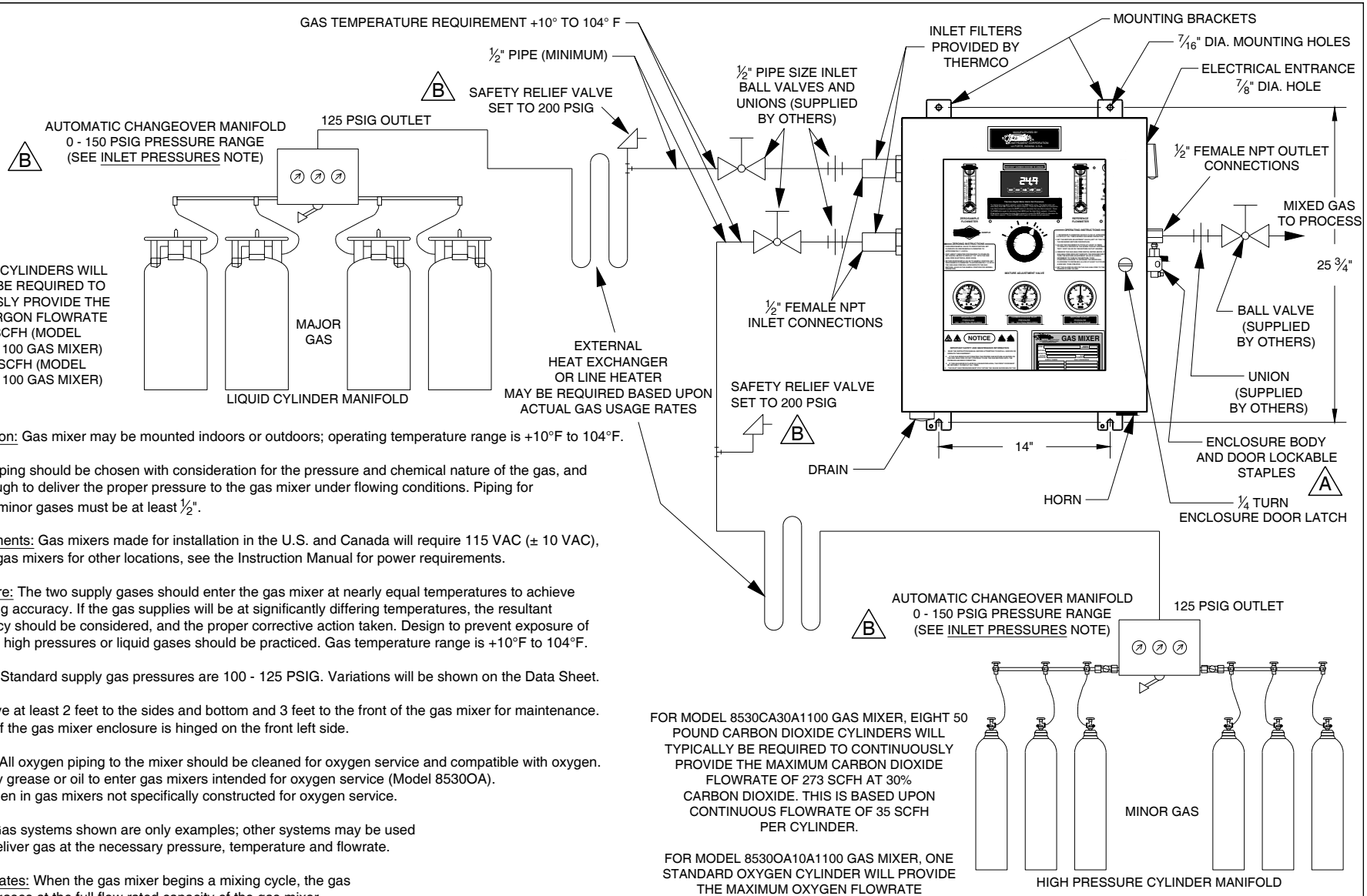

Mounting Location: Gas mixer may be mounted indoors or outdoors; operating temperature range is +10°F to 104°F.

Piping Notes: Piping should be chosen with consideration for the pressure and chemical nature of the gas, and sized large enough to deliver the proper pressure to the gas mixer under flowing conditions. Piping for both major and minor gases must be at least ½".

Power Requirements: Gas mixers made for installation in the U.S. and Canada will require 115 VAC (± 10 VAC), 60 Hz. 1Ø. For gas mixers for other locations, see the Instruction Manual for power requirements.

Gas Temperature: The two supply gases should enter the gas mixer at nearly equal temperatures to achieve the proper mixing accuracy. If the gas supplies will be at significantly differing temperatures, the resultant mixing inaccuracy should be considered, and the proper corrective action taken. Design to prevent exposure of the gas mixer to high pressures or liquid gases should be practiced. Gas temperature range is +10°F to 104°F.

Inlet Pressures: Standard supply gas pressures are 100 - 125 PSIG. Variations will be shown on the Data Sheet.

Clearance: Leave at least 2 feet to the sides and bottom and 3 feet to the front of the gas mixer for maintenance. The front door of the gas mixer enclosure is hinged on the front left side.

Oxygen Piping: All oxygen piping to the mixer should be cleaned for oxygen service and compatible with oxygen. Do not allow any grease or oil to enter gas mixers intended for oxygen service (Model 8530OA). Do not use oxygen in gas mixers not specifically constructed for oxygen service.

Gas Systems: Gas systems shown are only examples; other systems may be used provided they deliver gas at the necessary pressure, temperature and flowrate.

Peak Gas Flowrates: When the gas mixer begins a mixing cycle, the gas mixer will draw gases at the full flow rated capacity of the gas mixer. For the Model 8530CA30A1100, the argon flowrate will be 638 SCFH and at a mixture of 30% carbon dioxide, the carbon dioxide flowrate will be 273 SCFH. For the Model 8530OA10A1100, the argon flowrate will be 712 SCFH and at a mixture of 10% oxygen, the oxygen flowrate will be 80 SCFH. The duration of the mixing cycle will vary depending upon the mixed gas usage rate but will be continuous at the maximum gas mixer design flowrate.

Gas Mixing Accuracy: The gas mixing accuracy varies with the operating termperature. Refer to the Instruction Manual for additional information.

Gas Mixer Enclosure Mounting Orientation: The gas mixer enclosure should be mounted vertically within 1° of vertical.

	REVISIONS	BY	DATE
F			
E			
D	REVISED TO OEMOB022 DIGITAL METER	GAR	10-22-21
C	GRAPHICAL AND SPELLING CORRECTIONS	DMR	9-16-20
B	ADDED SAFETY RELIEF VALVES; ADDED INLET PRESSURES REFERENCE	GAR	9-7-17
A	"ENCLOSURE BODY AND DOOR LOCKABLE STAPLE" WAS "LOCKABLE HASP/CLASP"	GAR	10-12-15

Thermco® INSTRUMENT CORPORATION
LA PORTE, INDIANA USA

TITLE:

INSTALLATION DRAWING FOR MODEL 8530 GAS MIXER

DATE:	9-22-15
SCALE:	N.T.S.
DRAWN BY:	JDE
APPROVED BY:	GAR
SUPERSEDES:	
DRAWING NUMBER:	1-14012