DENLAR FIRE PROTECTION

NLAR SUBMITTAL DATA SKU: D1030-R-NFPA-PRO-DED

30" PRE-ENGINEERED RANGE HOOD

BASE MODEL: D1030-R-NFPA-PRO

| 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 I Top Discharging External Fans: □ FBO - Fan by SELECT OPTIONAL ACCESSORIES | | e Fan 🗌 RF - Roof Mo | ounted Fan 🗌 WF - Wall Mounted Fan | |
| ADA: ADA Fan/Light Control | | MACM: Make-Up | Air Control Module | |
| CC: Custom Color – (Stainless Standard) | Specify Color: | CLBX-PRO: Clockbox Pro with integrated ADA | | |
| TANK-E: Test Tank Strobe Alarm | | | nd Light Strobe Alarm | |
| MPK: Manual Pull Station | | | | |
| RANGE FUEL SOURCE DISCONNECT OPTIC G: 3/4" NPT Natural Gas (DED Needed if | • | | nt (includes 3/4" NPT Natural Gas and Electric) - | |
| to be Controlled on a Gas Range) | Liectile components Need | | 220VAC O 5-20R, 120VAC | |
| E: Electric - | | | , | |
| O 14-50R, 220VAC O 6-20R, 220 | VAC | <u> </u> | 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 | | | | |
| | |) G G J S-15B | 5-20B | |
| | C 50AMP 220VAC 20AM | | | |
| | | Co | ontact factory for any special circumstance | es |

REQUIREMENTS

Hood shall:

- Be D1000 Series by DENLAR Fire Protection
- Be wall mounted so that the bottom of the mounting bracket sits 24" to 30" 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 212° F degree fusible link (30") 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 by LED bulb









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BASE MODEL: D1030-R-NFPA-PRO



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

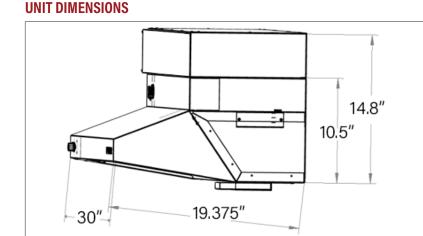
- Pressure gauge
- Temperature switches
- Hard wired fuel source disconnect
- Dry alarm contacts
- On board diagnostics
- Status LED

Trouble signal

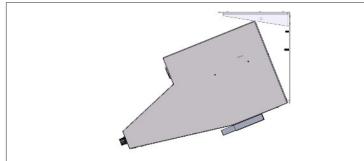
- Service key
- Audible buzzer (90db)
- LED bulb
- Grease baffle with drip tray
- Integrated ADA light and fan controls through ClockBox Pro

SPECIFICATIONS

| Compliance | UL300A, NSF, UL507, and NFPA101, ADA compliant |
|--|---|
| Weight | 75 lbs |
| Mounting Configuration | Wall |
| Min / Max Install Height Above Top of Residentail Range / Cook Top | 24" - 30" |
| Voltage | 120 AC |
| Phase | 1 |
| Hz | 60 Hz |
| Amps | 4 Amps |
| Circuit Breaker Size | 15-20 Amps |
| Operating Current | 3.7 Amps |
| Fan Operating Current | 3.45 Amps |
| Output Operating Current | 0.25 to 0.5 Amps |
| Input Wiring | Power Cord |
| Output Wiring | 14/2 MC Wire |
| Fan Type | Rear Discharging (Fan is Internal) |
| МОСР | 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 | 5 / 60 Degree Conical |



REQUIRED FOR ALL MODELS



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









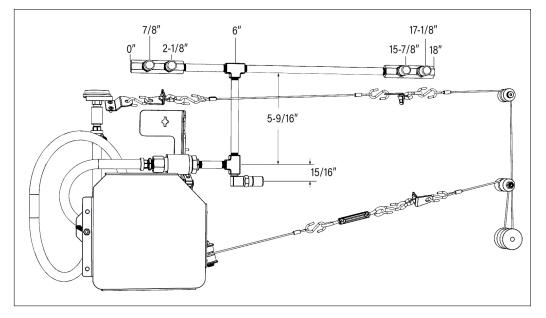


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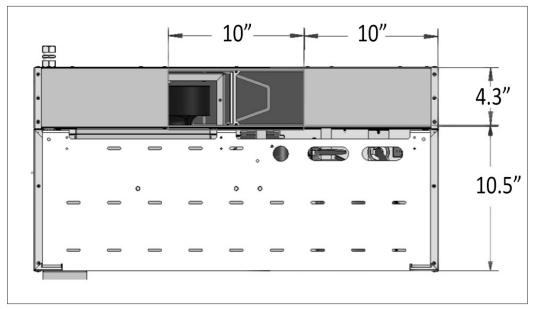


BASE MODEL: D1030-R-NFPA-PRO

NOZZLE PLACEMENT



TOP DUCTED EXHAUST



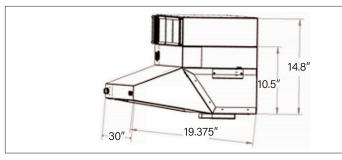




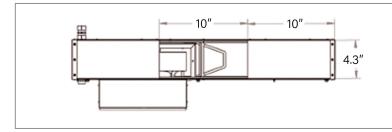


FAN: -R-NFPA (PRO) 30"

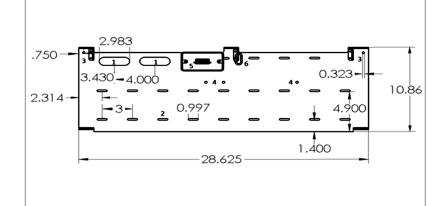
UNIT DIMENSIONS



30" EXHAUST FAN REAR VIEW DIMENSIONS



TOP DISCHARGING MOUNTING BRACKET (D1000-BPSF-NFPA)



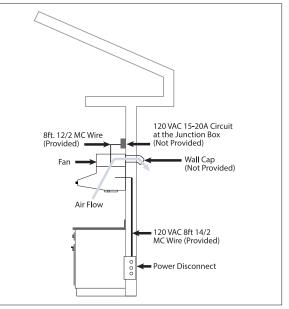
| | Back Plate Support Layout |
|---|--|
| 1 | Cut-outs for Wire Entry |
| 2 | Mounting Holes |
| 3 | Top Mounting Holes |
| 4 | 1/4-20 Studs for Securing Hoods to D1000-BPSF-NFPA |
| 5 | Handy box for Power In and Power Out |
| 6 | Quick Link Safety Cable Holder |

DENLAR FIRE PROTECTION DENLARHOODS.COM

SPECIFICATIONS

| Style | Rear Discharge |
|------------------------|---------------------------------|
| Туре | Integral to Hood |
| Weight | 22 lbs |
| Operating Current | 3.1 Amps |
| Voltage | 120 AC |
| Phase | 1 |
| Frequency | 60 Hz |
| CFM + -2.5% (Low-High) | 174 - 519 |
| Pressure (In Water) | -0.251.35 |
| dBA (Low-High) | 60 - 80 |
| Hood Outlet (LxH) | 10 in x 4.25 in |
| Duct | 4 in - 24 in |
| Fan Inlet | 9.8 in x 9.7 in |
| Fan Outlet | 10 in x 4.25 in |
| Control | Electronic Control Module (ECM) |
| Speeds | Variable |

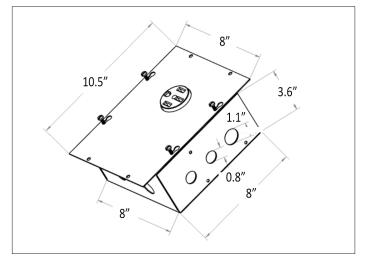
SAMPLE EXHAUST LAYOUT



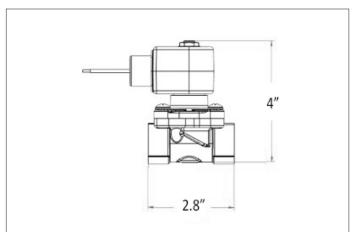
DENLAR FIRE PROTECTION

DUAL ELEMENT POWER SOURCE DISCONNECT: -DED (D1000)

ELECTRIC RECEPTACLE DIMENSIONS



GAS VALVE DIMENSIONS



ELECTRIC RECEPTACLE SPECIFICATIONS

| Models | -DED-220 14-50 | -DED 120 5-20 | |
|-------------------|----------------|---------------|--|
| Weight | 5.4 lbs. | | |
| NEMA | 14-50 R | 5-20 R | |
| Output Volts | 220 AC | 120 AC | |
| Output Current | 50 Amps | 20 Amps | |
| Coil Voltage | 1 | 20 | |
| Phase | | 1 | |
| Frequency | 60 |) Hz | |
| Fuse | 0.5 | Amps | |
| Fuse Type | 5 X 20mr | m cartridge | |
| Operating Current | 0.25 | Amps | |
| Material | Galv | anized | |
| Mounting Type | Surface or | flush mount | |
| Mounting Height | See loo | cal codes | |

GAS VALVE SPECIFICATIONS

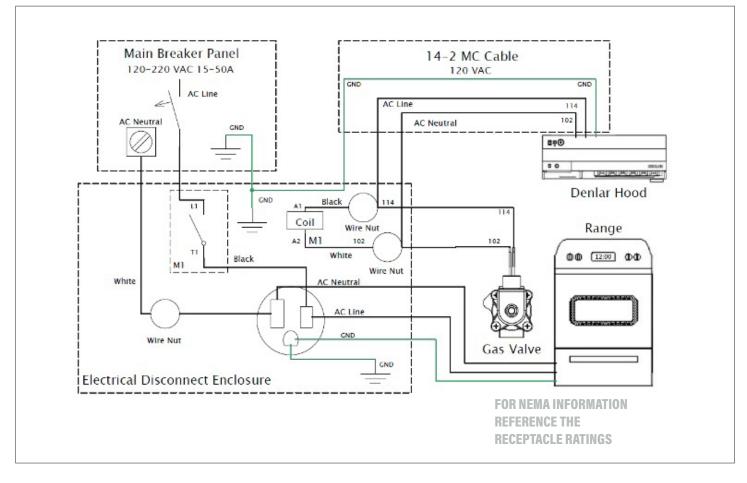
| Coil Voltage | 120 AC |
|----------------------------|---|
| Phase | 1 |
| Frequency | 60 Hz |
| Fuse | 0.5 Amps |
| Operating Current | 0.25 Amps |
| Valve Type | 2-Way |
| Function | Normally closed |
| Actuation Type Coil Type | Direct lift |
| Coil Type | 1⁄2" NPT conduit, 18' leads, class F, NEMA 4X |
| Body Material | Brass |
| Seal Material | NBR |
| Orifice Size | 7/16″ |
| Port Size | 3/4" |
| Number Of Ports | 2 |
| Port Type | NPT |
| Media | General purpose for air, liquids, and gases |
| Min. Pressure Differential | 0 PSI |
| Max. Pressure Differential | 100 PSI (AC) PSI |
| Min. Fluid Temperature | 0° F |
| Max. Fluid Temperature | 185° F |
| Flow Coefficient | 5 CV |





DUAL ELEMENT POWER SOURCE DISCONNECT: -DED

SCHEMATIC







CLOCKBOX PRO[™]: -CLBX-PRO



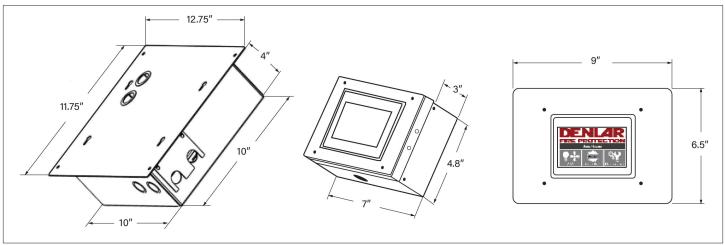
SPECIFICATIONS

| Mounting | Surface Mount or Flush Mount |
|-------------------------------|----------------------------------|
| Weight | 18 lbs |
| Voltage | 120 VAC |
| Phase | 1 |
| Frequency | 60 Hz |
| Breaker Size (Amps) | 15 A |
| Operating Current (Amps) | 0.1 A |
| Fuse (Amps) | 1 A |
| Output Current Maximum (Amps) | 10 A |
| Touch Screen Voltage | 24 DC |
| Conduit | 25 ft 16 mm Flexible ENT Conduit |

FEATURES

| o Hour imer | 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 | Y | Y | Υ | Υ | Y | Y | Y |

UNIT DIMENSIONS

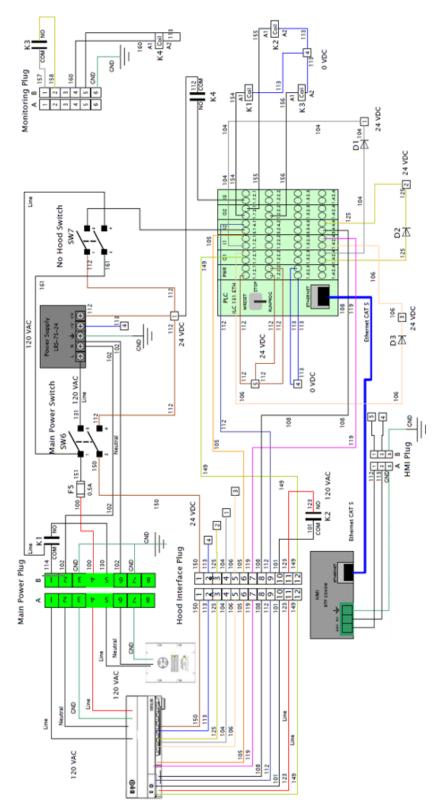






CLOCKBOX PRO[™]: -CLBX-PRO

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**

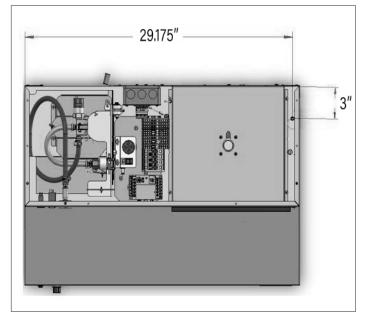




Conduit Connector

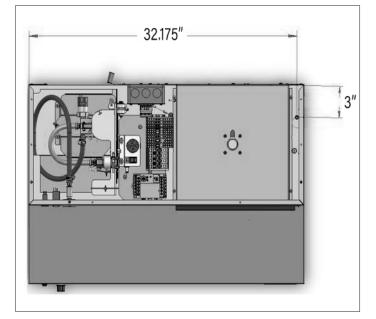
1x 25' Stainless-Steel Cable with Clevis Pin

30" MODEL PULL-PIN LOCATION





36" MODEL PULL-PIN LOCATION

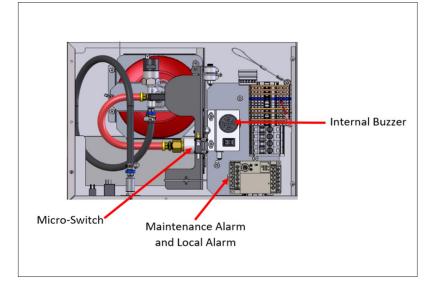


The Manual Pull Station (D1000-MPK) is designed to discharge the D1000 Model when a user pulls the tab from the Manual Pull Station Face Plate. The D1000-MPK is provided with 25 feet Stainless-Steel Cable and with three 90 Degree Corner Pulleys. It is required to have 7-10 inches extra Stainless-Steel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



ALARM: INTEGRATED TO D1000

ALARM LOCATION



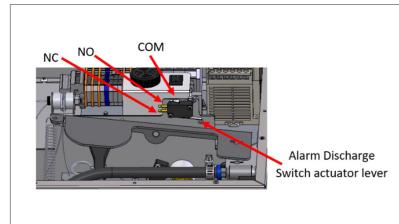
INTERNAL BUZZER SPECIFICATIONS

| 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

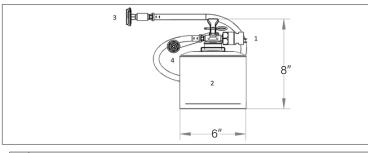
| Туре | Dry Contact |
|------------------|----------------------------------|
| Type of Contacts | Com / NO / NC |
| Contact Amperage | 15 Amps |
| Location | Above tank actuation paddle |
| Activates upon | Mechanical discharge of the tank |





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

UNIT DIMENSIONS

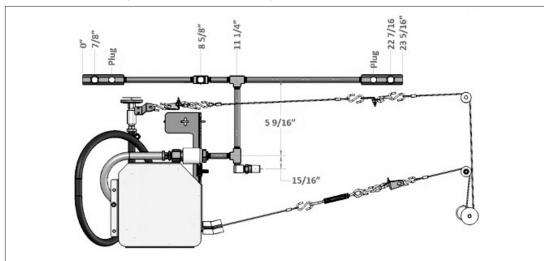


| | 1 | Tank is Equipped with a Pressure Switch which opens on discharge. | |
|---|---|---|--|
| | 2 | Tank is of Stainless Steel Construction. | |
| | 3 | Visual Pressure Gauge. | |
| ſ | 4 | Discharge Hose with Quick Connect fitting attached. | |

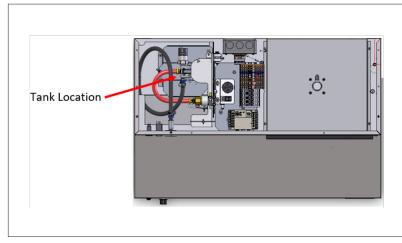
NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)

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 |