

SPECIAL NOTES TO ENGINEER OF RECORD

DRAIN LINE DESIGN:

ENGINEER IS RESPONSIBLE FOR DRAIN LINE DESIGN BEYOND THE UNIT. DRAIN LINE MUST BE INSTALLED PER LOCAL CODES. DRAIN LINE MUST BE SLOPED (MINIMUM 1/4 INCH PER FOOT). AVOID ANY UNNECESSARY 90 DEGREE TURNS. IF COMBINED WITH OTHER DRAIN LINES, THEN PIPE SIZE SHOULD BE INCREASED ACCORDINGLY. P-TRAPS SHOULD NOT BE USED IN THE GREASE DRAIN LINE AND HEAT TAPE MUST BE USED WHERE DRAIN LINE IS RUN IN ENVIRONMENTS THAT WOULD SOLIDIFY GREASE.

SPECIFICATION OF MAXI GRILL UNIT:

THE SPECIFICATION OF THE APPROPRIATE MAXI GRILL UNIT IS DEPENDENT UPON THE CFM FLOW OF THE HOOD SYSTEM. FOR BEST RESULTS IN MEDIUM TO HEAVY DUTY APPLICATIONS (SUCH AS SOLID FUEL APPLIANCES OR ODOR-HEAVY COOKING), DESIGN A CFM FLOW AT LEAST 20% BELOW THE MAX CFM RATE LISTED FOR THE UNIT.

FAN SPECIFICATION:

A FAN WITH VARIABLE SPEED CONTROL SHOULD BE SPECIFIED WHICH IS APPROPRIATE FOR THE TOTAL STATIC PRESSURE AND ADEQUATE CFM FLOW OF THE SYSTEM.

VARIABLE SPEED CONTROL:

THE FAN MUST BE EQUIPPED WITH AN EASILY ACCESSED VARIABLE SPEED CONTROL. THE BALANCE IN CFM FLOW IS ESSENTIAL TO THE EFFECTIVENESS OF AIR SCRUBBING. IF THE CFM FLOW IS ABOVE THE MAX CFM FLOW RATED BY THE MAXI GRILL, THE UNIT WILL BE INCAPABLE OF CLEANING THE SMOKE FULLY, AND MAY PULL EXCESS WATER INTO THE DUCT STREAM. THE VARIABLE SPEED CONTROL ALSO ALLOWS FOR VARIATION IN DRAFT PRESSURE, WHICH MAY BE AFFECTED BY MANY VARIABLES IN A LIVE KITCHEN SETTING.

BASIC FAN REQUIREMENTS:

- AT LEAST AN IP54 PROTECTION CLASS.
- VARIABLE SPEED CONTROL.

SPECIAL NOTES TO MECHANICAL TRADES

CHOOSE AN INSTALLATION LOCATION WHICH ALLOWS FOR EASY AND REGULAR UNIT ACCESS/MAINTENANCE. PLACING POSITIONS - NOTE: IT IS MOST BENEFICIAL TO INSTALL THE UNIT NEAR THE HOOD SYSTEM INTAKE. THIS REDUCES PARTICULATE AND GREASE BUILD UP WITHIN THE CHIMNEY SYSTEM.

- HANG ON WALL
- PLACE ON FLOOR
- PLACE ON ROOF
- SUSPEND FROM CEILING

MECHANICAL:

- CONNECT THE CHIMNEY LINE TO THE MAXI GRILL INTAKE PORT IN A CONTINUOUS WELDED CONNECTION. USE APPROPRIATE CHIMNEY PIPE THAT FOLLOWS LOCAL CODES FOR THE HOOD SYSTEM(S)/COOKING APPLIANCE(S).
- CONNECT OUTTAKE PORT IN A CONTINUOUS WELDED CONNECTION. THE IN-LINE FAN (TO BE PROVIDED BY ENGINEER OF RECORD) MUST BE CALIBRATED TO A BALANCED CFM RATE ACCORDING TO THE REQUIRED CFM FLOW AND CALCULATED STATIC PRESSURE. CONSULT MAX CFM RATE OF MAXI GRILL UNIT TO ENSURE EFFICIENT SMOKE SCRUBBING OPERATION. CONSULT "SPECIAL NOTES TO ENGINEER OF RECORD" FOR MORE INFORMATION ON FAN SPECIFICATION AND CALIBRATION. FAILURE TO SPECIFY AND INSTALL FAN CORRECTLY CAN RESULT IN DIMINISHED SCRUBBING ABILITY AND EXCESS WATER IN THE DUCTWORK.
- THE EXHAUST DUCT MUST MAINTAIN AT LEAST A 2 DEGREE INCLINE FROM THE EXHAUST PORT OF THE MAXI GRILL ONWARDS. THIS WILL ALLOW EXCESS MOISTURE TO DRAIN BACK INTO THE UNIT. IF THIS IS NOT POSSIBLE, A WATER DRAIN MUST BE INSTALLED AT THE LOWEST POINT OF WATER COLLECTION IN THE DUCT.

ELECTRICAL:

- A CERTIFIED ELECTRICIAN SHOULD SUPPLY AND CONNECT THE ELECTRICAL LINE PER LOCAL CODE.
- CONSULT THE "WIRING DIAGRAM", "ELECTRICAL CONNECTION SCHEDULE" AND "SCOPE OF WORK" FOR DETAILED ELECTRICAL REQUIREMENTS.
- ENSURE THAT THE PUMP IS ROTATING IN THE CORRECT DIRECTION AS MARKED BY THE YELLOW ROTATION STICKER ON THE SIDE OF THE PUMP. ENSURE THAT THE WATER PUMP GAUGE READS 2.5 BAR DURING OPERATION. IF THIS DOES NOT OCCUR, REWIRE THE L SERIES WIRES IN THE CORRECT SERIES. FAILURE TO DO SO RENDERS UNIT INEFFECTIVE.

GENERAL INFORMATION:

MAX CFM RATE: 6,200 CFM
STATIC PRESSURE: 1.8 INH2O
INLET/EXHAUST CONNECTION: 21.65" H X 41.34" W UNIT
WEIGHT (EMPTY): 1,520 LB
OPERATING WEIGHT: 2,590 LB
WATER TANK CAPACITY: 128 GALLONS WATER
CONSUMPTION: 9 GALLONS/HR * OPERATING
TEMPERATURE: 14°F TO 120°F
* BASED UPON 1 BAR FRESH WATER INTAKE PRESSURE

MAXI GRILL 500S SYSTEMS INSTALLATION CLEARANCES

SERVICE ACCESS SIDE: 45" CLEARANCE (REQ'D FOR FILTER REMOVAL AND MAINTENANCE); ACCESS SIDE MUST BE SPECIFIED AS LEFT OR RIGHT FROM THE INLET

PER UL 1978 AND NFPA 96, MINIMUM CLEARANCES TO CONSTRUCTION:
TO COMBUSTIBLE: 18"
TO LIMITED-COMBUSTIBLE: 3"
TO NON-COMBUSTIBLE: 0"

PLEASE NOTE:

THIS ORDER IS NOT CONSIDERED APPROVED AND CANNOT BE RELEASED TO PRODUCTION UNTIL INFORMATION IS SUPPLIED.

- ☐ SUPPLY SIDE (LEFT OR RIGHT)
☐ EXTERNAL STATIC PRESSURE
☐ REQUIRED CFM FLOW OF HOOD/EXHAUST DUCT
☐ FAN SPECIFICATION
☐ OTHER

MAXI GRILL 500S

SEQUENCE OF OPERATION

RED ON/OFF DIAL - LOCATED ON ELECTRICAL BOX COVER - "ON" POSITION.

- WATER PUMP ON.
- HIGH PRESSURE WATER SPRAY SYSTEM ON.
- SLOW WATER INTAKE SOLENOID ON.

OFF MODE - RED ON/OFF DIAL SET TO OFF POSITION.
1. WATER PUMP OFF.
2. HIGH PRESSURE WATER SPRAY SYSTEM OFF.
3. SLOW WATER INTAKE SOLENOID OFF.

MAXI GRILL 500S

SCOPE OF WORK

RESPONSIBILITY TO BE DESIGNATED BY THE GENERAL CONTRACTOR
DEFINITIONS FOR REFERENCE:
CONNECTION LOCATIONS WILL VARY PER SYSTEM, REFER TO SMOKI USA DIAGRAMS FOR SPECIFICATIONS.

- APPLICABLE CONTRACTOR TO SUPPLY AND INSTALL 208-230V (21-20.4A) ON A DEDICATED MINIMUM 30A CIRCUIT AT MAXI GRILL UNIT.
- APPLICABLE CONTRACTOR TO SUPPLY AND INSTALL (3) THREE PHASE POWER FEED FROM CIRCUIT BREAKER(S) TO MAXI GRILL UNIT.
- SMOKI USA REPRESENTATIVE/AFFILIATE TO PERFORM FINAL INSPECTION ONCE ALL RESPONSIBILITIES HAVE BEEN COMPLETED.

MAXI GRILL 500S

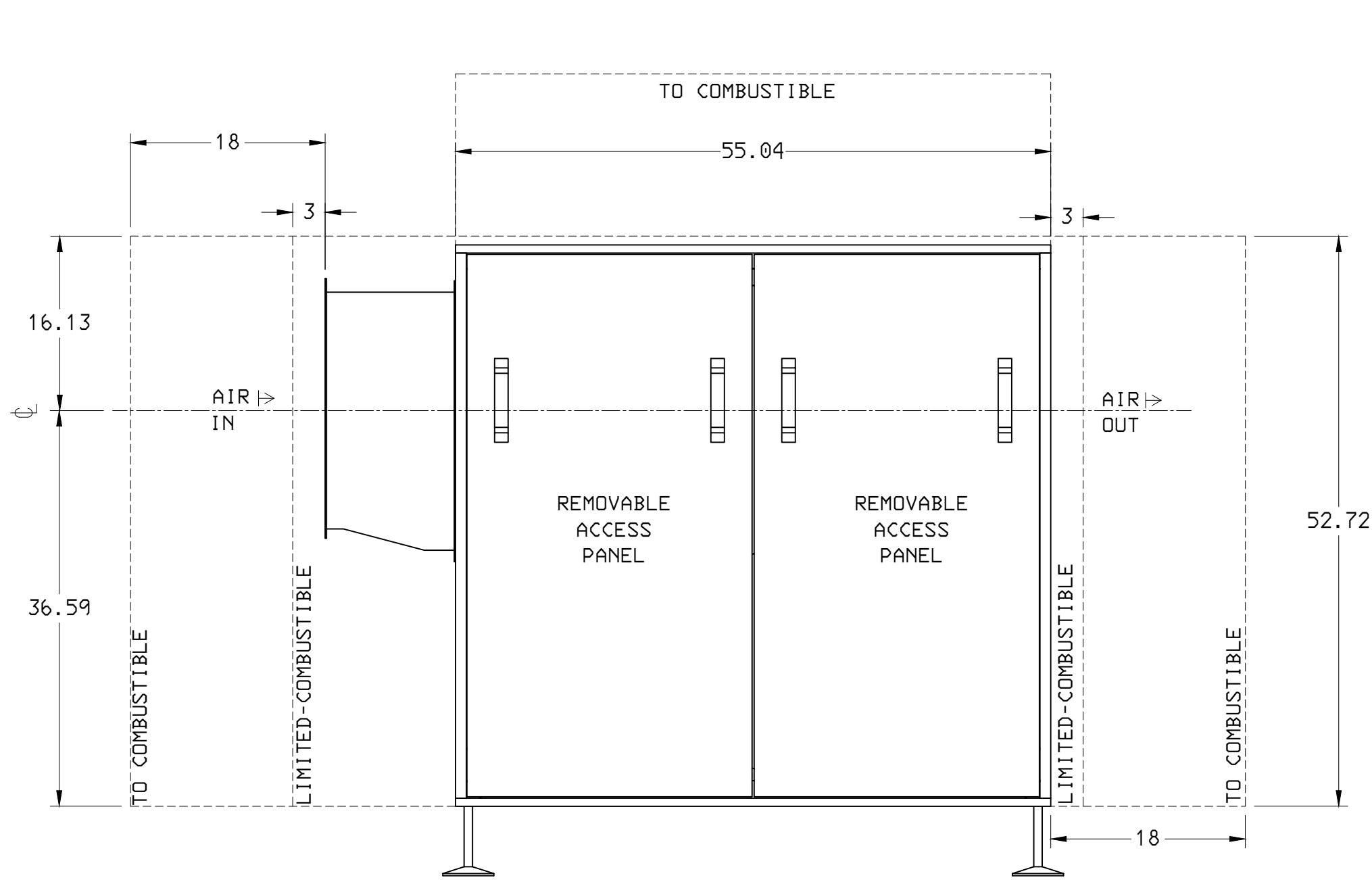
ELECTRICAL CONNECTION SCHEDULE

POWER CONNECTIONS:

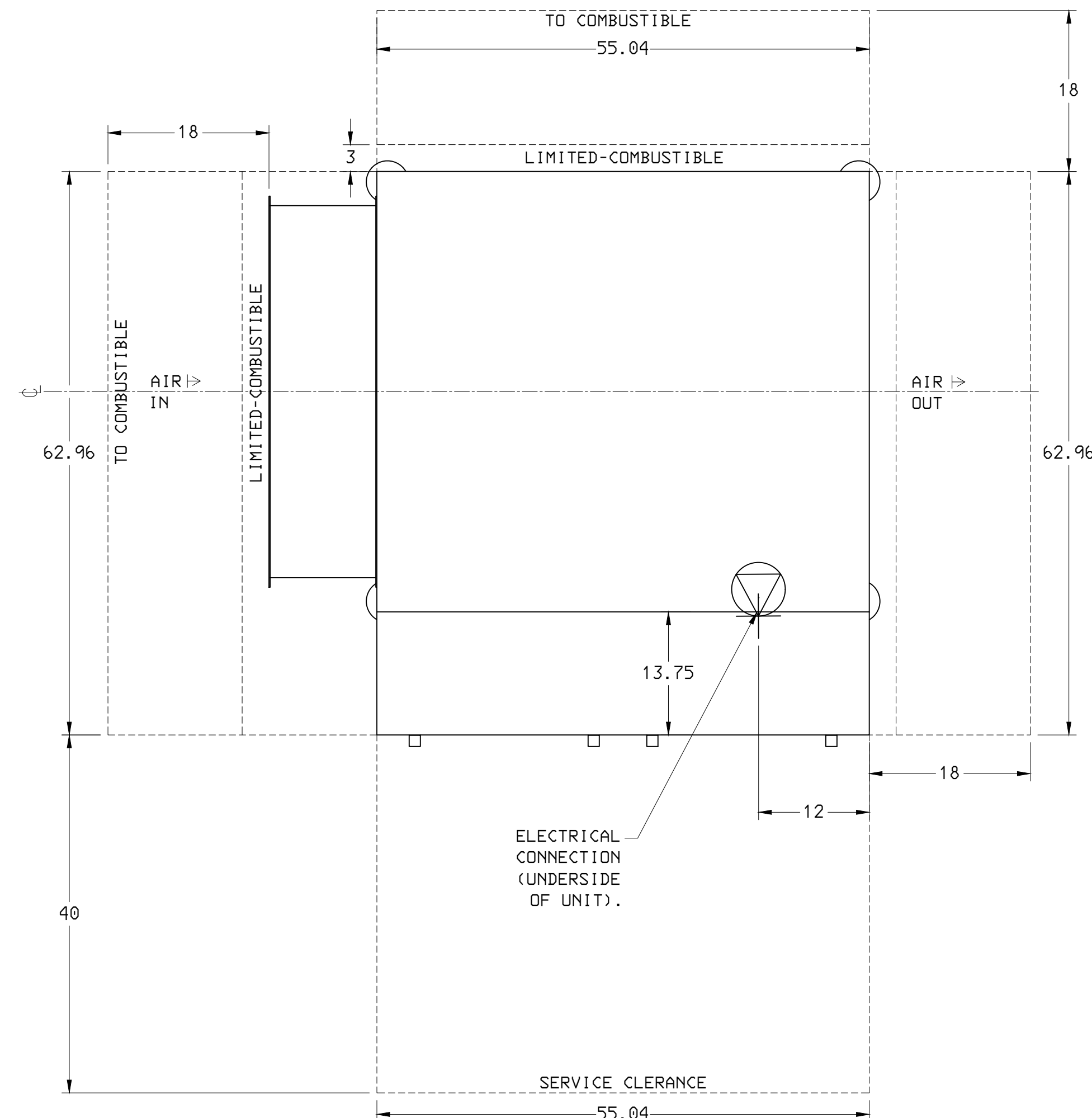
- L-1 208-230V, 21-20.4 AMP - MAXI GRILL POWER - 1 WIRE
L-2 208-230V, 21-20.4 AMP - MAXI GRILL POWER - 1 WIRE
L-3 208-230V, 21-20.4 AMP - MAXI GRILL POWER - 1 WIRE
N-1 NEUTRAL - MAXI GRILL WIRE
G-1 GROUND - MAXI GRILL - 1 WIRE

NOTE:

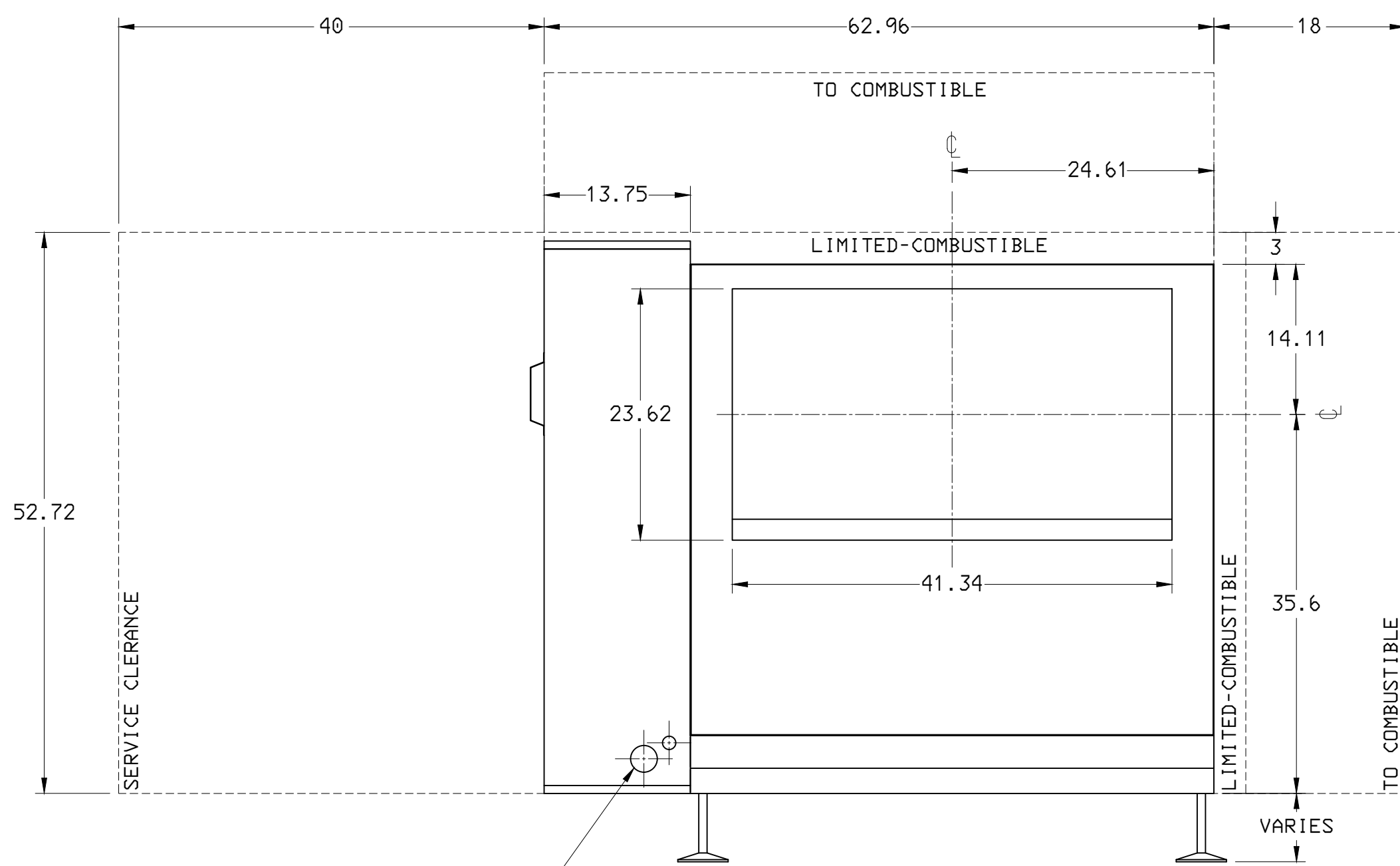
ALL CABLING AND WIRING TO BE PROVIDED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE STATED.



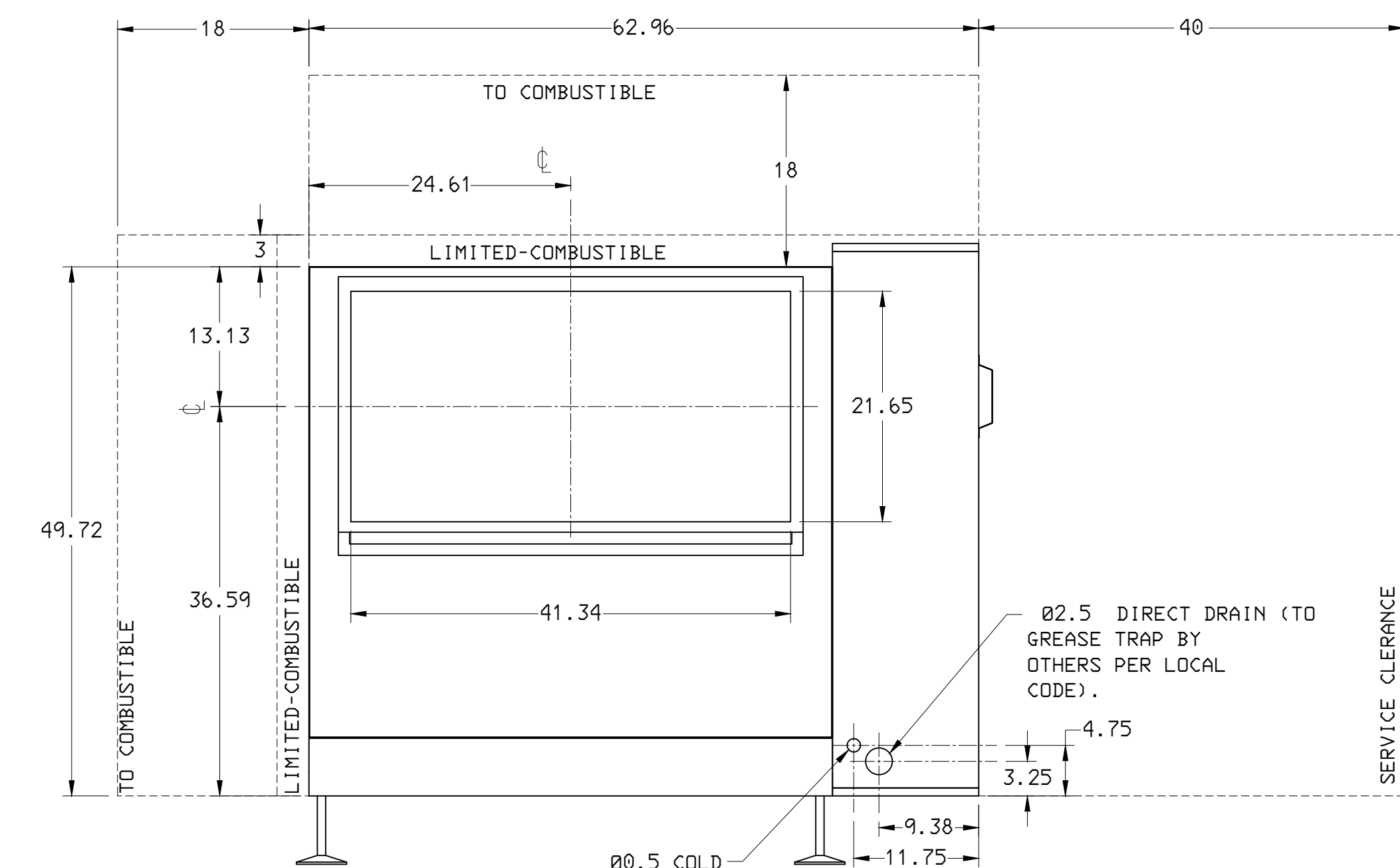
FRONT ELEVATION



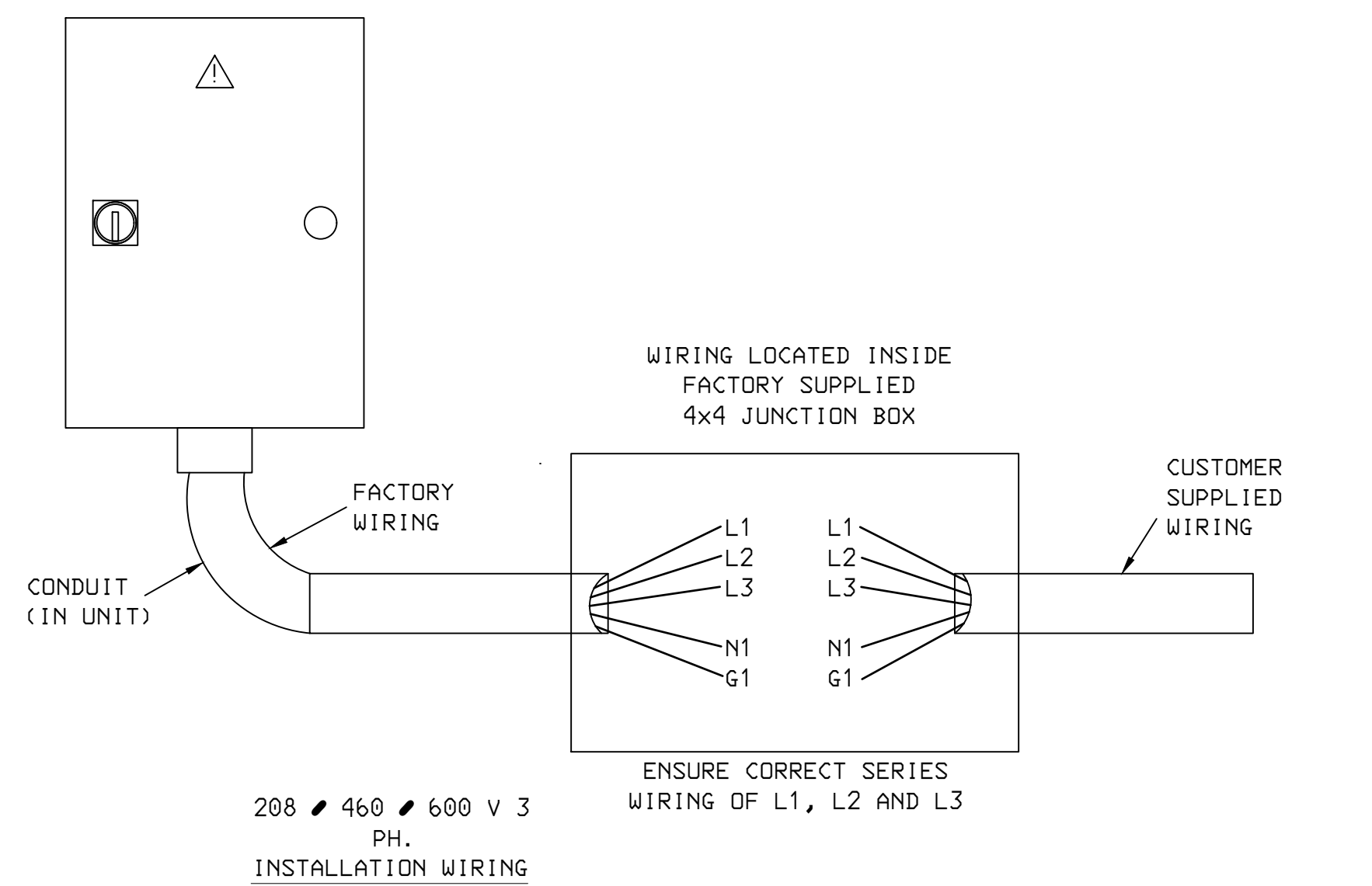
PLAN



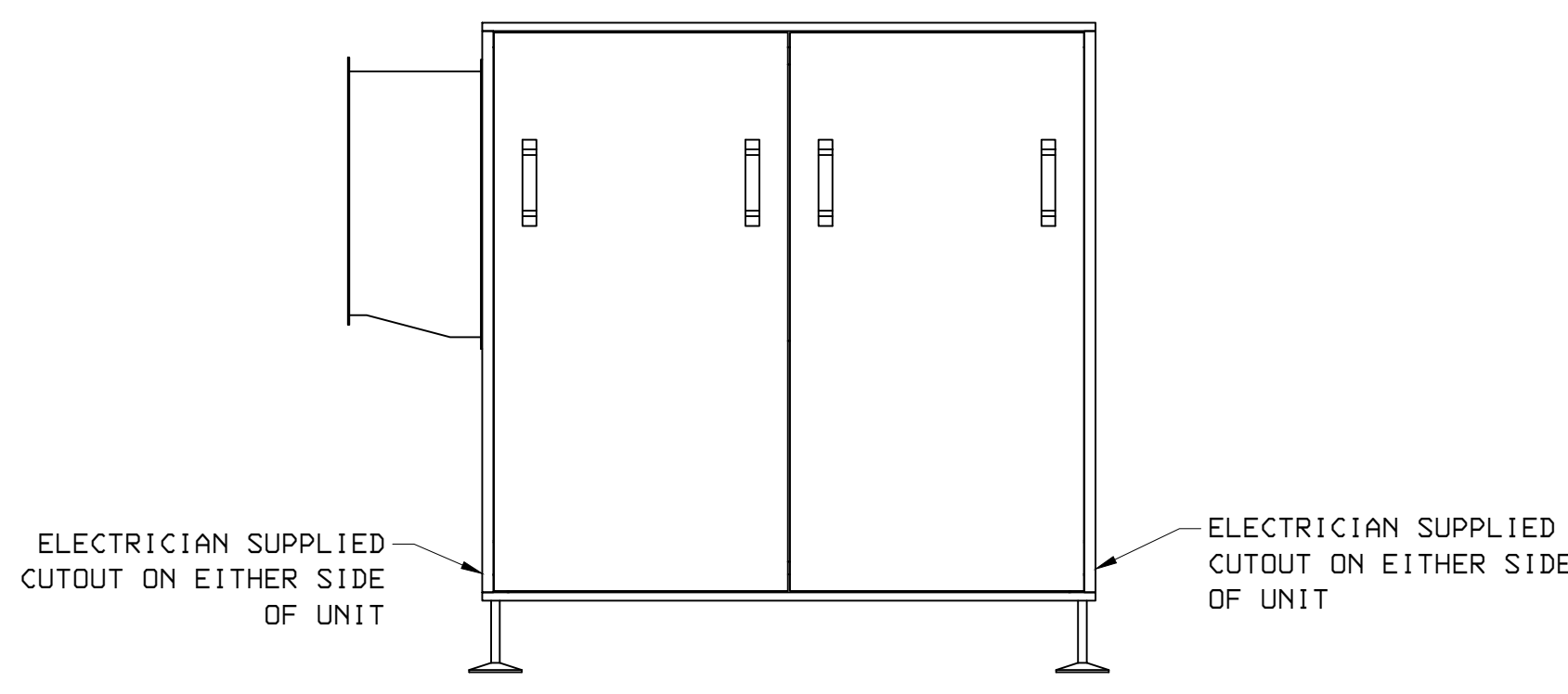
RIGHT ELEVATION



LEFT ELEVATION



INSTALLATION WIRING



POWER CONNECTION

WIRING DIAGRAM

General Notes

THIS DRAWING MUST BE CHECKED SIGNED AND RETURNED TO APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:

- ALL DIMENSIONAL INFORMATION. AIR FLOW DIRECTIONS AND CLEARANCES.

NOTICE TO REVIEWER:
ANY CHANGES TO THE COOKING EQUIPMENT SPECIFICATIONS SUCH AS INCREASED EXHAUST AIRFLOW, SMOKI USA MUST BE NOTIFIED IN ORDER RECALCULATE THE THE EXHAUST AIRFLOW NECESSARY TO SATISFY THE NEW NEED.

☐ REVISE & RESUBMIT

APPROVED FOR FABRICATION

- ☐ WITH NO REVISIONS
☐ WITH REVISIONS AS NOTED

APPROVED BY: DATE:

SEND APPROVED DRAWINGS TO:

MAIL:
SMOKI® USA, INC
601 N MAIN ST,
BREWSTER, NY 10509

EMAIL:
APPROVALS@SMOKIUSA.COM

SMOKI® USA POLLUTION CONTROL UNITS ARE LISTED TO:
CULUS LISTED - UL 8782 - FILE #MH60726
NYC FDNY CERTIFICATE OF APPROVAL# 5912



POLLUTION CONTROL UNIT

PCU Model #

Left

PCU Name

Left v9

No.	Revision/Issue	Date

Manufacturer Name and Address

SMOKI
USA
601 N MAIN ST,
BREWSTER, NY 10509 USA

Project Name and Address

Project	Sheet
Date 8/25/2025	1 of 1
Scale 1:12	