

PROJECT:				
LOCATION:				
SUBMITTED BY:				
FAN MODEL				
DIAMETER				
DOWNROD				
WALL CONTROL				
VARIABLE FREQUENCY DRIVE				
I-BEAM MOUNTING HARDWARE				
INSTALLATION				
COMMENTS				

NOTES

 $\ensuremath{\mathsf{Fan}}(s)$ will be located at the nearest location(s) as per building plans.

Wall control location(s) to be identified by owner at time of installation.

IF A TOUCHSCREEN IS SELECTED: Owner must provide 110V outlet within 6' of touchscreen control location.

IF INSTALLATION IS TO BE PERFORMED BY OTHERS: Installation and site preparation to be performed by others at owner's request.

IF GOLD LEVEL INSTALLATION: Basic mechanical installation includes: scissor lift rental (if necessary), mounting all fans and equipment, routing all communication cables, connecting fans and controls (if applicable) to power supply, and factory authorized startup and commissioning.

CUSTOMER IS RESPONSIBLE FOR PROVIDING POWER SUPPLY TO 15' FROM EACH FAN LOCATION PRIOR TO FAN INSTALLATION

IF PLATINUM LEVEL INSTALLATION: Full turnkey installation includes: routing all electrical wire and conduit from each fan location to electrical panel, terminating electrical connections with NEMA rated receptacles, scissor lift rental (if necessary), mounting all fans and equipment, routing all communication cables, connecting fans and control (if applicable) to power supply, routing low voltage fire relay cable from each fan location to security panel (if fire relay tie-in is required – Customer's fire/security company to land final connections), and factory authorized startup and commissioning.



POWER & EFFICIENCY					
INPUT POWER OPTIONS	AC 1PH 200-240V 50/60Hz AC 3PH 200-240V 50/60Hz AC 3PH 380-480V 50/60Hz				
CURRENT AT MAX SPEED (Amp)	4.5 - 3.9 A		2.4 - 2.1 A	I	2.0 - 1.6 A
POWER (hp)					BLDC Motor 5/8 HP
MAXIMUM SPEED (RPM)					107 RPM
MAX AFFECTED AREA					70 ft Dia 4,900 sqft
DIMENSIONS & WEIGHT					
FAN DIAMETER					14 ft
FAN WEIGHT					128 lbs (58 kg)
(A) MINIMUM 2 ft			5 INCH (127MM)	A
			ł		
+		— 14 ft ———			Pictured with 2 ft downrod
MOUNTING & SAFETY					
MOUNTING OPTIONS					I-beam Glulam
DOWNROD (A)	Downrods available in 1 ft increments: 2 ft min., 10 ft max. Downrod length must be specified at time of order.				
SAFETY FEATURES	Fan Retention System Airfoil Retention System Fire relay				
IN THE BOX					
INCLUDED	Fan I-beam mount with pre-wired downrod Control panel Install manual Wall Control Mounting hardware kit 350 Series Fan Controller Communication Kit Guy wire kit				
OPTIONAL	Additional cable lengths Glulam brackets BMS Integration 430 Series Fan Controller 700 Series Fan Controller Environmental Control Fire Relay				
WARRANTY & CERTIFICATIO	NS				
CERTIFICATIONS			ETL/Intert	ek-certified t C22.2 N	o ANSI/UL 507 and CSA lo. 113 in North America
WARRANTY ¹				10-year	r, Non-Prorated Warranty
¹ See complete warranty for details.					

READ THE ENTIRE MANUAL BEFORE OPERATING THE FAN

Read and understand this manual before installing or operating a fan unit. Installation, adjustment, repair, or maintenance must be performed by qualified personnel.

Follow all safety practices and instructions during the installation, operation, and servicing of the fan. Failure to apply these safety practices could result in death or serious injury. If you do not understand the instructions, please call our Technical Department at 1-844-593-FANS (3267) for guidance.

All fan controls and incoming power should be installed only by qualified technicians familiar with the requirements of the National Electrical Code and local codes. Failure to follow these guidelines will void the manufacturer's warranty. All electrical controls are configured at the factory and are ready to use. No user adjustments are available. Follow the included installation instructions when installing this device to ensure proper operation. Do not make any changes to any part of the fan without first consulting Hunter Industrial Fan. Installation is to be in accordance with the National Electrical Code, ANSI/NFPA 70-1999 and local codes.



WARNING! Be aware of electric shock hazard, explosion, or arc flash

The user is responsible for compliance with all international and National Electrical Code requirements with respect to grounding of all equipment. Many of the parts of this unit operate at line voltage. **DO NOT TOUCH** any live conductors. Install all covers before applying power or starting and stopping the unit. To reduce the risk of electric shock or injury, use this unit only in the manner intended by the manufacturer. If you have questions, call our Technical Department at 1-844-593-FANS (3267).

Before servicing or cleaning the unit, switch power off at the service panel and lock the service disconnecting means to prevent power from being switched on

accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning sign, such as a tag, to the service panel. At all times, leave the power off at the service panel. To reduce the risk of electric shock or injury, use this unit only in the manner intended by the manufacturer. If you have questions, call our Technical Department at 1-844-593-FANS (3267).

DAMAGED EQUIPMENT

Do not operate or install any fans or fan accessories that appear to be damaged. Failure to follow this instruction can result in death, serious injury, or equipment damage.

SERVICE

If the fan does not operate properly using the procedures in this manual, remove all power to the unit and contact our Technical Department for further assistance at 1-844-593-FANS (3267). Keep all body parts clear of moving parts at all times. All electrical troubleshooting and repair must be done by a qualified technician and meet all applicable codes.

KEY RETENTION SYSTEM COMPONENTS

Our fans are engineered with safety features that prevent pieces of the fan from falling in the unlikely event of a catastrophic failure. Install the retention cable on EVERY fan. The retention cable, if installed per Hunter Industrial Fan specifications, will provide comprehensive protection of people, equipment, and property in the unlikely event of mounting system failure.

CAUTION! The fan should never be run without a properly installed retention cable, which is supplied with every fan along with all required hardware. If the retention cable is not installed, the warranty will be voided.

MARK THE FLOOR TO ALERT PERSONNEL

When mounting a fan in an area where materials may be elevated into its path, we recommend marking or painting the floor with a large crosshatched circle to alert personnel of the overhead location of fans.

WEIGHT CONSIDERATIONS

We recommend that a building structure be capable of holding approximately twice the stated hanging weight of the fan.

The hanging weight of a 24' fan with a standard 4' downrod is 212 lbs., the maximum hanging weight of a 24' fan with a 10' downrod is 232 lbs.

If there is any uncertainty in the strength of the building structure, a professional structural engineer should perform a thorough evaluation of the building prior to purchasing the fans. Hunter Industrial Fan provides guidelines for mounting fans; however, it is the sole responsibility of the building owner and installer to ensure the safety of the mounting system, that the building structure is sound, and that the installation complies with all federal, state, and local codes.

CHECK FEDERAL, STATE, AND LOCAL CODES

Code compliance is the responsibility of the installer.

Check all relevant codes to make sure that all product certifications, product listings, and building regulations are met.

WINDY CONDITIONS

Fans should not be operated or installed in locations where it is frequently windy.

SPRINKLER SYSTEMS AND FAN PLACEMENT

In any installation where fire sprinklers are in place, the fan should not interfere with their correct operation. Fans should be located no less than 3 feet below a sprinkler, and placed central to each sprinkler quadrant. Our industrial control panel can be connected to a fire relay system, which, in an emergency, will stop fans in case of fire.

Prior to installing fans, review all codes applicable to sprinkler systems and fans to ensure code compliance and refer to NFPA 13 Standard from the National Fire Prevention Association.

Please call our Technical Department for guidance at 1-844-593-FANS (3267). However, it is your sole responsibility to see that the installation is completed to code and that it is correct.

OTHER INFORMATION ON PLACEMENT AND SPACING

If possible, avoid mounting fans directly below lights or skylights to avoid any strobe effect caused by moving airfoils. Note, a large fan, 20 to 24 feet in diameter, performs best at 20 to 30 feet above the floor, but acceptable performance has been demonstrated as low as 10 feet and as high as 50 feet.

If the building has a mezzanine, fans should be mounted so a person cannot reach a fan in any way from the upper level/deck. Make certain that fans are positioned so that the airfoil tips are at least 3 feet away from any area where a person may be able to extend outward to reach them.

Fans should not be located directly beneath any air discharge. This includes air conditioning units and evaporative coolers. Such equipment can be used effectively in conjunction with HVLS fans but the discharge must be located outside of the swept area of the fan.



GUY WIRE CHECK

Checking a fan's guy wires for tension and inspecting for frayed sections could prevent a problem before it occurs. Fan owners should confirm that the guy wires are not wrapped around any sharp edges. We recommend attaching guy wires to the building with provided clamps to prevent fraying. Turnbuckles should be checked to ensure tightness. If they are loose, the guy wire cables need to be re-tensioned.

AIRFOIL CLEANING

Depending on the commercial application of the fan, there can be quite a bit of dust or other particulates that cling to the fan's airfoils. We recommend fan owners keep airfoils clean by having a maintenance person or skilled trade professional–who has experience using a lift–wipe the fan airfoils with a rag or sponge using hot water or regular cleaning solutions. Please do not use chlorine or any chemicals containing chlorine.

RETENTION SYSTEM CHECK

Each fan is installed with a retention system. The retention cable is attached to the motor and wraps around the building structure. The safety cable is an important part of the safety system and protects users from a catastrophic event. It is critical for fan owners to ensure that it is intact and properly secured.

REPLACEMENT PARTS

Please call our Technical Department at 1-844-593-FANS (3267).

IN THE BOX

FAN COMPONENTS

MOUNTING HARDWARE KIT



FAN COMPONENTS

- a) (1) Downr
- b) (1) Motor & (4) Motor Nu
- c) (1) 350 Series Contr
- d) (1) Control Pan
- e) (4) Blad

INSTALLATION MANUALS

- a) ECO Installation Manu
- b) HMI installation and user gui

MOUNTING HARDWARE KIT

- a) (2) S
- b) (2) Cl
- c) (4) Bolts, Nuts,

Washers

GUY WIRE KIT

- a) (1) Gripple
- b) (4) Beam Cl
- c) (urnbuckles

COMMUNICATON KIT

a) (1) 100ft Cat5 Cab (Terminated)

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CONTROL

350 SERIES TOUCHSCREEN CONTROLLER





- Comes standard on XP and Eco Fans
- Simple control of speed and direction
- Can be daisy chained to control up to 5 fans
- 3.5" LCD Touchscreen
- Alert Readouts

- Plug-n-Play design
- Standard junction box
- Simple flush mounting

430 SERIES TOUCHSCREEN CONTROLLER







- Compatible with all Hunter Industrial Fans
- Simple intuitive user Interface
- Standard on Titan
- Password protection for scheduling, grouping, and fan naming
- BMS Integration with optional gateway
- Fan diagnostics directly from screen
- Most cost effective network controller

4.3"
TOUCHSCREENNUMBER OF FANS CONTROLLEDUP TO 10 FANSACTIVE DISPLAY AREA4.3" DIAGONALLYRESOLUTION480 X 272 DIAGONALDIMMINGDIMMABLE TO 0%PROTECTION CLASSIP66INPUT VOLTAGE100 VAC - 240 VAC

180 THREET INDUSTRIAL ROAD | SMYRNA, TN 37214 | 1-844-591-FANS (3267) | HUNTERFAN.COM/INDUSTRIAL

700 SERIES TOUCHSCREEN CONTROLLER







- Optional Environmental Control
- BMS Integration with optional gateway
- Control up to 30 fans with network solutions to fit your needs
- Password protection for scheduling, grouping, and fan naming
- Fan diagnostics directly from screen



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OPTIONS FOR CONTROLS

BACNET GATEWAY



BACNET GATEWAY

- Simple approach to interface fans to a Building Management System
- Enables remote monitoring, control and visualization of a fan network
- Supports BACnet MS/TP and BACnet/IP
- OPERATING ENVIRONMENT TEMPERATURE
- OPERATING ENVIRONMENT HUMIDITY
- INPUT VOLTAGE
- ENCLOSURE RATING
- CERTIFICATIONS

IP67

-20° TO 70°C/(-4° TO 158°F)

10-95% RH NON-CONDENSING

24VAC 125MA, 12-24VDC 250MA @ 12VDC

BTL | CE | FCC CLASS B&C PART 15 | UL 60950 IC CANADA | ROHS AND WEEE COMPLIANT | PTCRB AND CTIA

OPTIONS FOR CONTROLS

CONTROL CABLE REPEATER



BACNET GATEWAY

- Extend standard Cat 5e/Cat 6 Ethernet cable runs an additional 100M without loss of transfer speed
- Port Speed: 10/100 Mbps auto detect

OPERATING ENVIRONMENT TEMPERATURE	-40° TO 75°C (-40° TO 167°F)
OPERATING ENVIRONMENT HUMIDITY	10-95% RH NON-CONDENSING
INPUT VOLTAGE	CLASS 2 POWER SUPPLY: 12-48VDC, 18-30VAC 50/60HZ
MAX POWER	ЗW
ENCLOSURE RATING	IP67
CERTIFICATIONS	IEEE 802.31, 802.3U, 802.3X FOR 10/100 ETHERNET

IEEE 802.31, 802.3U, 802.3X FOR 10/100 ETHERNET IEEE 802.3AB, 802.3X FOR GIGABIT ETHERNET CE | CSA | EICC | UL E200031 | ROHS 2 COMPLIANT

Electrical Plug Requirements

Voltage	Phase	Plug (included)	Receptacle
200-240V	Single	HBL2321	L6-20R
200-240V	Three	HBL2421	L15-20R
380-480V	Three	HBL2431	L16-20R







FIRE PANEL (FIELD WIRING)

DRY CONTACTS: NORMALLY CLOSED

- On the Terminal Strip mounted to the outside of the VFD enclosure a Jumper will be in place on terminals "S" and "C". Remove the Jumper from terminals "S" and "C".
- Connect the wires coming from the Fire Panel to terminals "S" and "C".

NORMALLY ENERGIZED

- On the Terminal Strip mounted to the outside of the VFD enclosure a Jumper will be in place on terminals "S" and "C". Remove the Jumper from terminals "S" and "C".
- Connect a wire from terminal "S" to "SA" on the Fire Relay Terminal Strip.
- Connect a wire from terminal "C" to "C" on the Fire Relay Terminal Strip.
- Apply 12-40VDC from Fire Panel to Fire Relay Input. Relay has a 20mA draw.

NORMALLY UNENERGIZED

- On the Terminal Strip mounted to the outside of the VFD enclosure a Jumper will be in place on terminals "S" and "C". Remove the Jumper from terminals "S" and "C".
- Connect a wire from terminal "S" to "SB" on the Fire Relay Terminal Strip
- Connect a wire from terminal "C" to "C" on the Fire Relay Terminal Strip.
- Apply 12-40VDC from Fire Panel to Fire Relay Input. Relay has a 20mA draw.







FIRE PANEL (FIELD WIRING)

FIRE RELAY ARRANGEMENT FOR MULTIPLE FANS (30 FAN MAXIMUM)

Normally Energized/Unenergized



Dry Contacts



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