



MDVS 250-500

Job Name: _____

Representative: _____

Job Location: _____

Job #: _____

Architect/Engineer: _____

Contractor: _____

EXHAUSTO Job File: _____

Use

The MDVS is a mechanical exhaust system used to control and maintain proper pressure and exhaust for multiple commercial or industrial laundry dryers.

Description

The MDVS system consists of an exhaust fan, the BESB Box Ventilator, a VFD (Variable Speed Drive) and the EBC30, Modulating Fan Control. The EBC30 maintains a perfect, constant pressure for the dryers by modulating the speed of the Box Ventilator.

The MDVS system is supplied as a complete package with fan(s), control(s), pressure sensor, duct probe and adapters for mounting on a duct or a wall.

Operation

During installation the EBC30 automatically detects connections, setting requirements and any add-on devices. The planned pressure setting must be entered manually via the control panel. After these steps have been taken, the control will keep the settings in memory. Many other functions can be programmed, but the control is shipped pre-programmed for each individual job.

Each dryer is interlocked with the control. A call for heat activates the exhaust fan and releases the dryer operation once an adequate, pre-set pressure is established. The sequence is repeated every time a new dryer calls for heat. When a dryer shuts down, the exhaust fan will slow down while still maintaining the pressure setting. When the last dryer shuts down the exhaust fan will operate in post-purge mode for a preset time period.

The integrated proven pressure function will shut down the entire system in case of a power failure to the supply fan or the Variable Speed Drive (if installed) or mechanical failure. During a following call for heat, the Operating Priority function will detect if one or more dryers can be operated safely and with proper pressure. If so, the dryer(s) will be able to operate without fan operation. After two (2) hours, fan operation is checked and if present, the control will go back to normal operation. Otherwise, it will continue to operate in Operating Priority mode. The self-check is

repeated every two (2) hours infinitely. During a period without fan operation, the control is in alarm mode.

If the supply fan has been out of commission for seven (7) days, the Bearing Cycle Activation function will operate the fan at a low speed for a short time. This is automatically repeated every seven (7) days, if the fan has not been operating.

Any errors detected during operation are either shown via the self-diagnostic panel or on the display.

Sizes

The system is available in many sizes as shown on the following pages, and virtually handles any heating appliance(s) independent of input/HP.

Listings

ETL-listed to UL705 for Power Ventilators with special consideration given to the transport of lint-laden air.

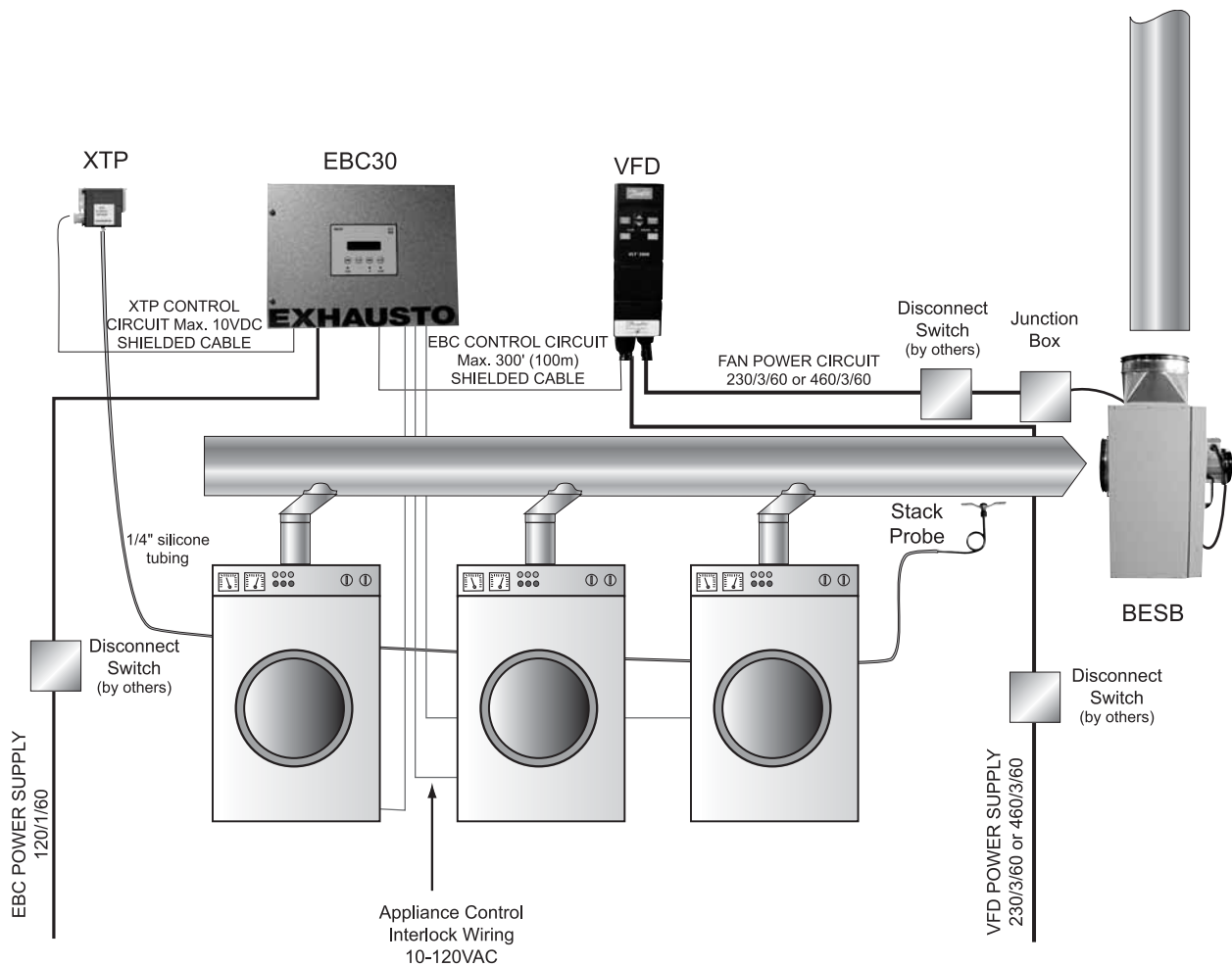
CSI Specifications

CSI Model Specifications are available from EXHAUSTO and via the internet at us.exhausto.com.

The document number is: 3917013.



MDVS 250-500



System Components and Specifications

Model	Fan	Control	Danfoss VFD	Triac Board	If 6+ appliances	Power Supply VFD	Max. Input Amp to VFD	Power Supply Fan	Max. Input Current Fan	Max Output Fan HP	RPM
MDVS250	BESB250	EBC30, incl. XTP and stack probe	No	Yes	Add-on Relay Board	NA	NA	120/1/60	5.8	0.5	1600
MDVS315	BESB315		2807 (1HP)	No		220-240/1/60	16.7	230/3/60	4.0	1.0	1740
			200-240/3/60			8.2	230/3/60	4.0	1.0	1740	
			380-480/3/60			3.0	460/3/60	2.3	1.0	1740	
MDVS400	BESB400		2815 (2HP)	No		220-240/1/60	24.3	230/3/60	6.5	2.0	1740
			200-240/3/60			12.2	230/3/60	6.5	2.0	1740	
MDVS500	BESB500	2822 (3HP)	No	380-480/3/60	5.1	460/3/60	3.8	2.0	1740		
		200-240/3/60		15.3	230/3/60	7.8	3.0	1740			
						380-480/3/60	8.3	460/3/60	4.1	3.0	1740

Wiring	Wire Rating	Rating Amps	No. of leads	Max. Length	Min. Wire Gauge
EBC POWER SUPPLY	600V	6.3	3	*	14
XTP CONTROL CIRCUIT	-	<0.01	3	300'	24
FAN POWER SUPPLY	600V	5.8	3	*	14
APPLIANCE CONTROL CIRCUIT	*	*	4	*	*
EBC & VFD CONTROL CIRCUIT	-	<0.1	2	300'	24
VFD POWER SUPPLY	600V	see above	5	*	14

All wiring must comply with local codes, and in their absence, the National Electrical Code, NFPA 70.

** Job specific - check local code