### **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 🗌 <b>WF</b> - 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	<b>NS</b> (CHECK APPROPR	RIATE RECEPTACI E)			
<b>G:</b> 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









DL1197A 2/24



### **BASE MODEL: D1036-D-RF-NFPA**



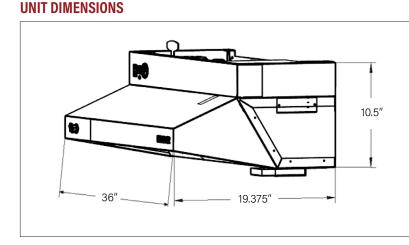
#### **GENERAL FEATURES**

- 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

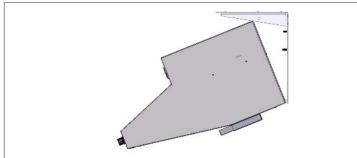
#### Pressure switch

- 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





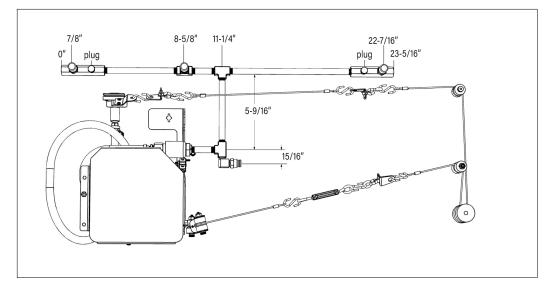




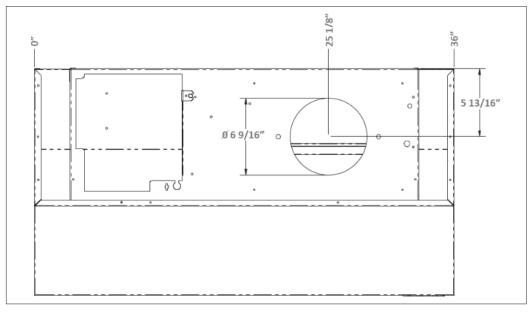


### **BASE MODEL: D1036-D-RF-NFPA**

### **NOZZLE PLACEMENT**



### **TOP DUCTED EXHAUST**



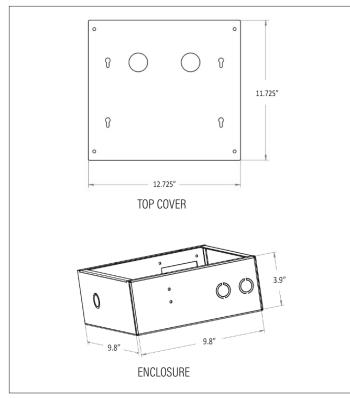




### DENLAR FIRE PROTECTION

### **DUAL RECEPTACLE POWER SOURCE DISCONNECT: -DRD (D1000)**

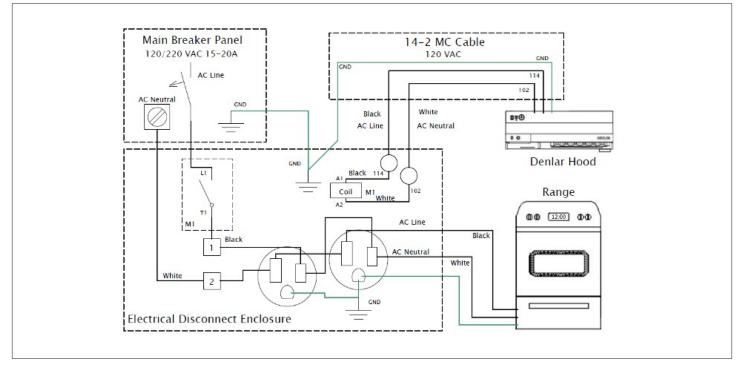
### **RECEPTACLE DIMENSIONS**



### **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**

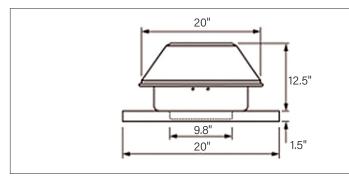






### FAN: -D-RF-NFPA (PRO) 36"

### NFPA ROOF MOUNT DIMENSIONS



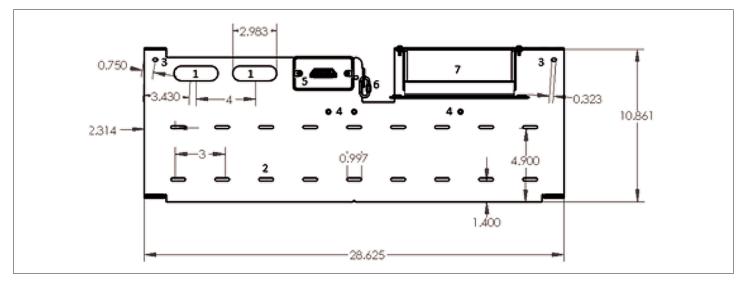
	D1000-BPSI Layout				
1	Cut-outs for Wire Entry				
2	Mounting Holes				
3	Top Mounting Holes				
4	1/4-20 Studs for Securing Hoods to D1000-BPSI				
5	Handy box for Power In and Power Out				
6	Quick Link Safety Cable Holder				
	Collar to Attach Duct Work (7" Dia. X 1" Height) (A Minimum				

 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)**

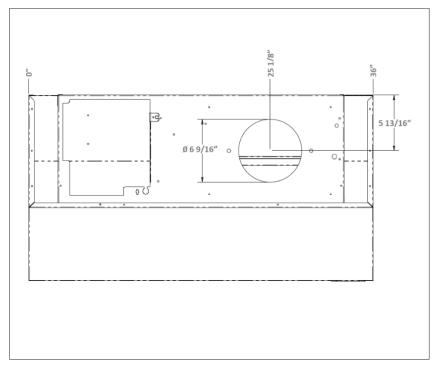




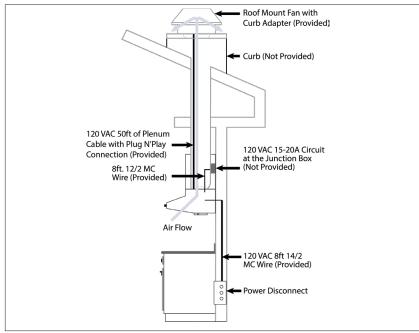
### **DENLAR** FIRE PROTECTION

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

### **DUCT LOCATION**



### SAMPLE EXHAUST LAYOUT







### CLOCKBOX<sup>™</sup>: -CLBX



#### **SPECIFICATIONS**

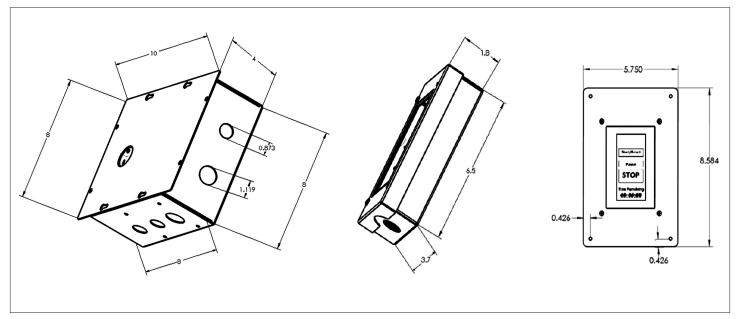
Mounting	Surface Mount or Flush Mount
Weight	14 lbs
Voltage	120 VAC
Phase	1
Frequency	60 Hz
Breaker Size	15 Amps
Operating Current	0.1 Amps
Fuse	0.5 Amps
Touch Screen Voltage	5 DC
Output Current Maximum	2 Amps
Conduit	25 ft 16 mm ENT Conduit

#### **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

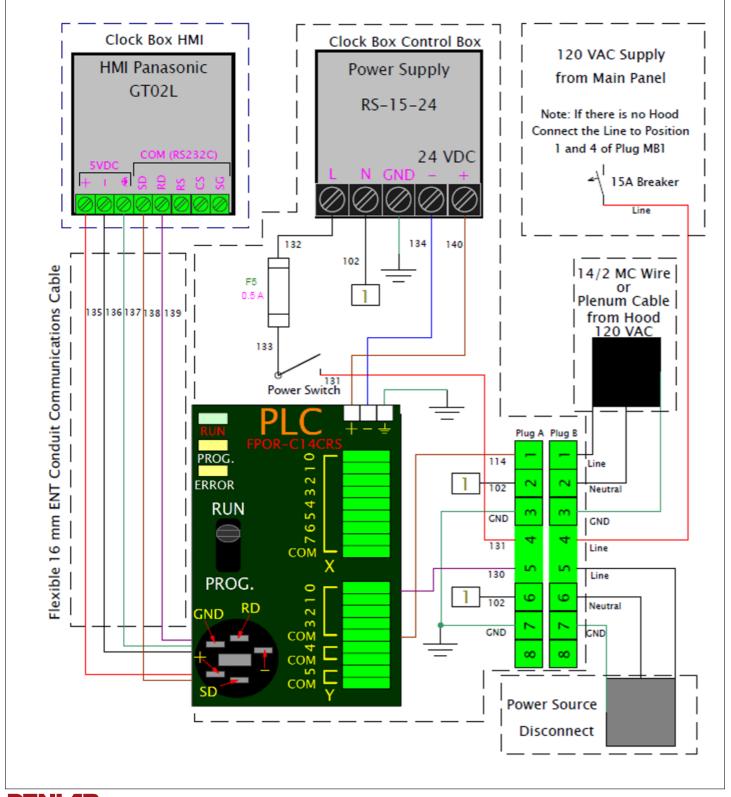






### CLOCKBOX<sup>™</sup>: -CLBX

**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** 



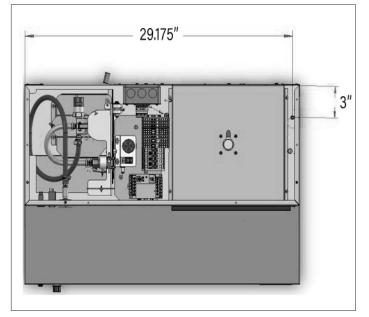
1x 25' Stainless-Steel

Cable with Clevis Pin



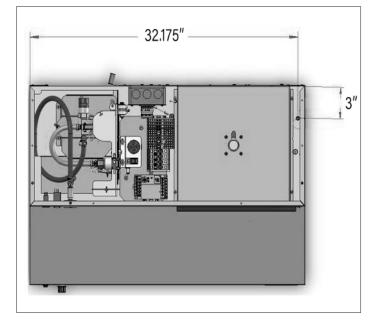
1x 1/2" ENT Conduit Connector

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





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

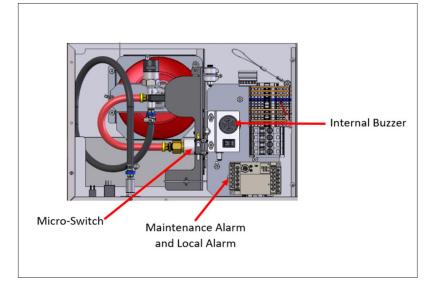


The Manual Pull Station (D1000-MPK) is designed to discharge the D1000 Model when a user pulls the tab from the Manual Pull Station Face Plate. The D1000-MPK is provided with 25 feet Stainless-Steel Cable and with three 90 Degree Corner Pulleys. It is required to have 7-10 inches extra Stainless-Steel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



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

#### **ALARM LOCATION**



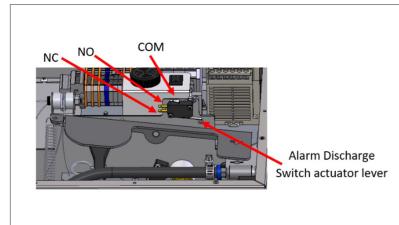
### **INTERNAL BUZZER SPECIFICATIONS**

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**

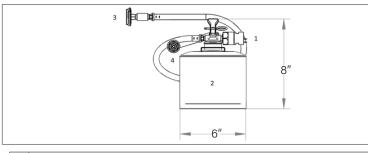
Туре	Dry Contact
Type of Contacts	Com / NO / NC
Contact Amperage	15 Amps
Location	Above tank actuation paddle
Activates upon	Mechanical discharge of the tank





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

### **UNIT DIMENSIONS**

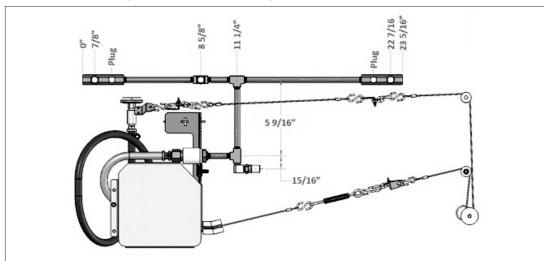


	1	Tank is Equipped with a Pressure Switch which opens on discharge.
	2	Tank is of Stainless Steel Construction.
	3	Visual Pressure Gauge.
ſ	4	Discharge Hose with Quick Connect fitting attached.

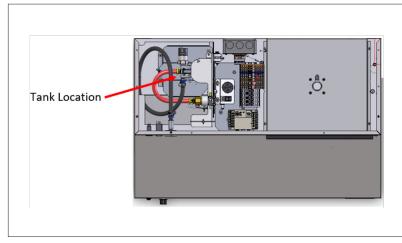
### **NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)**

### **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