DENLAR FIRE PROTECTION

SUBMITTAL DATA SKU: D1036-D-RF-NFPA-DRD

36" PRE-ENGINEERED RANGE HOOD

BASE MODEL: D1036-D-RF-NFPA

| Job Name: | | Date: | Mark: | | |
|---|--------------------------|------------------------------|--|--|--|
| Reference: | Unit Location: | | Prepared By: | | |
| Engineer: | Contractor: | | Approval: | | |
| Expected Job Date: | | Notes: | | | |
| MODEL FAN OPTIONS Integral Fans: F - Recirculating R - Rear D Top Discharging External Fans: FBO - Fan by | | IF - Inline Fan 🛛 RF - Root | Mounted Fan 🗌 WF - Wall Mounted Fan | | |
| SELECT OPTIONAL ACCESSORIES | | | | | |
| ADA: ADA Fan/Light Control CLBX: ClockBox | | | 1 | | |
| CC: Custom Color – (Stainless Standard) | Specify Color: | | MACM: Make-Up Air Control Module STROBE: Horn and Light Strobe Alarm | | |
| TANK-TEST: Test Tank | | PD4X: Power Distribution Box | | | |
| MPK: Manual Pull Station | | | | | |
| RANGE FUEL SOURCE DISCONNECT OPTIC | NS (CHECK APPROPR | RIATE RECEPTACI E) | | | |
| G: 3/4" NPT Natural Gas (DED Needed if | • | • | ment (includes 3/4" NPT Natural Gas and Electric) - | | |
| to be Controlled on a Gas Range) | | O 14-50 |)R, 220VAC O 5-20R, 120VAC | | |
| E: Electric - | | 🔀 DRD: Dual Re | ceptacle - | | |
| O 14-50R, 220VAC O 6-20R, 220 | VAC | O 6-20 | R, 220VAC O 5-15R, 120VAC O 5-20R, 120VAC | | |
| O 10-50R, 220VAC O 5-20R, 120 | VAC | | | | |
| O 5-15R, 120VAC | | | | | |
| ELECTRIC NEMA (RECEPTACLE) OPTIONS | | | | | |
| | | | | | |
| 14-50R 10 | -50R 6 | 6-20R 5-15R | 5-20R | | |
| 220VAC 50AMP 220VA | C 50AMP 220VA | AC 20AMP 120VAC 15A | | | |
| DEOLUDEMENTS | | | Contact factory for any special circumstances | | |

REQUIREMENTS

Hood shall:

- Be D1000 Series by DENLAR Fire Protection
- Be wall mounted so that the bottom of the mounting bracket sits 30" to 36" above the range
- Be of stainless-steel construction (#18 & #20 GA, polished 304) with no sharp edges and brushed finish
- Have factory installed fire suppression system
- Have 280° F degree fusible link (36") which will activate the mechanical fire suppression system
- Have wet chemical extinguishing agent: Low PH Amerex
 660 (pressurized potassium citrate / potassium acetate mix)
- Have centrifugal fan with air delivery



- Be ETL listed, tested to UL300A standard
- Fan motor shall be permanently lubricated and meet UL507 standard
- Include a power disconnect for gas and/or electric appliances, deactivated at suppression system discharge
- Automatically disconnect range element once a certain preset temperature is reached or under particular predefined events or conditions
- Unit shall have multiple alarm contacts pre-installed (local, remote and trouble alarms) and an audible buzzer
- Lighting shall be LED bulb









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BASE MODEL: D1036-D-RF-NFPA



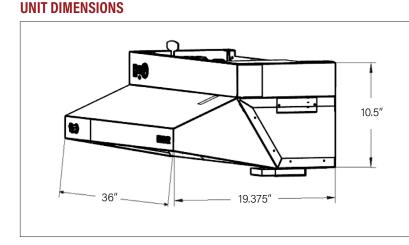
GENERAL FEATURES

- ETL/CSA listed
- 304 Brushed Stainless Steel
- Fail-Safe mechanical actuation
- Two step pre-suppression
- Plenum nozzle
- Main power switch and reset switch
- Service switch

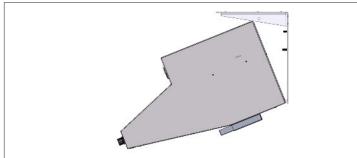
Pressure switch

- Pressure gauge
- Temperature switches
- Hard wired fuel source disconnect
- Dry alarm contacts
- On board diagnostics
- Status LED

- Trouble signal
- Service key
- Audible buzzer (90db)
- LED bulb
- Grease baffle with drip tray



REQUIRED FOR ALL MODELS



The main unit requires clearance to tilt to a 45° degree angle for maintenance purposes



SPECIFICATIONS

| Compliance | UL300A, NSF, UL507, and NFPA101 compliant |
|--|--|
| Weight | 56.8 lbs |
| Min / Max Install Height Above Top of Residentail Range / Cook Top | 30" - 36" |
| Voltage | 120 AC |
| Phase | 1 |
| Hz | 60 Hz |
| Amps | 6.3 Amps |
| Circuit breaker size | 15-20 Amps |
| Operating Current | 5.6 Amps |
| Fan Operating Current | 4.4 Amps |
| Output Operating Current | 0.25 to 0.5 Amps |
| Input Wiring | Power Cord |
| Output Wiring | 14/2 MC Wire |
| Fan Type | Roof Mounted Fan (Fan is External) |
| MOCP | 15 Amps |
| Duct Type | See Local Codes |
| Fire Control | Programmable Logic Controller |
| Tank Type | Stainless Steel |
| Tank Pressure | 102+-8% Psi |
| Tank Volume | 1300 mL |
| Suppression Agent | Low pH Wet Chemical Amerex 660 |
| No. of Nozzles / Spray | 4 / 60 Degree Conical |
| Protection Device / Limit | 3 Globe Links / 280° F |





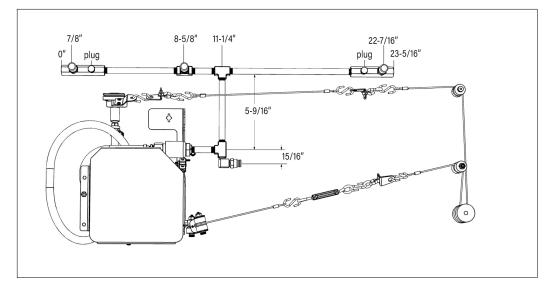




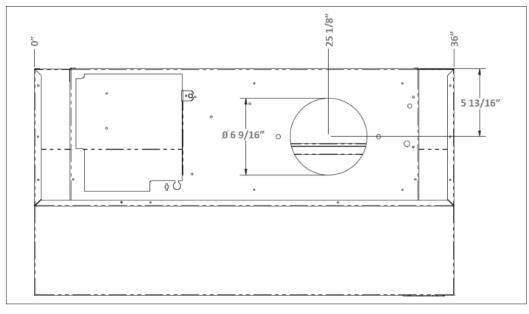


BASE MODEL: D1036-D-RF-NFPA

NOZZLE PLACEMENT



TOP DUCTED EXHAUST



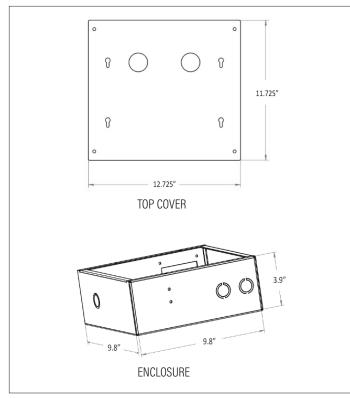




DENLAR FIRE PROTECTION

DUAL RECEPTACLE POWER SOURCE DISCONNECT: -DRD (D1000)

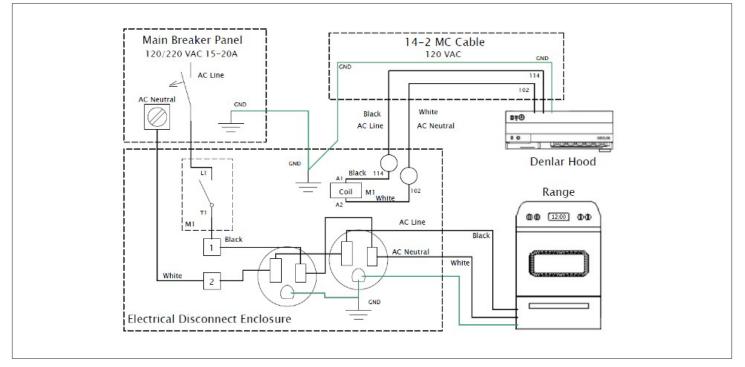
RECEPTACLE DIMENSIONS



SPECIFICATIONS

| Models | -DRD 6-20 | -DRD 5-20 | -DRD 5-15 |
|-------------------|---------------------|-----------|-----------|
| NEMA | 6-20R | 5-20R | 5-15R |
| Output Volts | 220 AC | 120 AC | 120 AC |
| Output Current | 20 Amps | 20 Amps | 15 Amps |
| Coil Voltage | 120 AC | | |
| Phase | 1 | | |
| Material | Galvenized 60 Hz | | |
| Frequency | | | |
| Fuse | 0.5 Amps | | |
| Fuse Type | 5 X 20mm cartridge | | |
| Operating Current | 0.25 Amps | | |

SCHEMATIC

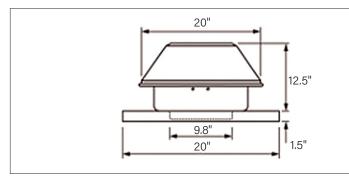






FAN: -D-RF-NFPA (PRO) 36"

NFPA ROOF MOUNT DIMENSIONS



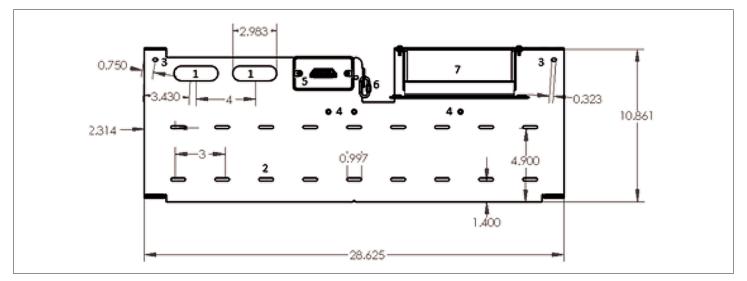
| | D1000-BPSI Layout | | | | |
|---|---|--|--|--|--|
| 1 | Cut-outs for Wire Entry | | | | |
| 2 | Mounting Holes | | | | |
| 3 | Top Mounting Holes | | | | |
| 4 | 1/4-20 Studs for Securing Hoods to D1000-BPSI | | | | |
| 5 | Handy box for Power In and Power Out | | | | |
| 6 | Quick Link Safety Cable Holder | | | | |
| | Collar to Attach Duct Work (7" Dia. X 1" Height) (A Minimum | | | | |

 7 of 6" length of 7" Dia. Duct is required before connecting an Increaser/Adapter)

SPECIFICATIONS Style

| Style | Roof Mount |
|-----------------------------|---|
| Туре | Roof w/ Curb Adapter (without physical curb) |
| Weight | 35 lbs |
| Operating Current | 5 Amps |
| Voltage | 120 AC |
| Phase | 1 |
| Frequency | 60 Hz |
| CFM + -2.5% (Low-High) | 326 - 548 |
| Pressure (In Water) | -0.391.09 |
| dBA (Low-High) | 63 - 75 |
| Hood Outlet (Length-Height) | 7 in (Dia) |
| Duct | 50 ft |
| Fan Inlet | 9 % in (Dia) |
| Fan Outlet | 20 in (Dia) |
| Control | Electronic Control Module (ECM) |
| Speeds | Variable |

TOP DISCHARGING MOUNTING BRACKET (D1000-BPSI)

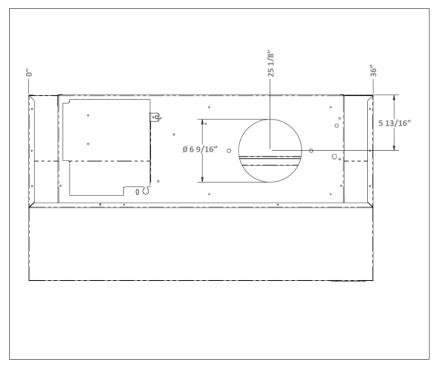




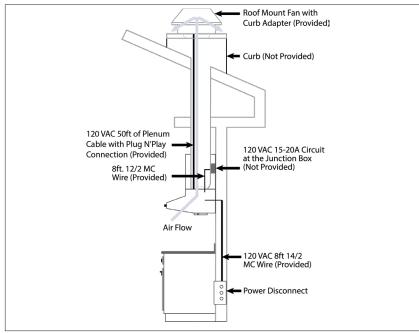
DENLAR FIRE PROTECTION

FAN: -D-RF-NFPA (PRO) 36"

DUCT LOCATION



SAMPLE EXHAUST LAYOUT







CLOCKBOX[™]: -CLBX



SPECIFICATIONS

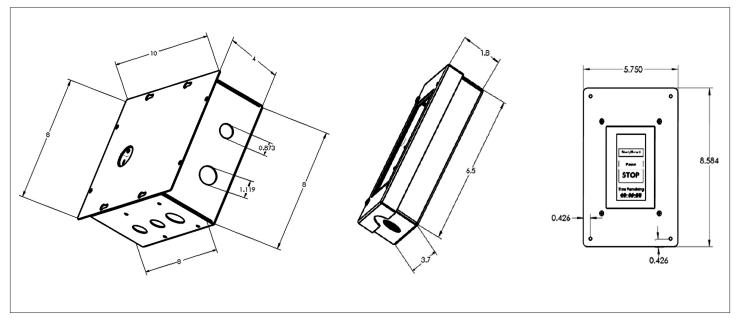
| Mounting | Surface Mount or Flush Mount |
|------------------------|------------------------------|
| Weight | 14 lbs |
| Voltage | 120 VAC |
| Phase | 1 |
| Frequency | 60 Hz |
| Breaker Size | 15 Amps |
| Operating Current | 0.1 Amps |
| Fuse | 0.5 Amps |
| Touch Screen Voltage | 5 DC |
| Output Current Maximum | 2 Amps |
| Conduit | 25 ft 16 mm ENT Conduit |

FEATURES

| Two Hour Timer | Password Protected | Adjustable Time | Change Password | ADA Compatible | Language Selection | Input/Output To A Monitoring Station/ Alarm System | Interacts with Hood | Displays User Instructions | Displays Hood Faults | Locks Out if There is a Fault with the Hood |
|-------------------|-----------------------|--------------------|--------------------|-------------------|-----------------------|--|------------------------|-------------------------------|-------------------------|---|
| Y | Y | Y | Y | N* | N* | N* | N* | N* | N* | N* |

* Available with the ClockBox Pro, information is available in the Accessories Booklet.

DIMENSIONS

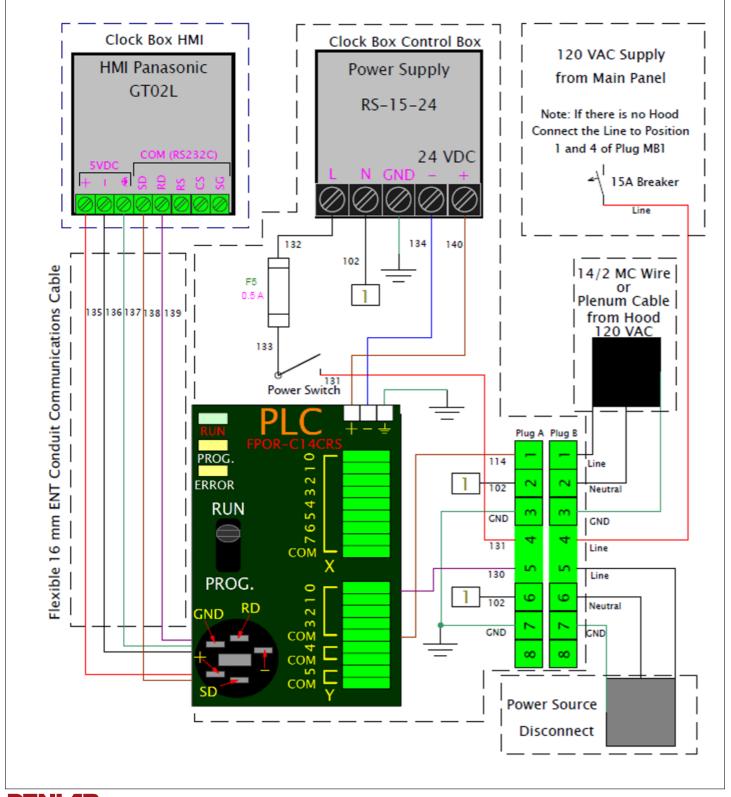






CLOCKBOX[™]: -CLBX

SCHEMATIC





MANUAL PULL STATION: -MPK (D1000)

THE D1000-MPK COMES EQUIPPED WITH THE FOLLOWING





1x Enclosure 4" x 1.5" Octagon Metal Box



3x 90 Degree **Corner Pulleys**



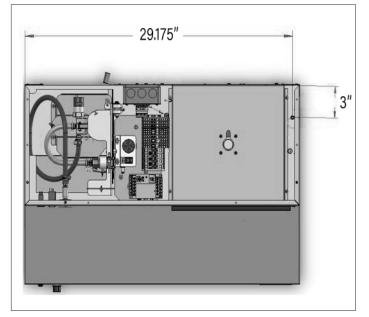
1x 25' Stainless-Steel

Cable with Clevis Pin



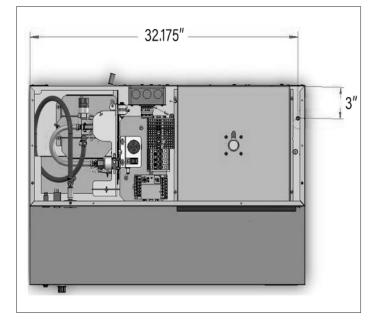
1x 1/2" ENT Conduit Connector

30" MODEL PULL-PIN LOCATION





36" MODEL PULL-PIN LOCATION

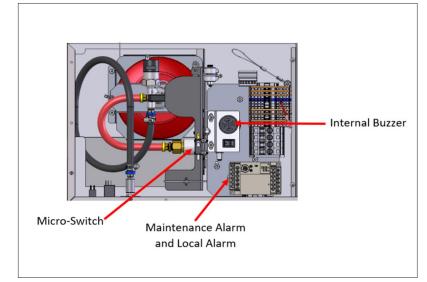


The Manual Pull Station (D1000-MPK) is designed to discharge the D1000 Model when a user pulls the tab from the Manual Pull Station Face Plate. The D1000-MPK is provided with 25 feet Stainless-Steel Cable and with three 90 Degree Corner Pulleys. It is required to have 7-10 inches extra Stainless-Steel Cable at the Pull Station Box.



ALARM: INTEGRATED TO D1000

ALARM LOCATION



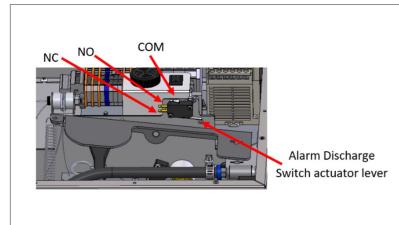
INTERNAL BUZZER SPECIFICATIONS

| Туре | Audible |
|----------------|---|
| Decibels | 90 |
| Location | Top center of main unit |
| Activates upon | Tank discharge hose disconnected, low pressure in tank, or high temp fault (190° F at hood) |

MAINTENANCE ALARM SPECIFICATIONS

| Туре | Dry Contact |
|------------------|---|
| Type of Contacts | Com / NO |
| Contact Amperage | 5 Amps |
| Location | PLC contacts C0 and Y0 |
| Activates upon | Tank discharge hose disconnected, low pressure in tank, or high temp fault (190° F at hood) |

MICRO-SWITCH LAYOUT



LOCAL ALARM SPECIFICATIONS

| Туре | Dry Contact |
|------------------|--|
| Type of Contacts | Com / NO |
| Contact Amperage | 5 Amps |
| Location | PLC contacts C1 and Y1 |
| Activates upon | Low pressure in tank, and high temp fault (190° F at hood) |

MICRO-SWITCH SPECIFICATIONS

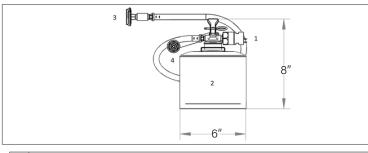
| Туре | Dry Contact |
|------------------|----------------------------------|
| Type of Contacts | Com / NO / NC |
| Contact Amperage | 15 Amps |
| Location | Above tank actuation paddle |
| Activates upon | Mechanical discharge of the tank |





SUPPRESSION TANK: -TANK-FC/SA (D1000)

UNIT DIMENSIONS

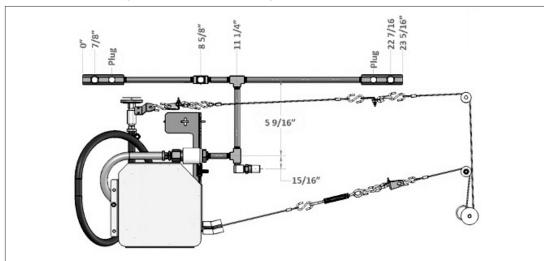


| | 1 | Tank is Equipped with a Pressure Switch which opens on discharge. |
|---|---|---|
| | 2 | Tank is of Stainless Steel Construction. |
| | 3 | Visual Pressure Gauge. |
| ſ | 4 | Discharge Hose with Quick Connect fitting attached. |

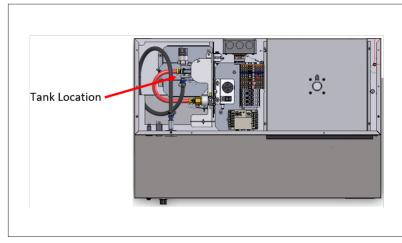
NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)

FC SPECIFICATIONS

| Туре | Self Contained Fire Suppression System |
|------------------------|--|
| Compliance | UL-1995 |
| Mounting Configuration | Integral to the hood |
| Weight | 9.4 lbs |
| Vessel | Stainless Steel |
| Chemical Type | Amerex 660 |
| Volume | 1300 mL |
| Chemical Weight | 2.2 lbs |
| Pressure (PSI) +-8% | 102 PSI |
| Height | 8 in |
| Width | 6 in |



TANK LOCATION



SA SPECIFICATIONS

| Туре | Self Contained Fire Suppression System |
|------------------------|--|
| Compliance | UL-1995 |
| Mounting Configuration | Integral to the hood |
| Weight | 9.4 lbs |
| Vessel | Stainless Steel |
| Chemical Type | Amerex 660 |
| Volume | 1300 mL |
| Chemical Weight | 2.2 lbs |
| Pressure (PSI) +-8% | Charge to 102 PSI on site |
| Height | 8 in |
| Width | 6 in |