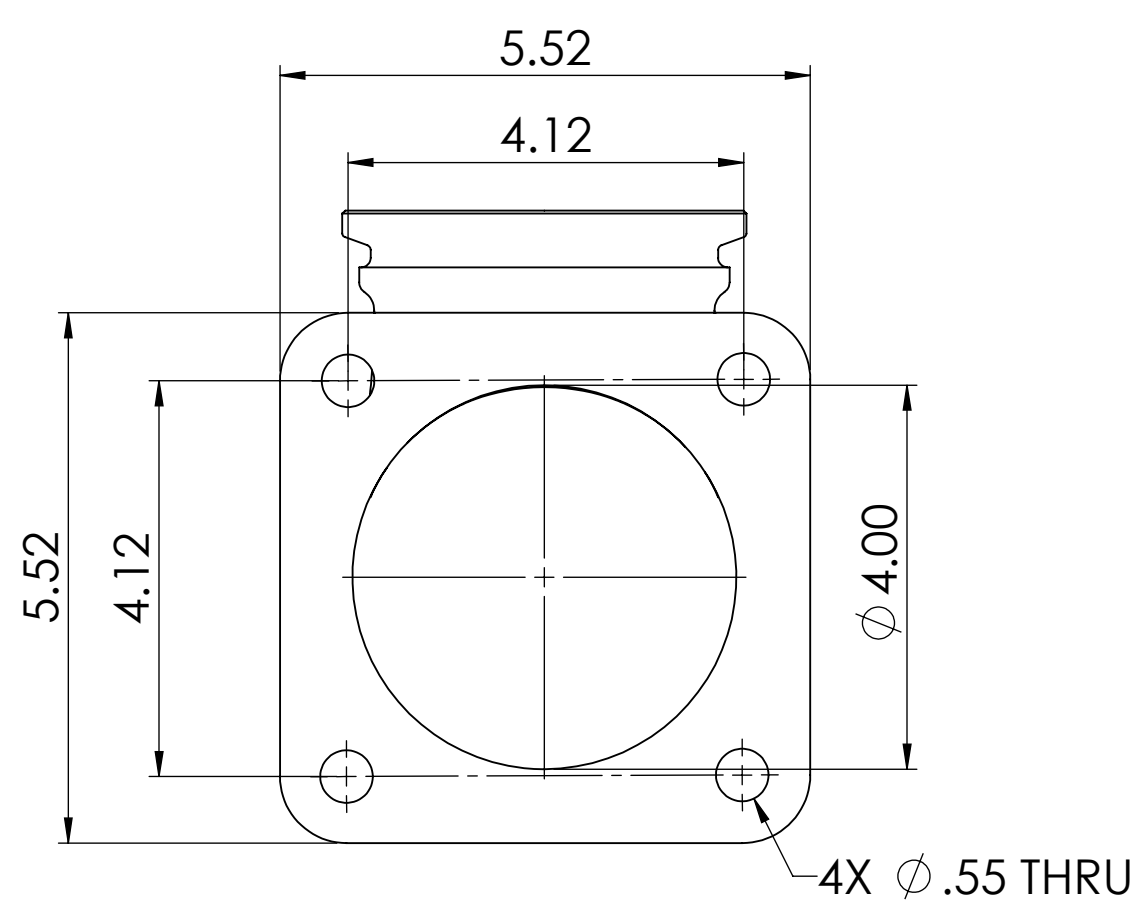
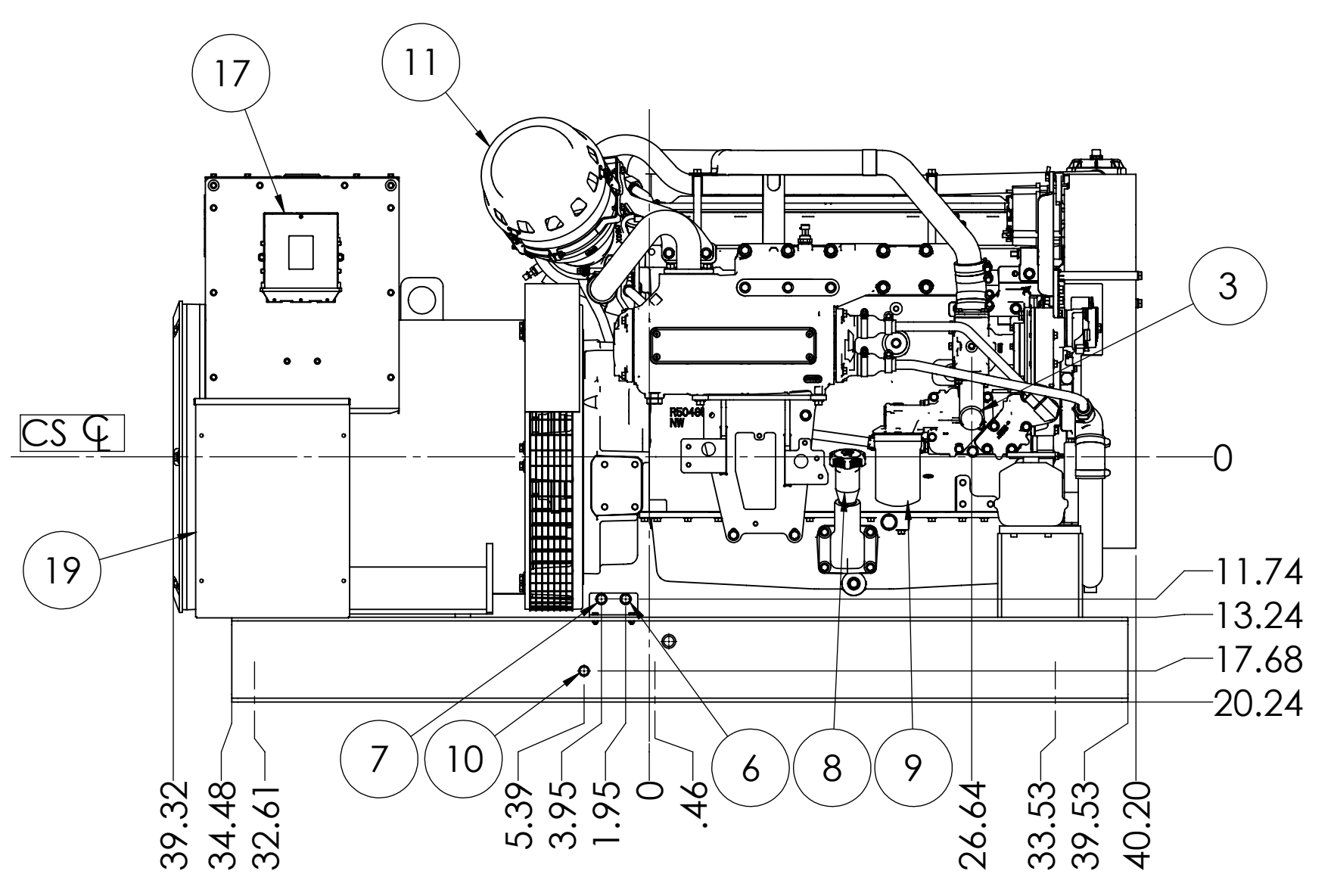


PLAN

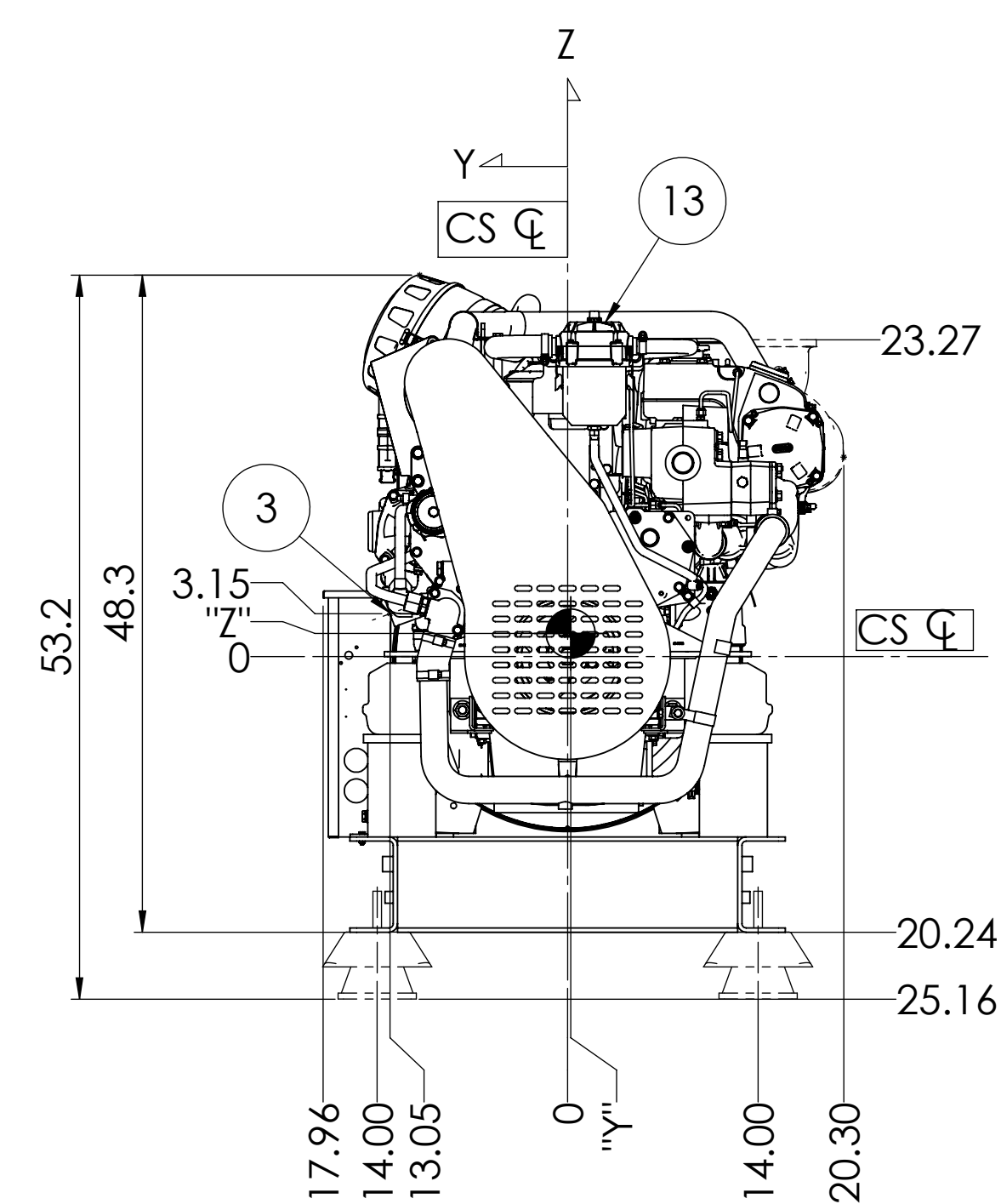


OPTIONAL DRY EXHAUST FLANGE DETAIL
SCALE 1:4

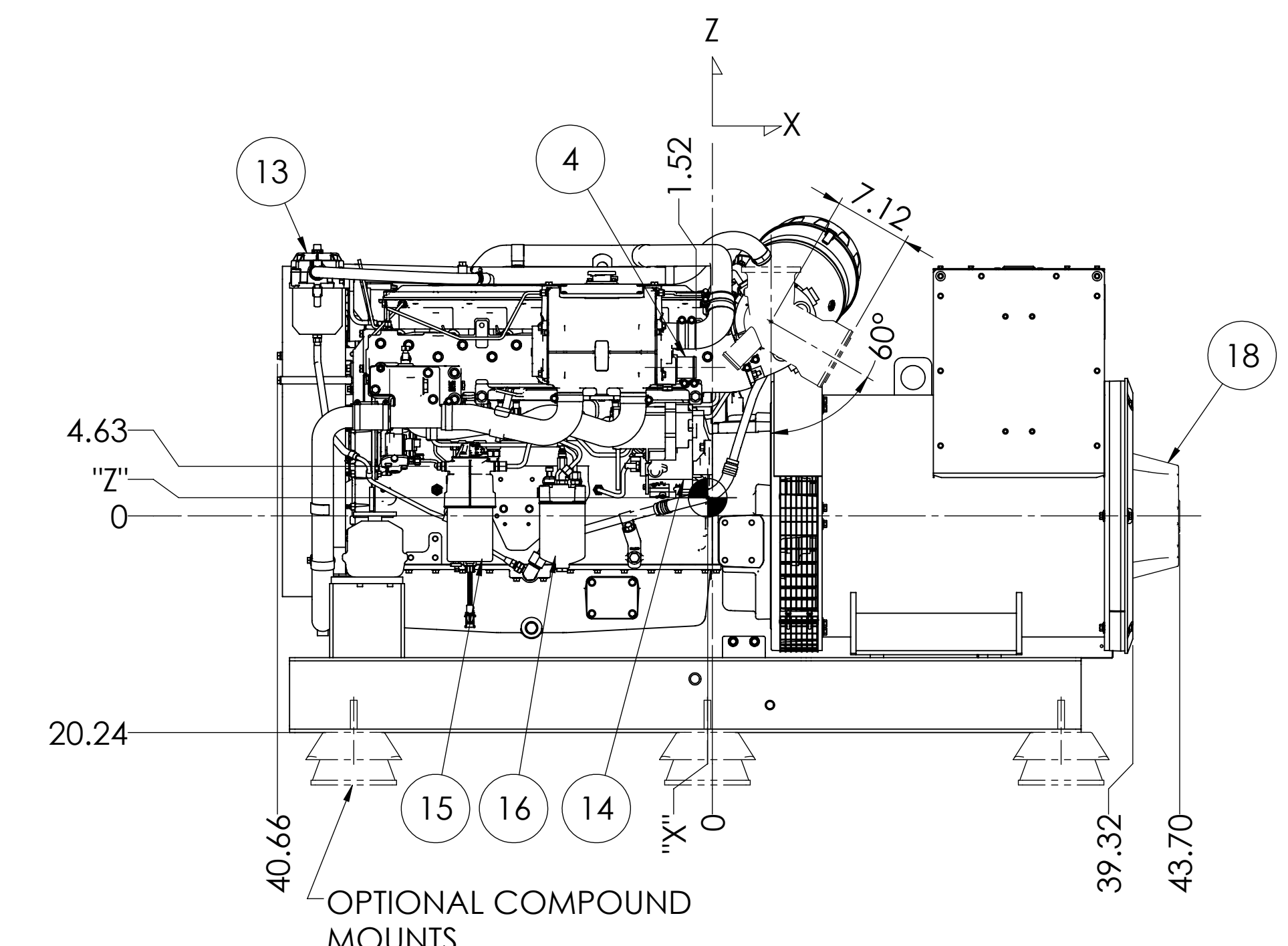
ITEM	DESCRIPTION
1	EXPANSION TANK
2	COOLANT FILL
3	SEAWATER INLET - Ø2.0 H.B.
4	SEAWATER OUTLET (DRY EXHAUST) - Ø2.0 H.B.
5	OPTIONAL WET EXHAUST ELBOW - Ø6.0 H.B.
6	FUEL SUPPLY - 3/8 NPT
7	FUEL RETURN - 3/8 NPT
8	CRANKCASE OIL FILL/DIPSTICK
9	CRANKCASE OIL FILTER
10	ENGINE OIL DRAIN - 3/8 NPT
11	AIR INLET FILTER
12	OPTIONAL DRY EXHAUST ELBOW - SEE DETAIL
13	CLOSED CRANKCASE VENTILATION SYSTEM
14	ELECTRIC STARTER
15	PRIMARY FUEL FILTER
16	FINAL FUEL FILTER
17	ENGINE CONTROL UNIT
18	PMG
19	D.C. JUNCTION BOX



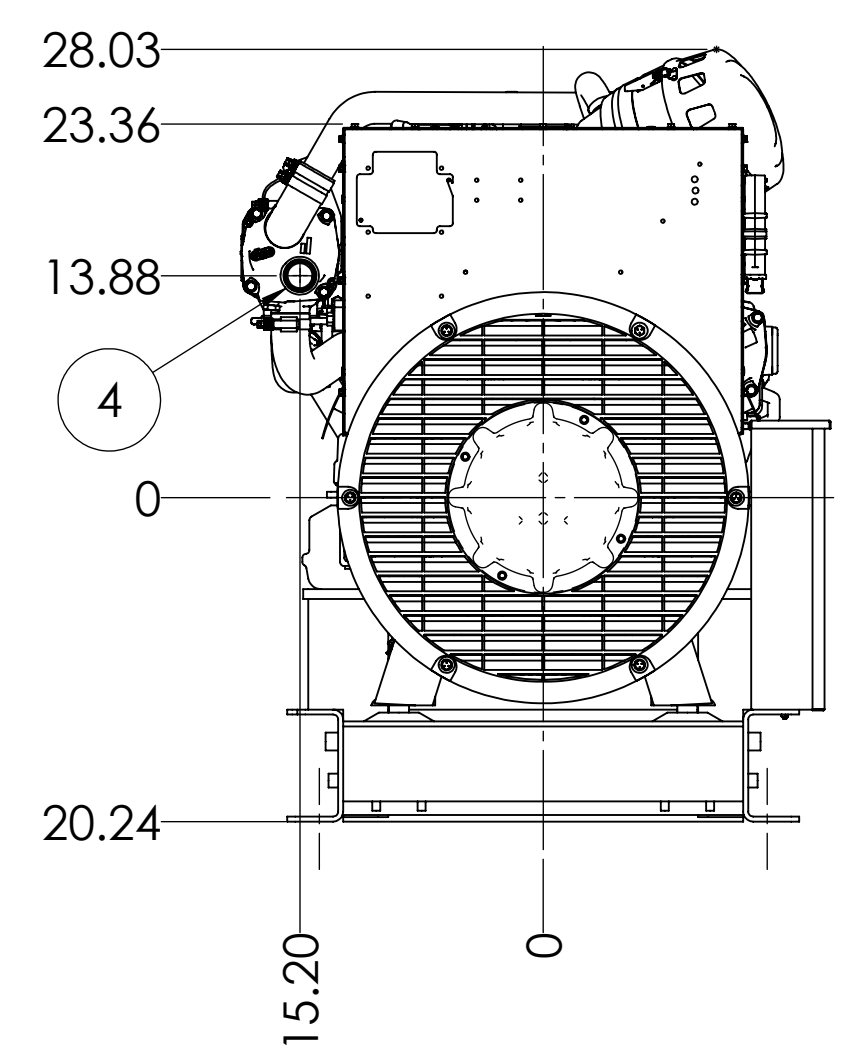
LEFT SIDE



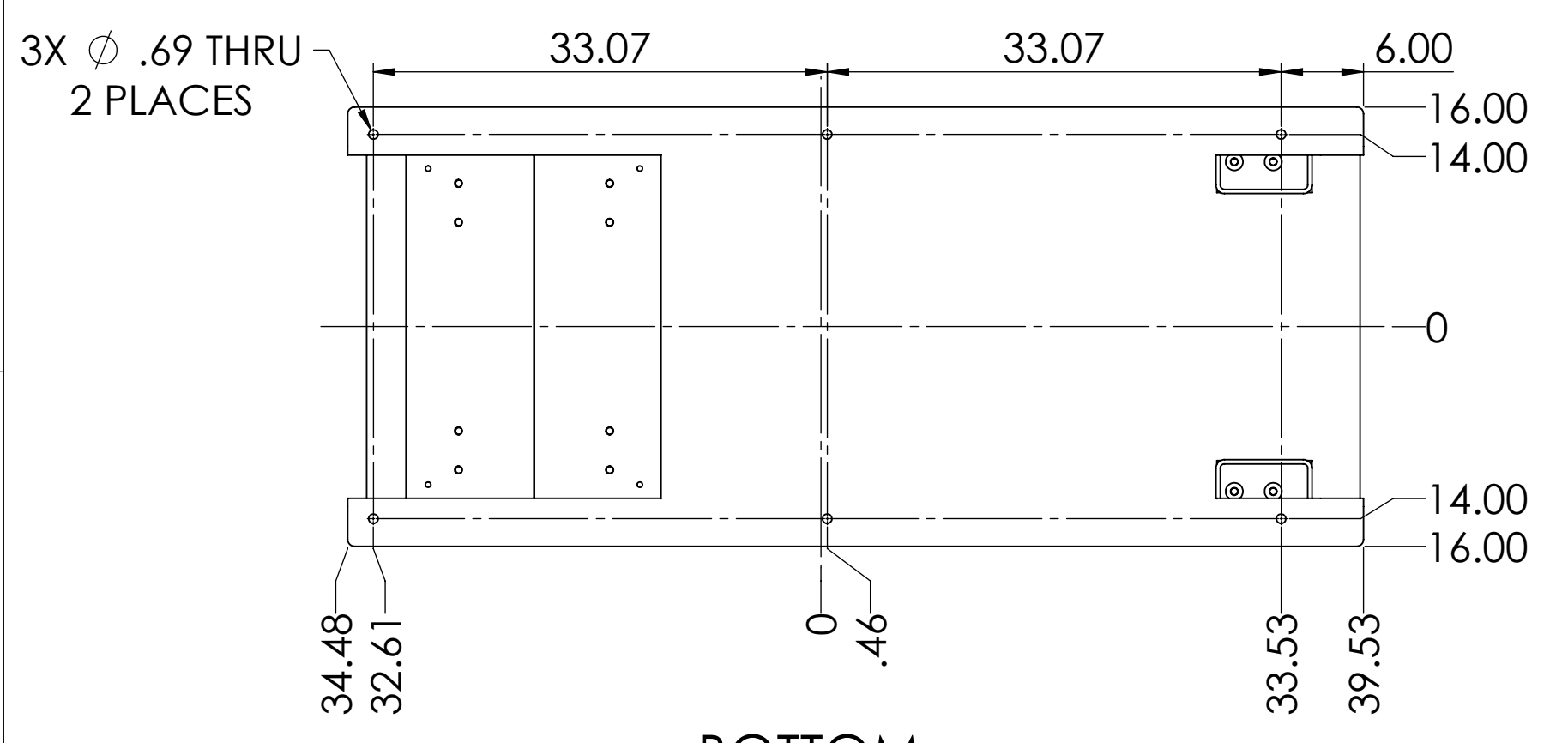
FRONT



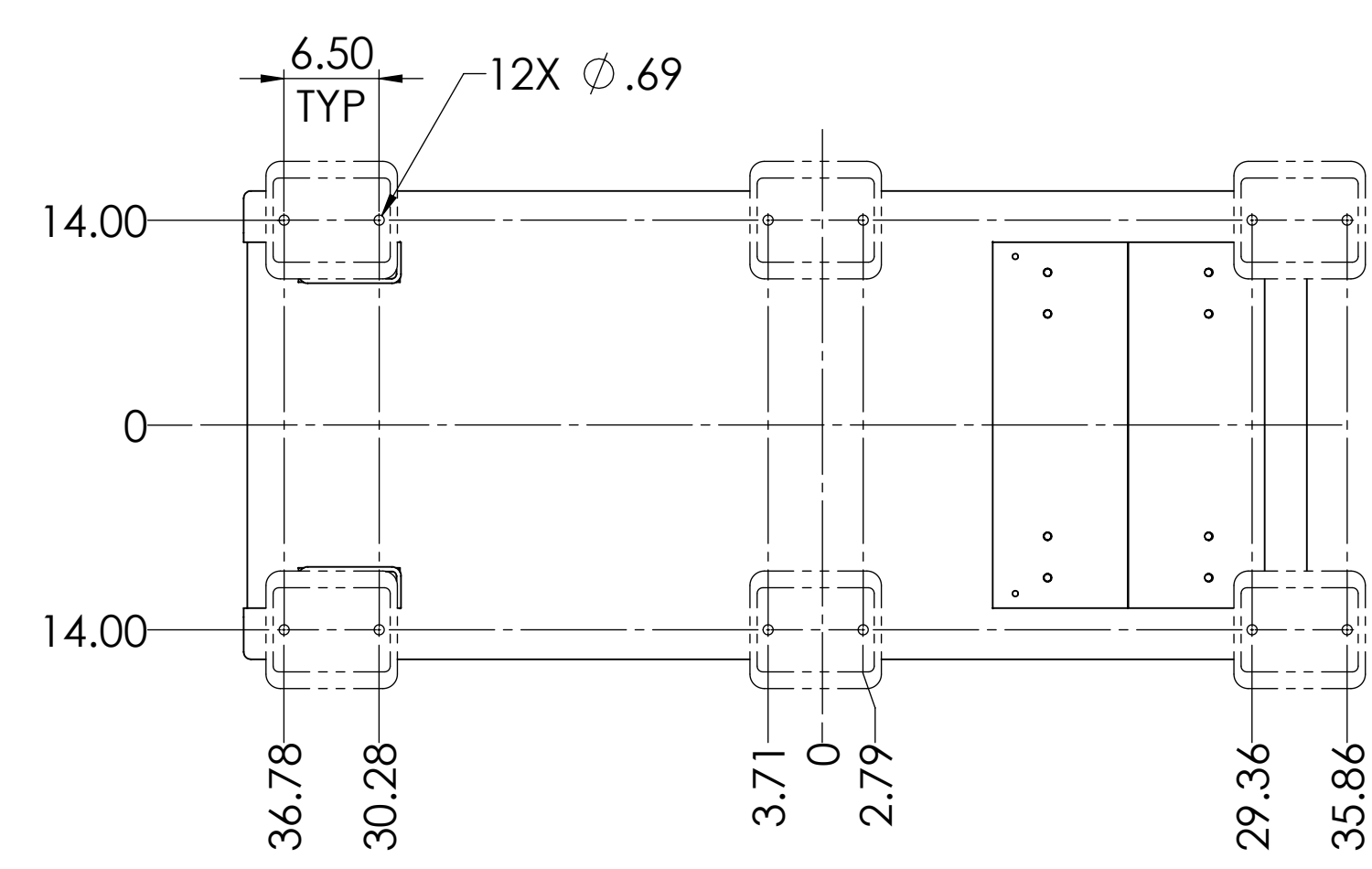
RIGHT SIDE



REAR



BOTTOM

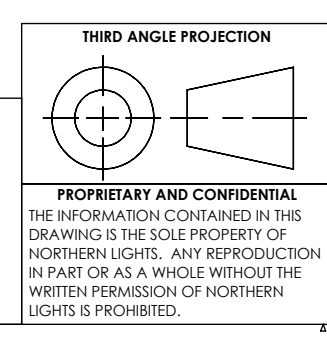


OPTIONAL COMPOUND MOUNTS

EST. WEIGHT AND C.G.				
MODEL	WEIGHT	C.G.		
	LBS.	X	Y	Z
M150A13.11 (150kW/60Hz)	3495	-.4	-.2	1.7
M150A13.51 (125kW/50Hz)	3640	.7	-.2	1.6

NOTE: WEIGHTS INCLUDE OIL, NO COOLANT.

THE DIMENSIONS ON THIS DRAWING ARE SUBJECT TO CHANGE. PLEASE CONTACT NLI TO BE SURE YOU HAVE THE MOST CURRENT REVISION.



UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES		MG	05/15/17
TOLERANCES:		CHECKED	TAH
ANGULAR: 0.5°		ENG APPR.	
HORIZONTAL: 0.1°		MEG APPR.	
VERTICAL: 0.1°		G.A.	
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5M		COMMENTS:	
MATERIAL:			
FINISH:			
DO NOT SCALE			

NORTHERN LIGHTS

4420 14th AVE. N.W.
Seattle, WA 98107
(206) 789-3880
www.northern-lights.com

TITLE: **INSTALLATION DIMENSIONS**
M150A13 HEAT EXCHANGER COOLED

SIZE	PART NO.	DWG. NO.	REV
D		D-5014	-

SCALE: 1:12 WEIGHT: LBS. SHEET 1 OF 1

D-5014