# DENLAR FIRE PROTECTION

# SUBMITTAL DATA SKU: D1030-F-NFPA-PRO-E

**30" PRE-ENGINEERED RANGE HOOD** 

# **BASE MODEL: D1030-F-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	Discharging Others Module 🔲 <b>IF</b> - Inline Fan 🗌 <b>RF</b> - Roof M	Iounted Fan 🗌 <b>WF</b> - Wall Mounted Fan
<b>ADA:</b> ADA Fan/Light Control		p Air Control Module
<ul> <li>CC: Custom Color – (Stainless Standard)</li> <li>TANK-TEST: Test Tank</li> </ul>	· · · —	ckBox Pro with integrated ADA and Light Strobe Alarm
MPK: Manual Pull Station		
<ul> <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> <li>X E: Electric -</li> </ul>	Electric Components Need DED: Dual Elem	ent (includes 3/4" NPT Natural Gas and Electric) - , 220VAC O 5-20R, 120VAC ptacle -
O 14-50R, 220VAC O 6-20R, 220 O 5-15R, 120VAC O 5-20R, 120 O 10-50R, 220VAC	OVAC 0 6-20R,	220VAC O 5-15R, 120VAC O 5-20R, 120VAC
ELECTRIC NEMA (RECEPTACLE) OPTIONS		
	D-50R 6-20R 5-15R .C 50AMP 220VAC 20AMP 120VAC 15AM	5-20R IP 120VAC 20AMP
		ontact 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







DL1220A 3/24



# **BASE MODEL: D1030-F-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

**UNIT DIMENSIONS** 

#### 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

P	
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
<b>Output Operating Current</b>	0.25 to 0.5 Amps
Input Wiring	Power Cord
Output Wiring	14/2 MC Wire
Fan Type	Front Discharging, Recirculating Hood
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	5 / 60 Degree Conical
Protection Device / Limit	3 Globe Links / 212° F

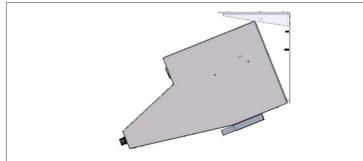






# 14.8" 10.5" 30" 19.375"

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



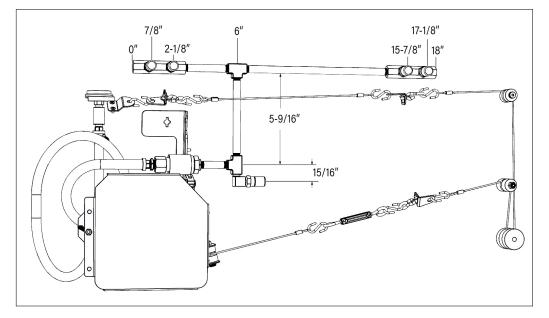
The main unit requires clearance to tilt to a 45° degree angle for maintenance purposes





# **BASE MODEL: D1030-F-NFPA-PRO**

### **NOZZLE PLACEMENT**



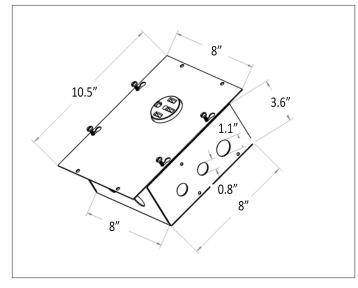






# **ELECTRIC STOVE POWER SOURCE DISCONNECT: -E (D1000)**

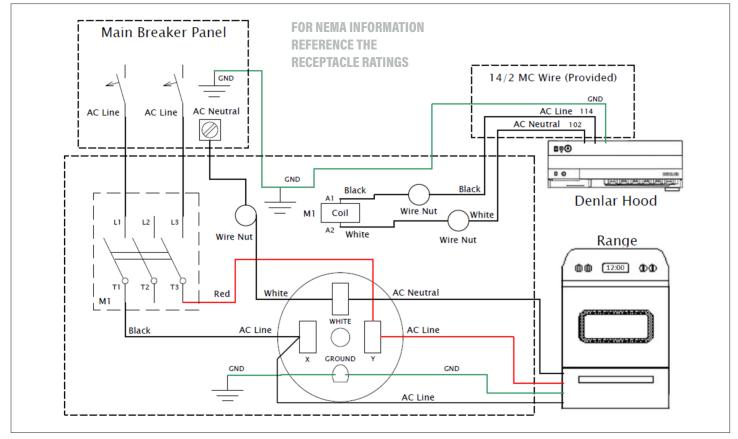
### **ELECTRIC RECEPTACLE DIMENSIONS**



#### **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**

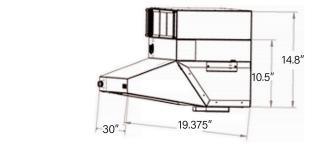




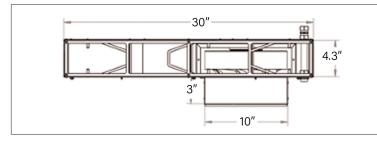


# FAN: -F-NFPA (PRO) 30"

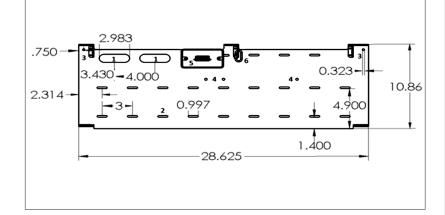
### **UNIT DIMENSIONS**



### **30" EXHAUST FAN FRONT VIEW DIMENSIONS**



## FRONT DISCHARGING MOUNTING BRACKET (D1000-BPSF-NFPA)



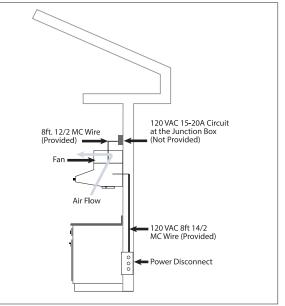
	Back Plate Support Layout
1	Cut-outs for Wire Entry
2	Mounting Holes
3	Top Mounting Holes
4	1/4-20 Studs for Securing Hoods to D1000-BPSF-NFPA
5	Handy box for Power In and Power Out
6	Quick Link Safety Cable Holder

# Style

Style	Front 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)	216 - 514
Pressure (In Water)	-0.261.38
dBA (Low-High)	60 - 84
Hood Outlet (LxH)	30 in x 4 in
Duct	N/A
Fan Inlet	9.8 in x 9.7 in
Fan Outlet	30 in x 4 in
Control	Electronic Control Module (ECM)
Speeds	Variable

# SAMPLE EXHAUST LAYOUT

**SPECIFICATIONS** 





# CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO



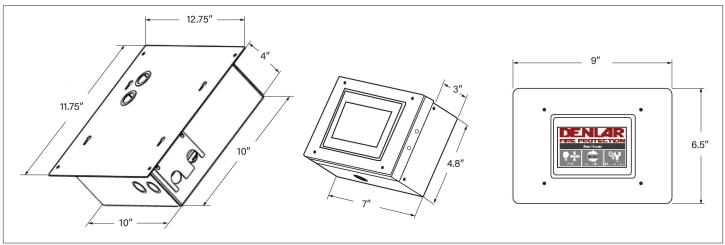
#### **SPECIFICATIONS**

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	Υ	Υ	Y	Y	Υ

#### **UNIT DIMENSIONS**

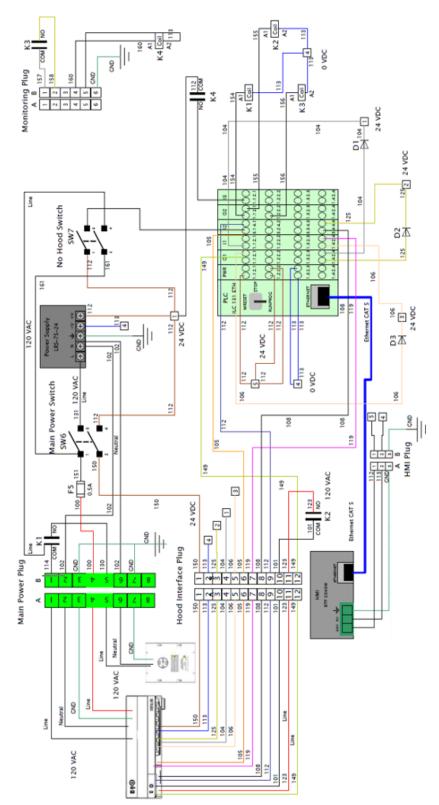






# CLOCKBOX PRO<sup>™</sup>: -CLBX-PRO

**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** 

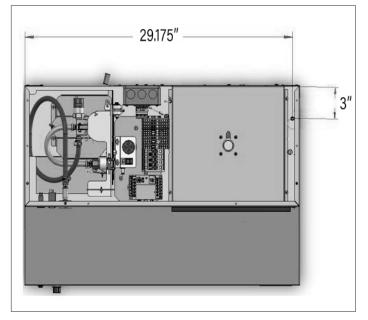


1x 1/2" ENT Conduit Connector



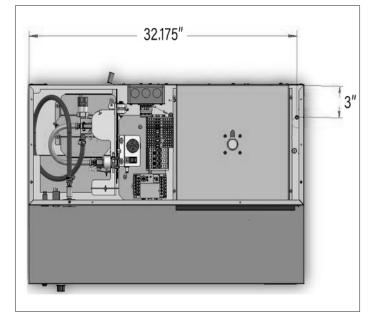
1x 25' Stainless-Steel Cable with Clevis Pin

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





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

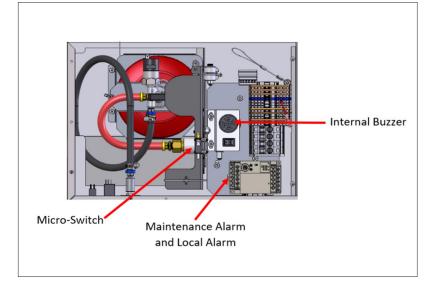


The Manual Pull Station (D1000-MPK) is designed to discharge the D1000 Model when a user pulls the tab from the Manual Pull Station Face Plate. The D1000-MPK is provided with 25 feet Stainless-Steel Cable and with three 90 Degree Corner Pulleys. It is required to have 7-10 inches extra Stainless-Steel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



# **ALARM: INTEGRATED TO D1000**

#### **ALARM LOCATION**



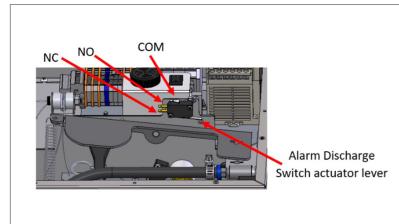
### **INTERNAL BUZZER SPECIFICATIONS**

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**

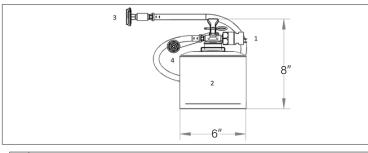
Туре	Dry Contact
Type of Contacts	Com / NO / NC
Contact Amperage	15 Amps
Location	Above tank actuation paddle
Activates upon	Mechanical discharge of the tank





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

### **UNIT DIMENSIONS**

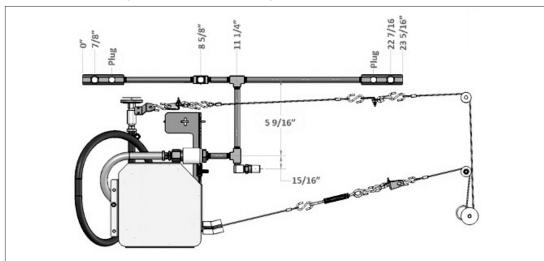


	1	Tank is Equipped with a Pressure Switch which opens on discharge.	
	2	Tank is of Stainless Steel Construction.	
	3	Visual Pressure Gauge.	
ſ	4	Discharge Hose with Quick Connect fitting attached.	

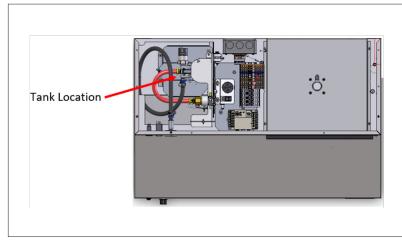
### **NOZZLE PLACEMENT (PRE-INSTALLED IN HOOD)**

### **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