# **DENLAR** FIRE PROTECTION

# NLAR SUBMITTAL DATA SKU: D1030-D-RF-NFPA-PRO-E

**30" PRE-ENGINEERED RANGE HOOD** 

# **BASE MODEL: D1030-D-RF-NFPA-PRO**

Job Name:	Date:	٢	Mark:		
Reference:	Unit Location:	F	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		n 🛛 <b>RF</b> - Roof Mou	nted Fan 🗌 <b>WF</b> - Wall Mounted Fan		
SELECT OPTIONAL ACCESSORIES		D1030-TC-D: Top C	aver.		
CC: Custom Color – (Stainless Standard)					
TANK-TEST: Test Tank			ox Pro with integrated ADA		
MPK: Manual Pull Station		STROBE: Horn and Light Strobe Alarm			
RANGE FUEL SOURCE DISCONNECT OPTIC					
<b>G:</b> 3/4" NPT Natural Gas (DED Needed if	-	-	(includes 3/4" NPT Natural Gas and Electric) -		
to be Controlled on a Gas Range)			20VAC O 5-20R, 120VAC		
<ul> <li>X E: Electric -</li> </ul>		DRD: Dual Recepta			
O 14-50R, 220VAC O 6-20R, 220 O 5-15R, 120VAC O 5-20R, 120 O 10-50R, 220VAC			DVAC O 5-15R, 120VAC O 5-20R, 120VAC		
ELECTRIC NEMA (RECEPTACLE) OPTIONS					
			G		
	0-50R 6-20R	5-15R	5-20R		
220VAC 50AMP 220VA	C 50AMP 220VAC 20AMP	120VAC 15AMP	120VAC 20AMP		
		Con	tact 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 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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rents or conditions nit shall have multiple alarm



# **BASE MODEL: D1030-D-RF-NFPA-PRO**



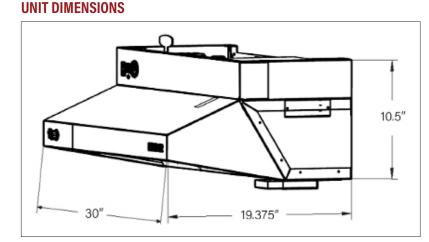
#### **GENERAL FEATURES**

- 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

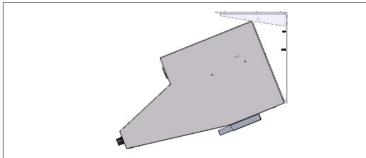
- Pressure switch
- Pressure gauge
- Temperature switches
- Hard wired fuel source disconnect
- Dry alarm contacts
- On board diagnostics
- Status LED

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

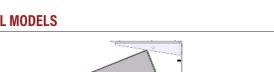
UL300A, NSF, UL507, and

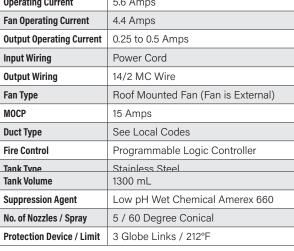


#### **REQUIRED FOR ALL MODELS**



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





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### **SPECIFICATIONS**

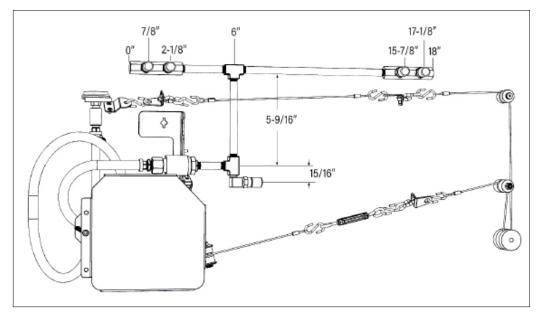
Compliance

oomphanoe	NFPA101 compliant	
Weight	53.4 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	6.3 Amps	
Circuit Breaker Size	15-20 Amps	
<b>Operating Current</b>	5.6 Amps	
Fan Operating Current	4.4 Amps	
<b>Output Operating Current</b>	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 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	

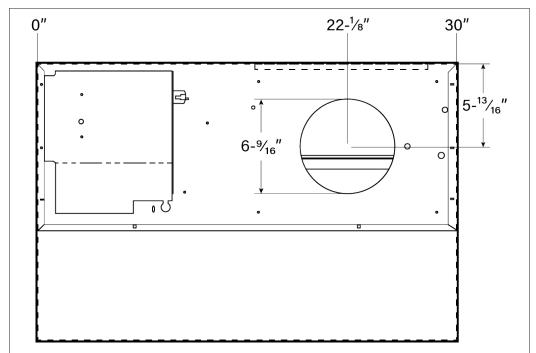


# BASE MODEL: D1030-D-RF-NFPA-PRO

### **NOZZLE PLACEMENT**



### **TOP DUCTED EXHAUST**



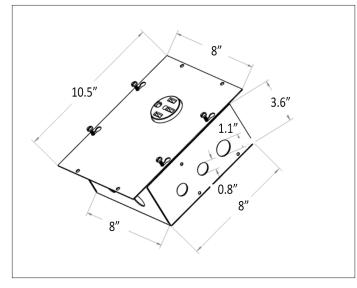




### DENLAR FIRE PROTECTION

# **ELECTRIC POWER SOURCE DISCONNECT: -E (D1000)**

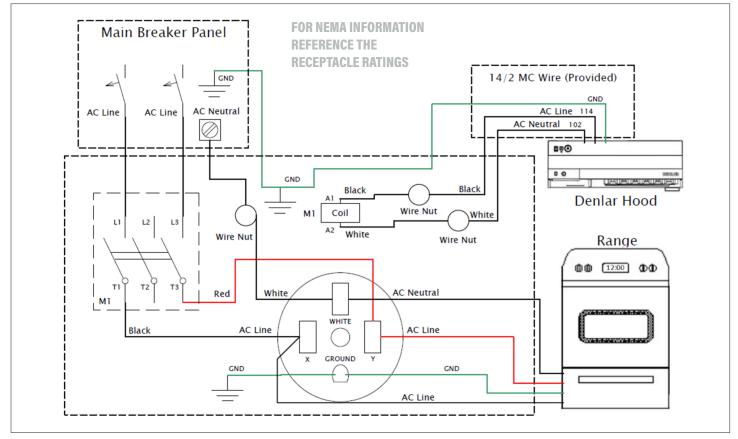
### **ELECTRIC RECEPTACLE DIMENSIONS**



#### **SPECIFICATIONS**

Models	-E-220 14-50	-E-220 10-50	-E 220 6-20	-E-120 5-20	-E-120 5-15	
Weight		5.4 lbs.				
NEMA	14-50R	10-50R	6-20R	5-20R	5-15R	
Output Volts	220 AC	220 AC	220 AC	120 AC	120 AC	
Output Current	50 Amps	50 Amps	20 Amps	20 Amps	15 Amps	
Coil Voltage		120				
Phase	1					
Frequency	60 Hz					
Fuse	0.5 Amps					
Fuse Type		5 X 20mm Cartridge				
Operating Current	0.25 Amps					
Material	Galvanized					
Mounting Type	Surface or flush mount					
Mounting Height	See local codes					

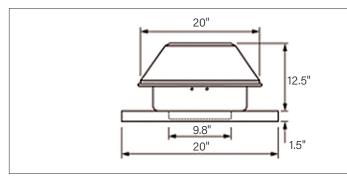
#### **SCHEMATIC**





# FAN: -D-RF-NFPA (PRO) 30"

#### NFPA ROOF MOUNT DIMENSIONS



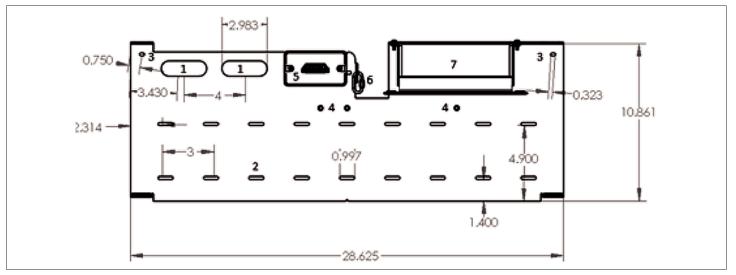
	D1000-BPSI Layout				
1	Cut-outs for Wire Entry				
2	Mounting Holes				
3	Top Mounting Holes				
4	1/4-20 Studs for Securing Hoods to D1000-BPSI				
5	Handy box for Power In and Power Out				
6	Quick Link Safety Cable Holder				
	Collar to Attach Duct Work (7" Dia, X 1" Height) (A Minimum				

Collar to Attach Duct Work (/\* Dia. X i\* Height) (A Minimum of 6" length of 7" Dia. Duct is required before connecting an Increaser/Adapter)

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

#### **SPECIFICATIONS**

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

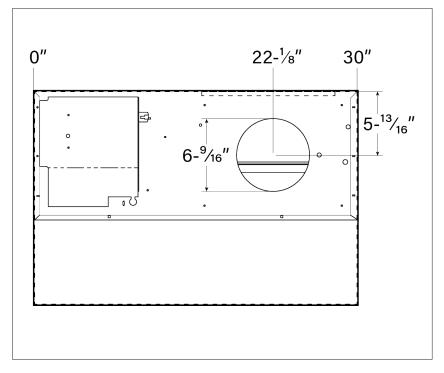




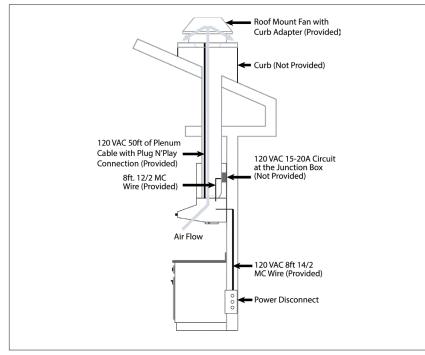
## DENLAR FIRE PROTECTION

# FAN: -D-RF-NFPA (PRO) 30"

### **DUCT LOCATION**



#### SAMPLE EXHAUST LAYOUT







# CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO



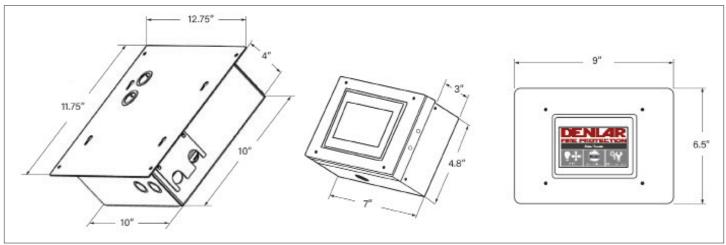
#### **SPECIFICATIONS**

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**

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	Y	Y	Υ	Υ	Υ	Υ	Y

#### **UNIT DIMENSIONS**

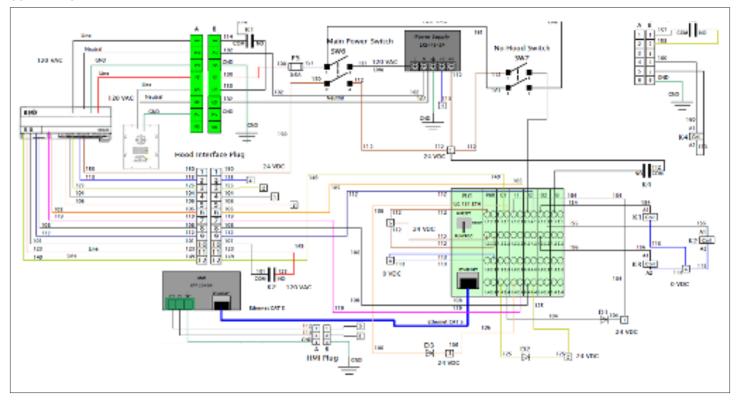






# CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO

### **SCHEMATIC**





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# **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** 

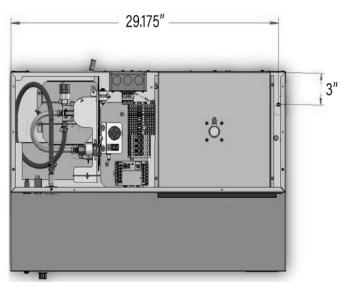


1x 1/2" ENT Conduit Connector



1x 25' Stainless-Steel Cable with Clevis Pin

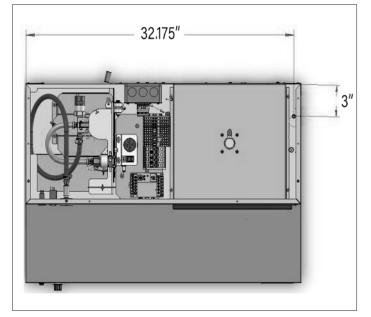
#### **30" MODEL PULL-PIN LOCATION**





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.

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

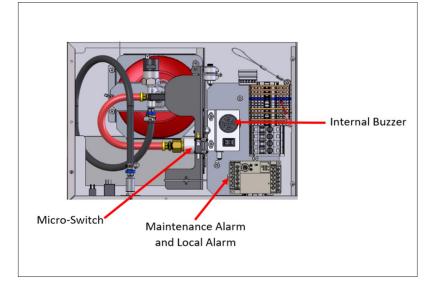






# **ALARM: INTEGRATED TO D1000**

#### **ALARM LOCATION**



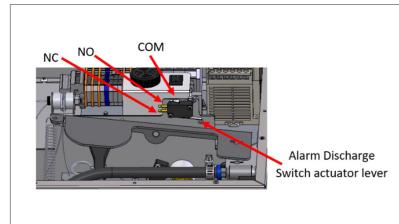
#### **INTERNAL BUZZER SPECIFICATIONS**

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**

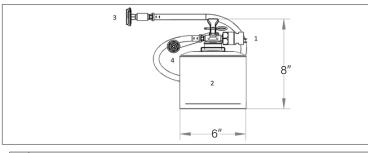
Туре	Dry Contact
Type of Contacts	Com / NO / NC
Contact Amperage	15 Amps
Location	Above tank actuation paddle
Activates upon	Mechanical discharge of the tank





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

#### **UNIT DIMENSIONS**

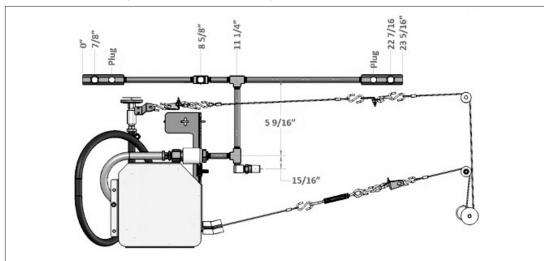


	1	Tank is Equipped with a Pressure Switch which opens on discharge.
	2	Tank is of Stainless Steel Construction.
	3	Visual Pressure Gauge.
ſ	4	Discharge Hose with Quick Connect fitting attached.

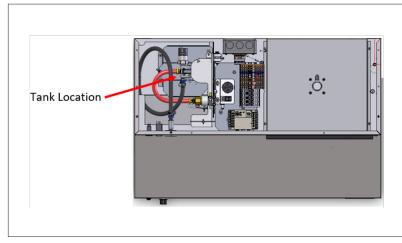
### **NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)**

### **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