### DENLAR FIRE PROTECTION

# NLAR SUBMITTAL DATA SKU: D1030-D-FB0-NFPA-PRO-G

**30" PRE-ENGINEERED RANGE HOOD** 

### **BASE MODEL: D1030-D-FBO-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 D         Top Discharging External Fans:       FBO - Fan by         SELECT OPTIONAL ACCESSORIES         ADA: ADA Fan/Light Control         CC: Custom Color - (Stainless Standard)	Others Module 🔲 <b>IF</b> - Inline Fa	] MACM: Make-Up		nted Fan
<ul> <li>TANK-TEST: Test Tank</li> <li>MPK: Manual Pull Station</li> </ul>	TANK-TEST: Test Tank       STROBE: Horn and Light Strobe Alarm			
<ul> <li>D1030-TC-D: Top Cover</li> <li>RANGE FUEL SOURCE DISCONNECT OPTIC</li> <li>G: 3/4" NPT Natural Gas (DED Needed if to be Controlled on a Gas Range)</li> </ul>	•	ACLE) ] DED: Dual Elemen	t (includes 3/4" NPT Natural G 20VAC O 5-20R, 120VAC	as and Electric) -
E: Electric -		] <b>DRD:</b> Dual Recept	acle -	
<ul> <li>0 14-50R, 220VAC</li> <li>0 6-20R, 220</li> <li>0 10-50R, 220VAC</li> <li>0 5-15R, 120VAC</li> <li>ELECTRIC NEMA (RECEPTACLE) OPTIONS</li> </ul>		O 6-20R, 22	20VAC O 5-15R, 120VAC (	O 5-20R, 120VAC
	G -50R 6-20R C 50AMP 220VAC 20AMP	G G J W 5-15R 120VAC 15AMP		

#### 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)
- Fan by others must have centrifugal fan with air delivery
- Be ETL listed, tested to UL300A standard



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- Contact factory for any special circumstances
- Fan by others motor shall be permanently lubricated and meet UL507 standard, CFM should achieve at least 500CFM for compliance
- 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







DL1224A 3/24



### **BASE MODEL: D1030-D-FBO-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

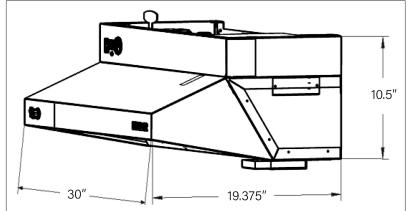
#### Pressure switch

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

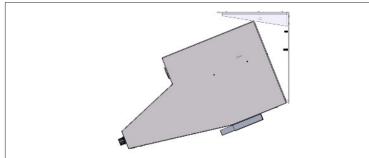
- Trouble signal
- Service key
- Audible buzzer (90db)
- LED bulb
- Grease baffle with drip tray
- Integrated ADA light and fan controls through ClockBox Pro

UL300A, NSF, UL507, and

#### UNIT DIMENSIONS



#### **REQUIRED FOR ALL MODELS**



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



_	Compliance	
	Weight	
		Min / Max Install Heigh

**SPECIFICATIONS** 

Compliance	NFPA101, ADA compliant		
Weight	53.4 lbs		
Min / Max Install Height Above Top of Residentail Range / Cook Top	24" - 30"		
Voltage	120 AC		
Phase	1		
Hz	60 Hz		
Amps	3.15 Amps		
Circuit Breaker Size	15-20 Amps		
Operating Current	N/A		
Fan Operating Current	N/A		
Output Operating Current	0.25 to 0.5 Amps		
Input Wiring	Power Cord		
Output Wiring	14/2 MC Wire		
Fan Type	Fan By Others / 3rd Party Supplies Fan (Fan is External)		
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		
Protection Device / Limit	3 Globe Links / 212° F		



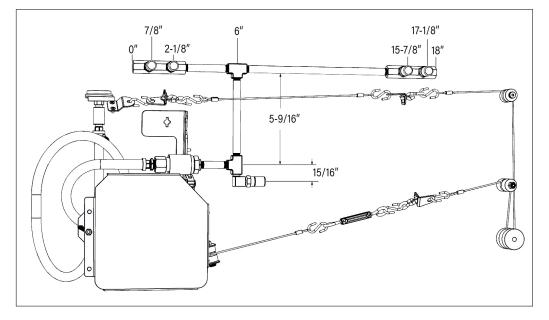




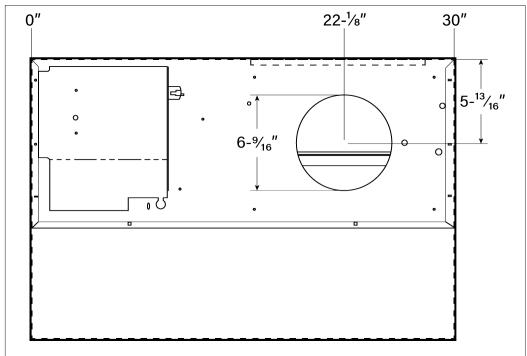


### **BASE MODEL: D1030-D-FB0-NFPA-PR0**

#### **NOZZLE PLACEMENT**



#### **TOP DUCTED EXHAUST**



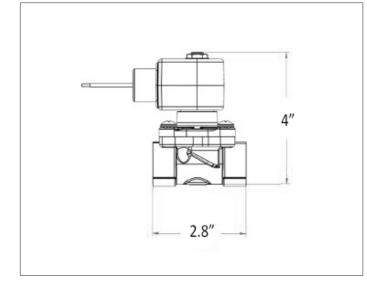




### DENLAR FIRE PROTECTION

### GAS POWER SOURCE DISCONNECT: -G (D1000)

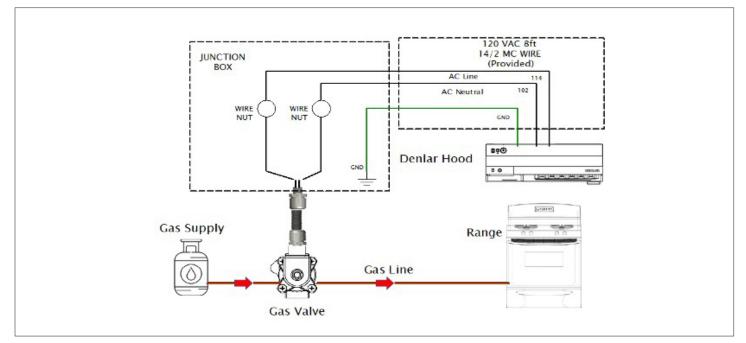
#### **GAS VALVE DIMENSIONS**



#### **SPECIFICATIONS**

Model	D1000-G
Wodel	D1000-G
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	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)
Min. Fluid Temperature	0° F
Max. Fluid Temperature	185° F
Flow Coefficient	5 CV

#### **SCHEMATIC**

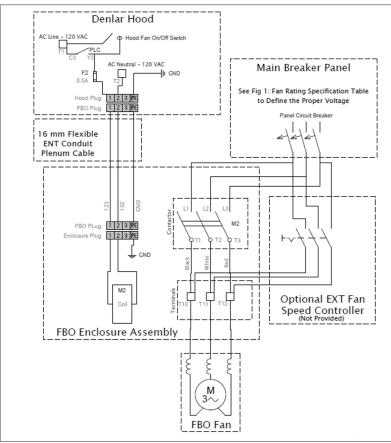






### FAN: -FBO-NFPA (PRO) 30"

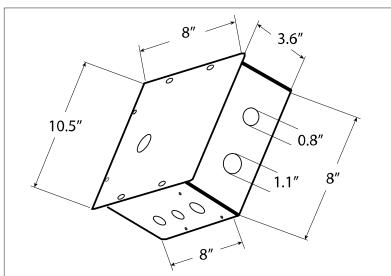
#### **SCHEMATIC**



#### **SPECIFICATIONS**

Style	N/A
Туре	3rd party supplied
Weight	6.4 lbs.
Operating Current	0.25 Amps
Voltage	120 AC
Phase	1
Frequency	60 Hz
CFM + -2.5% (Low-High)	N/A (500 Required for Compliance)
Pressure (In Water)	N/A
dBA (Low-High)	N/A
Hood Outlet (Low-High)	7 in (Dia)
Duct	N/A
Fan Inlet	N/A
Fan Outlet	N/A
Control	ON/OFF
Speeds	Single Speed
Fuse	0.5 Amps
Fuse Type	5 mm x 20 mm
Mounting Configuration	Surface Mount or Flush Mount

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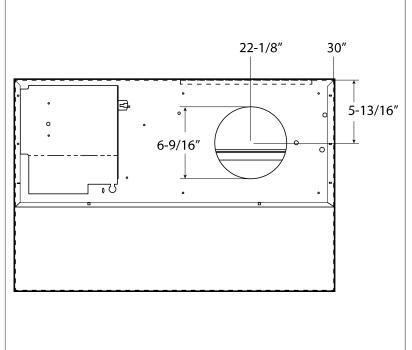


Fan Rating Specification					
Phase	Voltage	Max HP	Max Amps		
1 PH	120	2	24		
1 PH	240	3	17		
3 PH	200 - 208	7.5	25.3		
3 PH	220 - 240	7.5	22		
3 PH	440 - 480	15	21		
3 PH	550 - 600	20	22		

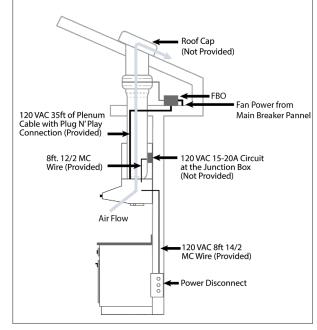
### DENLAR FIRE PROTECTION

# FAN: -FBO-NFPA (PRO) 30"

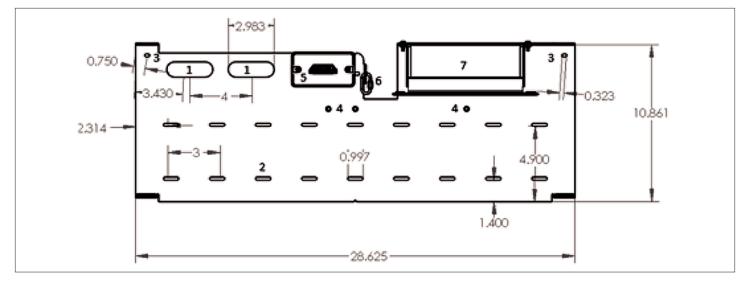
### **DUCT LOCATION**



#### SAMPLE EXHAUST LAYOUT



### **TOP DISCHARGING MOUNTING BRACKET (D1000-BPSI)**







### CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO



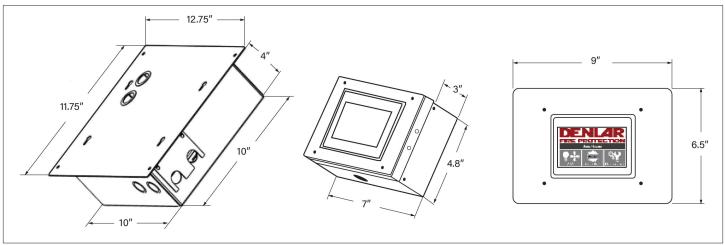
#### **SPECIFICATIONS**

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	Y	Y	Y	Y	Υ

#### **UNIT DIMENSIONS**

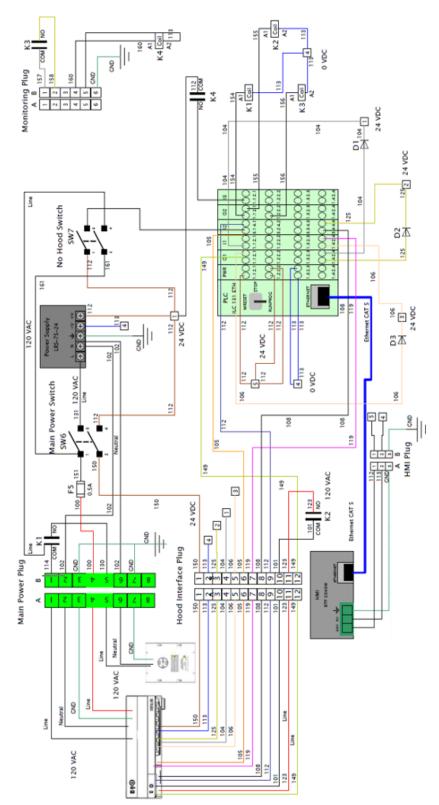






### CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO

**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** 



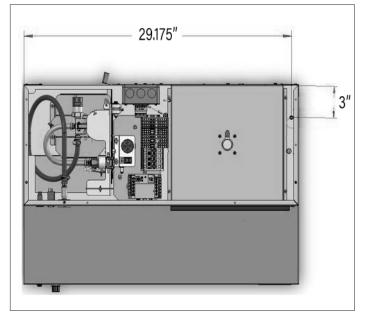


1x 1/2" ENT Conduit Connector

1x 25' Stainless-Steel

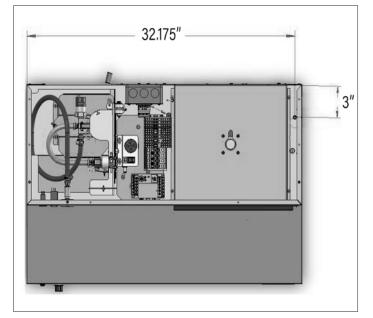
Cable with Clevis Pin

#### **30" MODEL PULL-PIN LOCATION**



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#### **36" MODEL PULL-PIN LOCATION**

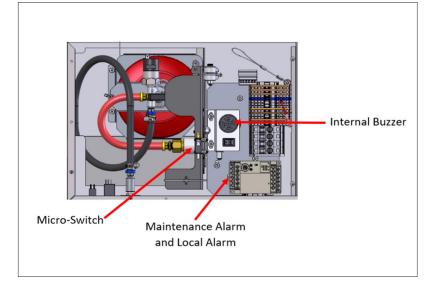


The Manual Pull Station (D1000-MPK) is designed to discharge the D1000 Model when a user pulls the tab from the Manual Pull Station Face Plate. The D1000-MPK is provided with 25 feet Stainless-Steel Cable and with three 90 Degree Corner Pulleys. It is required to have 7-10 inches extra Stainless-Steel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



### **ALARM: INTEGRATED TO D1000**

#### **ALARM LOCATION**



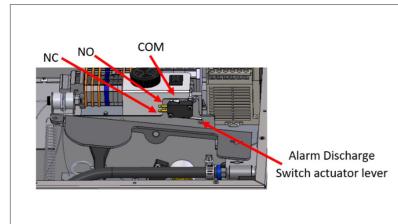
#### **INTERNAL BUZZER SPECIFICATIONS**

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**

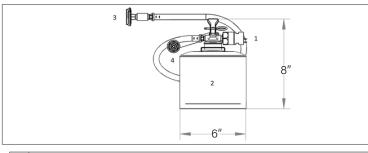
Туре	Dry Contact
Type of Contacts	Com / NO / NC
Contact Amperage	15 Amps
Location	Above tank actuation paddle
Activates upon	Mechanical discharge of the tank





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

#### **UNIT DIMENSIONS**

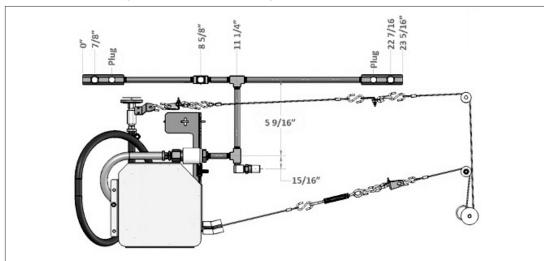


	1	Tank is Equipped with a Pressure Switch which opens on discharge.	
	2	Tank is of Stainless Steel Construction.	
	3	Visual Pressure Gauge.	
ſ	4	Discharge Hose with Quick Connect fitting attached.	

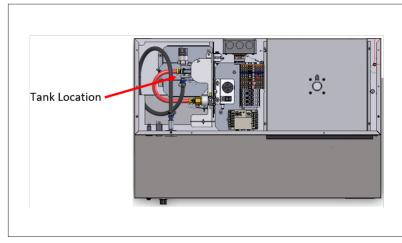
#### **NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)**

#### **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