



GOVERNMENT OF BERMUDA  
Ministry of Public Works  
Department of Works & Engineering

Central Area Distribution Pump Station  
Fort Hill Road Devonshire

**Addendum Two**

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**DATE:** 14<sup>th</sup> July 2017

**METHOD OF DELIVERY:**

**PROJECT NAME & NO.:** File No.: 41/188/1/75

POSTED ON [www.gov.bm/procurement-notice](http://www.gov.bm/procurement-notice)

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This Addendum forms part of the RFP documents and will be subject to all of the conditions set out in the contract conditions. This Addendum Two contains (nine) page.

**Addendum Two**

**1. Details of Equipment Supplied by Owner**

Attached are information sheets for the following:

- a. Hammond Power Centre
- b. GreenHeck Extract Fan

Bidders are requested to acknowledge receipt of this Addendum(Two) by emailing

[tjchristopher@gov.bm](mailto:tjchristopher@gov.bm)

Sincerely, Project Manager

END OF ADDENDUM two



Hammond Power  
Solutions Inc.

your *first*  
source for  
transformers



## HPS PowerPlus™ Mini Power Centers

*Other HPS Products*



[www.hammondpowersolutions.com](http://www.hammondpowersolutions.com)



## Single Phase Specifications

480 Primary 120/240 Secondary



60 Hz

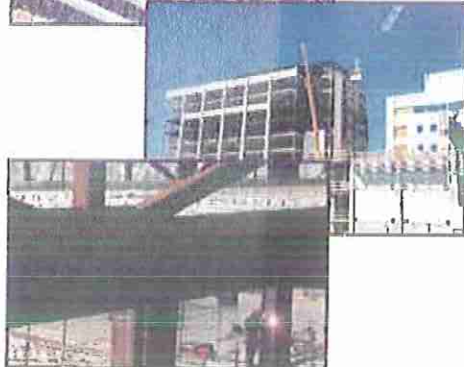
kVA Rating	Catalog Number	Winding Material	Max. Secondary Circuits*		Overall Dimensions			Weight Lbs.
			120 V (1 Pole)	240 V (2 Pole)	Width	Depth	Height	
<b>Type 3R Enclosure</b>								
5	M1PC005LESF	Aluminum	8	4	11.250	7.750	31.938	127
7.5	M1PC007LESF	Aluminum	8	4	13.875	11.125	31.938	201
10	M1PC010LESF	Aluminum	8	4	13.875	11.125	34.188	210
15	M1PC015LESF	Aluminum	12	6	15.125	12.500	34.188	291
25	M1PC025LESF	Aluminum	20	10	16.250	13.625	41.563	423
<b>316 Stainless Steel Enclosure</b>								
5	M1PC005LESF7	Aluminum	8	4	11.250	7.750	31.938	127
7.5	M1PC007LESF7	Aluminum	8	4	13.875	11.125	31.938	201
10	M1PC010LESF7	Aluminum	8	4	13.875	11.125	34.188	210
15	M1PC015LESF7	Aluminum	12	6	15.125	12.500	34.188	291
25	M1PC025LESF7	Aluminum	20	10	16.250	13.625	41.563	423

\*Please contact factory for exact number of secondary circuits available.

### Circuit Breaker Part Numbers

kVA	Primary Breaker	Secondary Breaker	Max. Rating Secondary Breaker
5	ED42B020	Q225	25
7.5	ED42B025	Q235	35
10	ED42B035	Q250	50
15	ED42B050	Q270	70
25	ED42B090	Q2110	110

10,000 Amps RMS Symmetrical Interrupting Capacity.  
Circuit Breakers listed above are Siemens part numbers.  
Breakers can be purchased from your local HPS Distributor.



- IMPEDANCE SHOWN IS CALCULATED VALUE
- TESTED VALUE WILL BE ON ACTUAL NAMEPLATE



Hammond Power Solutions Inc.

GUELPH, ONT BARABOO, WI COMPTON, CA MONTEREY, MX GRANBY, QC

HPS POWERPLUS - MINI POWER CENTER

PART No. No. DE PIÈCE No. DE PARTE	<input type="text" value="M1PC015LESF"/>	V001	TYPE TYPE TIPO	<input type="text" value="M1P"/>
kVA	<input type="text" value="15"/>	<input type="text" value="1"/>	PHASE	<input type="text" value="60"/> Hz
INPUT ENTRÉE ENTRADA	<input type="text" value="480"/> VOLTS AC	IMPEDANCE IMPÉDANCE IMPEDANCIA	<input type="text" value="2.50"/> %	
TAPS PRISES TAPS	<input type="text" value="2"/> X <input type="text" value="-5.0"/> %	AT A EN	<input type="text" value="135"/> °C	
	<input type="text" value="--"/> X <input type="text" value="--"/> %	RISE ÉLÉVATION AUMENTO	<input type="text" value="115"/> °C	
OUTPUT SORTIE SALIDA	<input type="text" value="120 / 240"/> VOLTS AC	CLASS CLASSE CLASE	<input type="text" value="180"/>	
	<input type="text" value="63"/> AMPS MAX	ENCLOSURE BOÎTIER GABINETE	<input type="text" value="TYPE 3R"/>	
REF.	<input type="text" value="1P-3T-12C"/>	WEIGHT POIDS PESO	<input type="text" value="291 lbs"/>	

INSTALL IN UPRIGHT POSITION  
 MINIMUM INSTALLATION CLEARANCES  
 SIDE : 8 INCHES - VERTICAL : 10 INCHES  
 INSTALLER EN POSITION VERTICALE  
 DISTANCES D'INSTALLATION MINIMALES  
 CÔTÉ : 8 POUÇES - VERTICAL : 10 POUÇES  
 INSTALAR EN POSICIÓN VERTICAL  
 SEPARACIÓN MINIMA DE INSTALACIÓN  
 LADO : 8 PULGADAS - VERTICAL : 10 PULGADAS  
 DIAGRAM AND ADDITIONAL INFORMATIONS INSIDE.  
 SCHÉMA ET INFORMATIONS ADDITIONNELLES À L'INTÉRIEUR.  
 DIAGRAMAS E INFORMACIONES ADICIONALES EN EL INTERIOR.

SERIAL No.  
No. DE SÉRIE  
No. DE SERIE



IN THE UNITED STATES ONLY,  
 SUITABLE FOR USE AS SERVICE EQUIPMENT.  
 AUX ÉTATS-UNIS SEULEMENT,  
 ACCEPTABLE COMME APPAREILLAGE DE BRANCHEMENT.  
 SOLO EN LOS ESTADOS UNIDOS,  
 ADECUADO PARA SU USO COMO EQUIPO DE SERVICIO.



E348160  
 UNIT SUBSTATION  
 No. XXXXXX

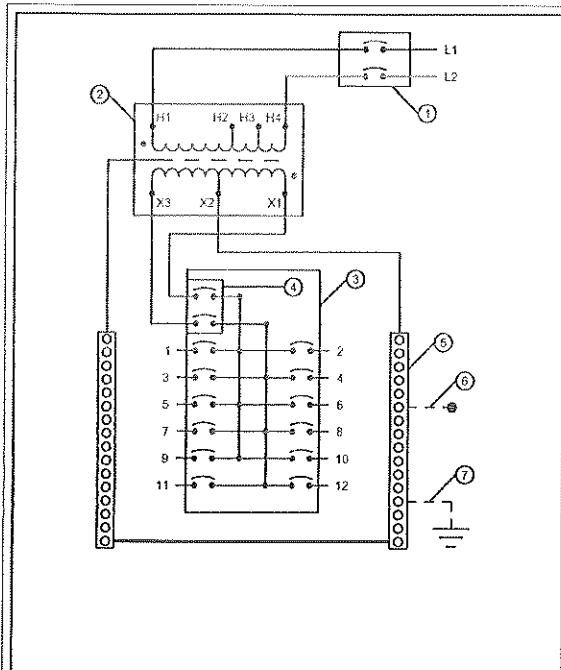


Hammond Power Solutions Inc.

TITLE: 1 PHASE POWERPLUS  
 MINI POWER CENTER  
 NAMEPLATE INFORMATION

DES: Y. T.	DATE: 2011-09-20		
ISSUED FOR APPROVAL	SCALE: NTS		
NO.	DATE	BY	REVISION

SHEET 1 OF 3  
 EDB M1PC015LESF



NEUTRAL	WIRE COMBINATIONS COMBINAISSONS DE FILS COMBINACIONES DEL CABLE	1 x 14 - 4 CU 2 x 14 - 10 CU 3 x 14 - 10 CU	1 x 12 - 4 AL 2 x 12 - 10 AL 3 x 12 - 10 AL
NEUTRE	TIGHTENING TORQUE COUPLE DE SERRAGE TORQUE DE APRIETE	14 - 10 CU / AL 8 CU / AL 6 - 4 CU / AL	20 INCH-LBS 25 LITRES-FOUCES 35 PULGADAS - LERAS

- 1 - MAIN BREAKER / DISJONCTEUR PRINCIPAL / INTERRUPTOR PRINCIPAL
- 2 - TRANSFORMER / TRANSFORMATEUR / TRANSFORMADOR
- 3 - PANEL BOARD / PAINNEAU DE DISTRIBUTION / PANEL DE DISTRIBUCION
- 4 - PANEL BOARD FEED BREAKER / DISJONCTEUR D'ALIMENTATION DU PAINNEAU DE DISTRIBUTION / INTERRUPTOR DE PANEL DE ALIMENTACION
- 5 - NEUTRAL / NEUTRE / NEUTRAL
- 6 - BOND WHEN REQUIRED / REUIER LORSQUE REQUIS / CONECTAR CUANDO SE REQUIERA
- 7 - GROUND WHEN REQUIRED / METTRE A LA TERRE LORSQUE REQUIS / TIERRA CUANDO SE REQUIERA

- THE MAXIMUM CONTINUOUS LOAD CURRENT NOT TO EXCEED 100% OF THE TRANSFORMER NOMINAL CURRENT.  
 - THE MAXIMUM CONTINUOUS LOAD CURRENT FOR THE BRANCH CIRCUITS NOT TO EXCEED 80% OF THE RATINGS OF THE CIRCUIT BREAKERS EMPLOYED IN OTHER THAN MOTOR CIRCUITS.  
 - MAXIMUM SHORT-CIRCUIT CAPACITY 10,000 AMPS.  
 - LE COURANT DE CHARGE CONTINUE MAXIMUM NE DOIT PAS EXCEDER 100% DU COURANT NOMINAL DU TRANSFORMATEUR.  
 - LE COURANT DE CHARGE CONTINUE MAXIMUM POUR LES CIRCUITS DE DERIVATION NE DOIT PAS EXCEDER 80% DES CARACTERISTIQUES NOMINALES DES DISJONCTEURS EMPLOYES DANS LES CIRCUITS AUTRES QUE DES CIRCUITS DE MOTEURS.  
 - CAPACITE DE COURT-CIRCUIT MAXIMUM 10,000 AMPERES.  
 - LA MAXIMA CORRIENTE DE CARGA CONTINUA NO EXCEDA EL 100% DE LA CORRIENTE NOMINAL DEL TRANSFORMADOR.  
 - LA MAXIMA CORRIENTE DE CARGA CONTINUA PARA LOS CIRCUITOS DE PODER NO EXCEDA DEL 80% DE LAS CALIFICACIONES DE LOS INTERRUPTORES EMPLEADOS EN OTROS CIRCUITOS DE MOTOR.  
 - CAPACIDAD MAXIMA DE CORTO-CIRCUITO 10,000 AMP.

1P - 3T - 120

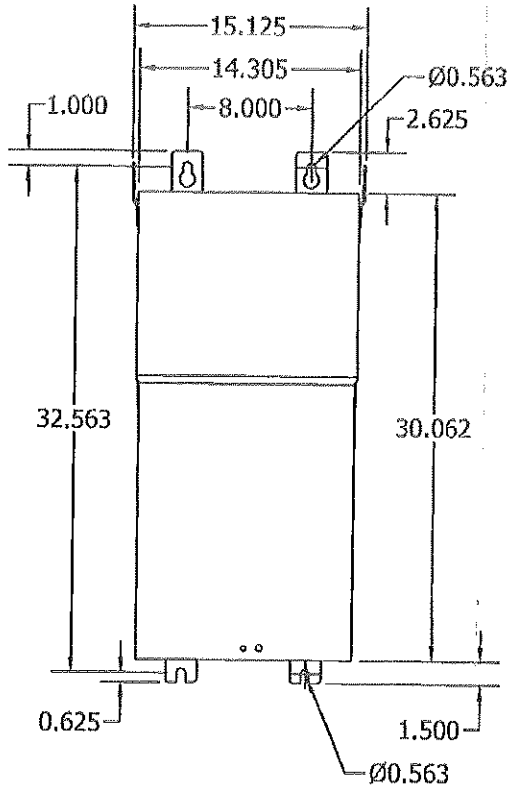


TITLE: 1 PHASE POWERPLUS MINI POWER CENTER DIAGRAM INFORMATION			
DES: Y. T.	ISSUED FOR APPROVAL		
00	2011-09-20	Y. T.	DATE: 2011-09-20
NO.	DATE	BY	REVISION
			SCALE: NTS

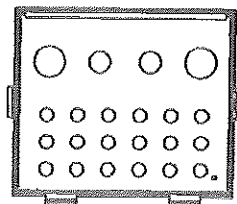
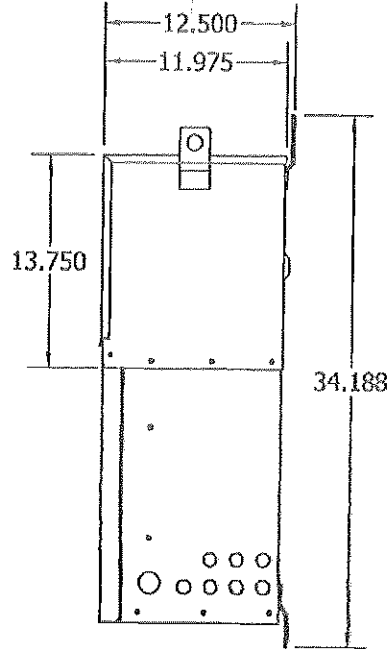
EDB  
 MIP0015LESF  
 SHEET 2 OF 3

- ALL DIMENSIONS IN INCHES  
 - ENCLOSURE COLOR : ANSI 61 GREY - OUTDOOR

FRONT VIEW



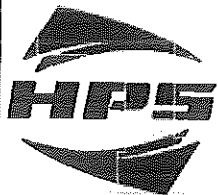
SIDE VIEW



BOTTOM VIEW

K.O. INFORMATION

- 0.875 DIA.
- 1.375 DIA.
- 2.000 DIA.

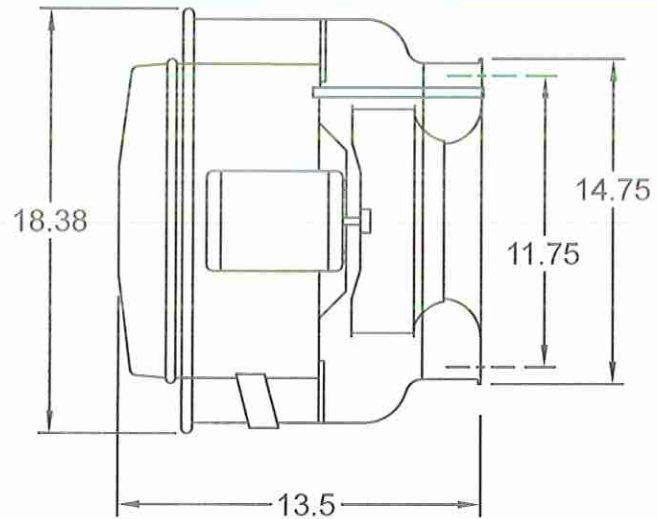


**Hammond Power Solutions Inc.**

TITLE: 1 PHASE POWERPLUS MINI POWER CENTER ENCLOSURE INFORMATION				
DESIGNER: Y. T.	DATE: 2011-08-20	ISSUED FOR APPROVAL		
NO.	DATE	BY	REVISION	SCALE: NTS

SHEET 3 OF 3  
 EDB MIP001SLESF

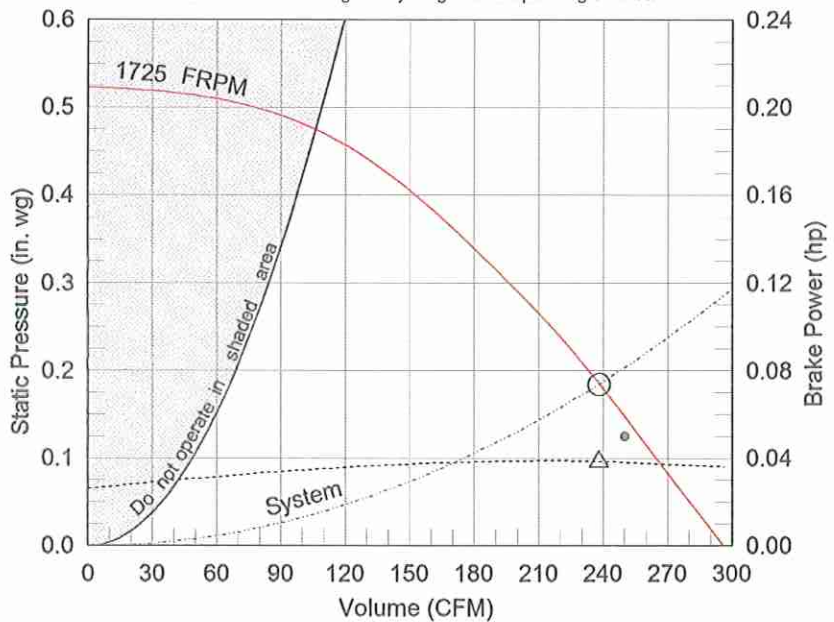
**Model: CW-065-VG**  
Direct Drive Centrifugal Sidewall Exhaust Fan



\*Overall height may be greater depending on motor

Dimensional	
Quantity	1
Weight w/o Acc's (lb)	24
Weight w/ Acc's (lb)	31
Optional Damper (in.)	8 x 8
Wall Opening (in.)	8.5 x 8.5

Performance	
Requested Volume (CFM)	250
Actual Volume (CFM)	238
External SP (in. wg)	0.125
Total SP (in. wg)	0.185
Fan RPM	1725
Operating Power (hp)	0.04
Elevation (ft)	33
Airstream Temp.(F)	70
Air Density (lb/ft3)	0.075
Tip Speed (ft/min)	3,669
Static Eff. (%)	18



Motor	
Motor Mounted	Yes
Size (hp)	1/6
Voltage/Cycle/Phase	208/60/1
Enclosure	TENV
Motor RPM	1725
Windings	1
FLA (Amps)	1.6

△ Operating Bhp point	External SP	0.125 in. wg
○ Operating point at Total SP	Direct Drive RPM Adjustment	-0.019 in. wg
● Operating point at External SP	Damper	0.079 in. wg
— Fan curve	Total SP	0.185 in. wg
- - - System curve		
⋯ Brake horsepower curve		

Sound Power by Octave Band

Sound Data	62.5	125	250	500	1000	2000	4000	8000	LwA	dBA	Sones
Inlet	66	67	64	54	52	50	44	37	60	48	5.0

Notes:

All dimensions shown are in units of in.  
\*NEC FLA - based on tables 430.248 or 430.250 of National Electrical Code 2014. Actual motor FLA may vary, for sizing thermal overload, consult factory.  
LwA - A weighted sound power level, based on ANSI S1.4  
dBA - A weighted sound pressure level, based on 11.5 dB attenuation per Octave band at 5 ft - dBA levels are not licensed by AMCA International  
Sones - calculated using AMCA 301 at 5 ft



## Model: CW-065-VG

### Direct Drive Centrifugal Sidewall Exhaust Fan

#### Standard Construction Features:

- Aluminum housing - Backward inclined aluminum wheel - Removable mounting plate - Birdscreen mounted to the discharge perimeter - Ball bearing motors (sizes 98-160), sleeve bearing motors (sizes 60-95) - Motors isolated on shock mounts - Corrosion resistant fasteners

#### Selected Options & Accessories:

Motor - Vari-Green EC motor w/Mounted Potentiometer Dial

UL/cUL 705 Listed - "Power Ventilators"

Switch, NEMA-1, Toggle, Shipped with Unit

Junction Box Mounted & Wired

High Wind Rated (+/- 150 PSF Rating)

Florida Product Approval #FL13225.1 & Miami-Dade NOA #16-0209.05

Texas Department of Insurance Product Evaluation RV-73

Damper Shipped Loose, WD-323-PB-8X8, Gravity Operated, Not Coated

Birdscreen: Galvanized

Unit Warranty: 1 Yr (Standard)

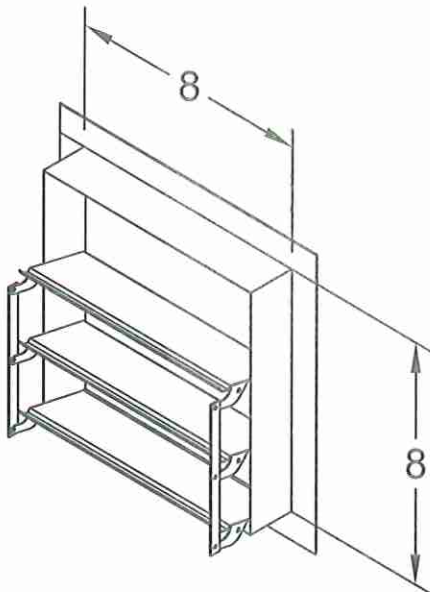


## Vertical Mount Exhaust Damper

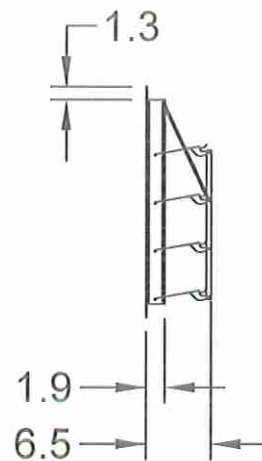
Model: WD-323

### Standard Construction Features:

- Model WD-323 is a vertical mount exhaust damper and is constructed of extruded aluminum with pre-punched mounting holes
- Damper blades are 0.025 in. roll formed aluminum with vinyl seals on the closing edge
- Steel axles are 0.188 in. diameter zinc plated steel
- Synthetic sleeve type bushings



DAMPER



TYP. SECTION VIEW

Notes: All dimensions shown are in units of in.  
Width And height furnished approximately 0.125 in. undersize

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