# DENLAR FIRE PROTECTION

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

**30" PRE-ENGINEERED RANGE HOOD** 

# **BASE MODEL: D1030-R-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 SELECT OPTIONAL ACCESSORIES □ ADA: ADA Fan/Light Control ⊠ CLBX: ClockBox		🔀 MPK: Manu		
CC: Custom Color – (Stainless Standard) Specify Color: LSC: Limiting Speed Control Module  TANK-TEST: Test Tank PD4X: Power Distribution Box RANGE FUEL SOURCE DISCONNECT OPTIONS (CHECK APPROPRIATE RECEPTACLE) G: 3/4" NPT Natural Gas (DED Needed if Electric Components Need DED: Dual Element (includes 3/4" NPT Natural Gas and Electric) -				
to be Controlled on a Gas Range)		— O 14	-50R, 220VAC O 5-20R, 120VAC	
<ul> <li>E: Electric -</li> <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>			Receptacle - 20R, 220VAC O 5-15R, 120VAC O 5-20R, 120VAC	
		-20R 5-15I C 20AMP 120VAC 1		
			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 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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DL1242A 3/24



# **BASE MODEL: D1030-R-NFPA**



#### **GENERAL FEATURES**

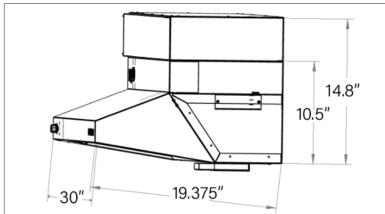
- ETL/CSA listed
- 304 Brushed Stainless Steel
- Fail-Safe mechanical actuation
- Two step pre-suppression
- Plenum nozzle
- Main power switch and reset switch
- Service switch

#### Pressure switch

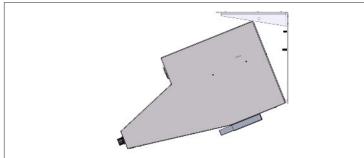
- Pressure gauge
- Temperature switches
- Hard wired fuel source disconnect
- Dry alarm contacts
- On board diagnostics
- Status LED

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

### UNIT DIMENSIONS



#### **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	Hood 53.5 lbs, Fan 22 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	Fuse 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
Protection Device / Limit	3 Globe Links / 212° F



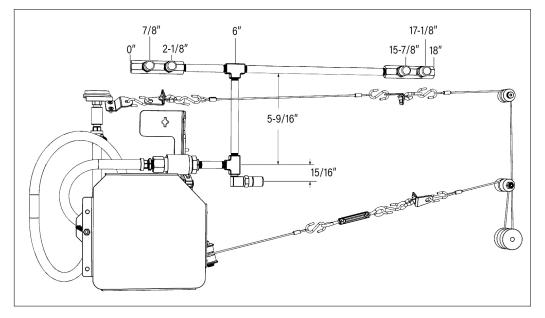




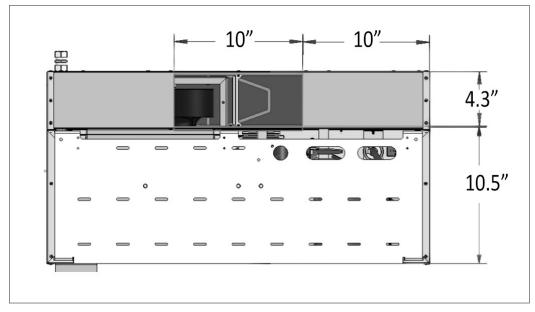


# **BASE MODEL: D1030-R-NFPA**

### **NOZZLE PLACEMENT**



#### **EXHAUST CUTOUT LOCATION**



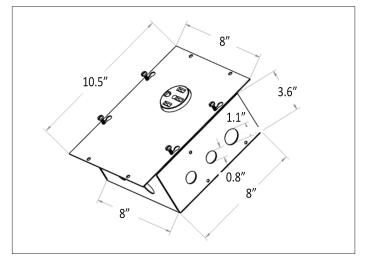




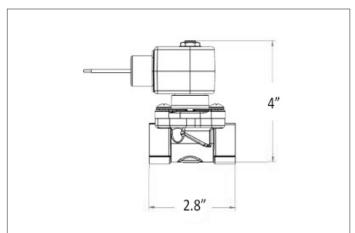
### DENLAR FIRE PROTECTION

# **DUAL ELEMENT STOVE 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	1 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**

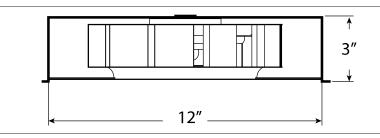
Coil Voltage	120 AC
Phase	1
Frequency	60 Hz
Fuse	0.5 Amps
Operating Current	0.25 Amps
Valve Type	2-Way
Function	Normally closed
Actuation Type Coil Type	Direct lift
Coil Type	1⁄2″ NPT conduit, 18′ leads, class F, NEMA 4X
Body Material	Brass
Seal Material	NBR
Orifice Size	7/16″
Port Size	3/4"
Number Of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



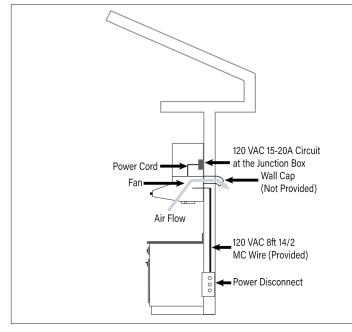


# FAN: -R (D1000) 30"

### FAN 30" MODEL DIMENSIONS



### **REAR (DISCHARGING) LAYOUT**

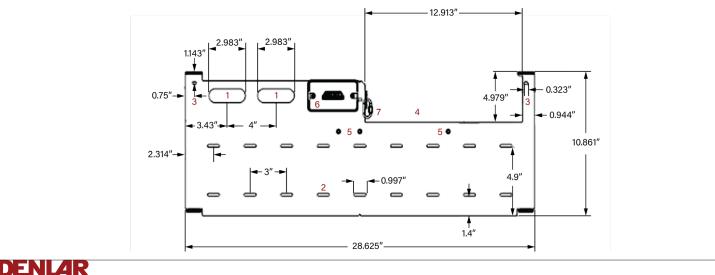


### **TOP DISCHARGING MOUNTING BRACKET (D1000-BPSF)**

### **SPECIFICATIONS**

Style	Rear Discharge
Туре	Integral to Hood
Weight	6.25 lbs
Operating Current	0.8 Amps
Voltage	120 AC
Phase	1
Frequency	60 Hz
CFM + -2.5% (Low-High)	139-279
Pressure (In Water)	-0.090.17
dBA (Low-High)	62 - 70
Hood Outlet (Length-Height)	12 in x 3 in
Duct	4-24 in
Fan Inlet	6.5 in (Dia)
Fan Outlet	12 in x 3 in
Control	Electronic Control Module (ECM)
Speeds	Variable

	D1000-BPSF Layout			
1	Cut-outs for Wire Entry			
2	Mounting Holes			
3	Top Mounting Holes			
4	Cut-out for Rear Exhaust Fan			
5	1/4-20 Studs for Securing Hoods to D1000-BPSF			
6	Handy Box for Power In and Power Out			
7	Quick Link Safety Cable Holder			



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# CLOCKBOX<sup>™</sup>: -CLBX



#### **SPECIFICATIONS**

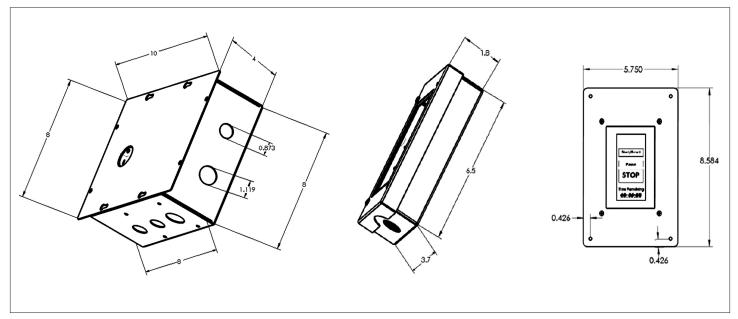
Mounting	Surface Mount or Flush Mount
Weight	14 lbs
Voltage	120 VAC
Phase	1
Frequency	60 Hz
Breaker Size	15 Amps
Operating Current	0.1 Amps
Fuse	0.5 Amps
Touch Screen Voltage	5 DC
Output Current Maximum	2 Amps
Conduit	25 ft 16 mm ENT Conduit

#### **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

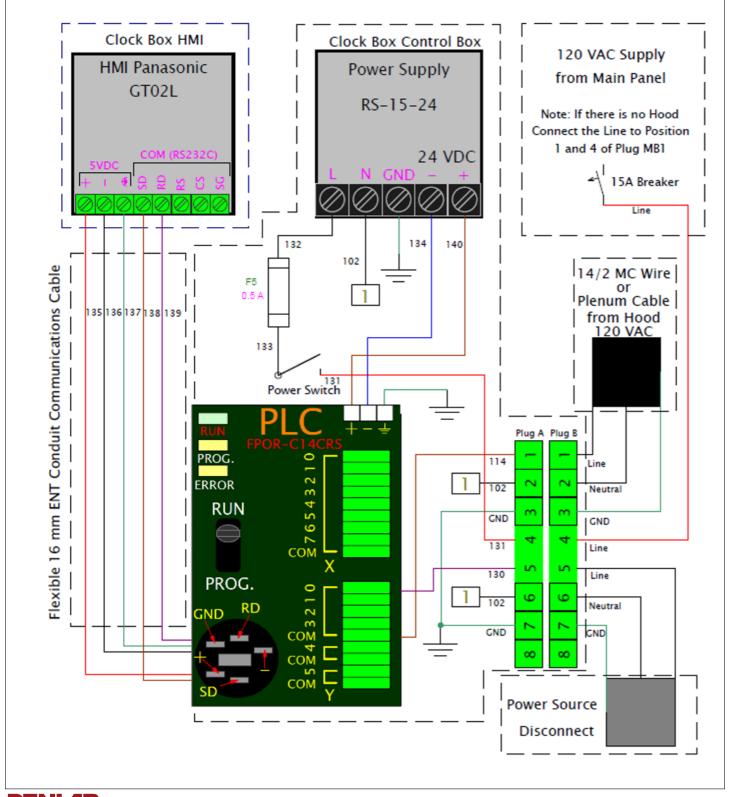






## CLOCKBOX<sup>™</sup>: -CLBX

**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** 

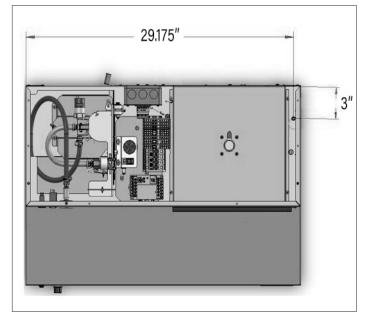


1x 1/2" ENT Conduit Connector



1x 25' Stainless-Steel Cable with Clevis Pin

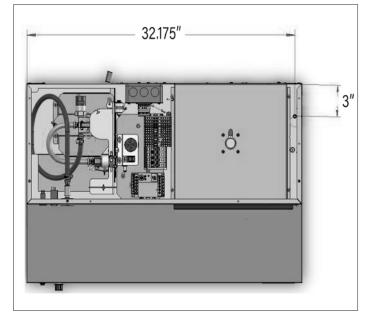
#### **30" MODEL PULL-PIN LOCATION**



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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.

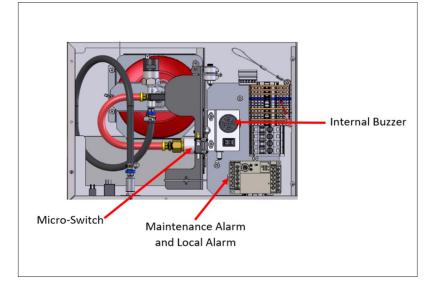
#### **36" MODEL PULL-PIN LOCATION**





# **ALARM: INTEGRATED TO D1000**

#### **ALARM LOCATION**



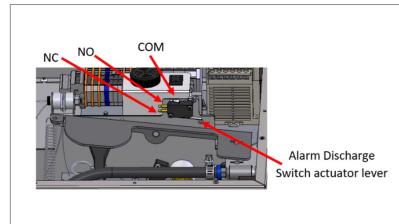
#### **INTERNAL BUZZER SPECIFICATIONS**

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**

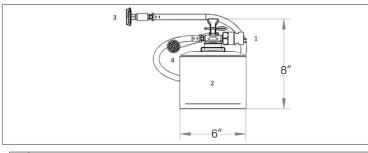
Туре	Dry Contact
Type of Contacts	Com / NO / NC
Contact Amperage	15 Amps
Location	Above tank actuation paddle
Activates upon	Mechanical discharge of the tank





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

#### **UNIT DIMENSIONS**

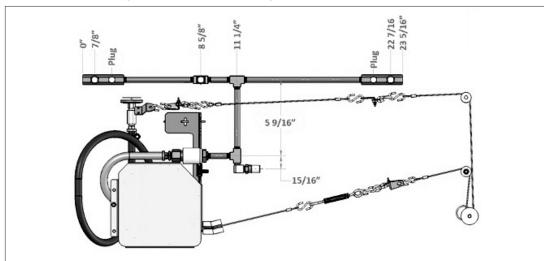


	1	Tank is Equipped with a Pressure Switch which opens on discharge.	
	2	Tank is of Stainless Steel Construction.	
	3	Visual Pressure Gauge.	
ſ	4	Discharge Hose with Quick Connect fitting attached.	

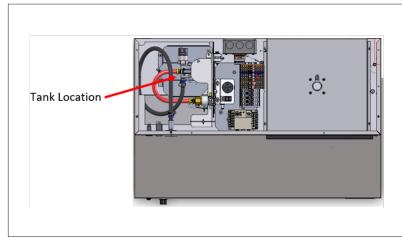
### **NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)**

### **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