



Legal Department

June 18, 2019

Chairman Samuel Randazzo
Public Utilities Commission of Ohio
180 East Broad Street
Columbus, OH 43215-3793

Re: **In the Matter of the Application of**)
 West-Ward Columbus, Inc.)
 and Ohio Power Company) **Case No. 19-0382-EL-EEC**
 for Approval of a Special Arrangement)
 Agreement with a Mercantile Customer)

Tanner Wolfram
Legal Fellow
Regulatory Services
(614) 716-2914 (T)
twolfram@aep.com

Dear Chairman Randazzo,

Attached please find the Joint Application of Ohio Power Company (AEP Ohio) and the above-referenced mercantile customer for approval of a Special Arrangement of the commitment of energy efficiency/peak demand reduction (EE/PDR) resources toward compliance with the statutory benchmarks for 2019 (hereinafter “Joint Application”).

Amended Substitute Senate Bill 221, codified at R.C. 4928.66, sets forth EE/PDR benchmarks that electric distribution utilities are required to meet or exceed. The statute allows utilities to include EE/PDR resources committed by mercantile customers for integration into the utilities’ programs to be counted toward compliance with a utility’s EE/PDR benchmarks. The statute also enables the Commission to approve special arrangements for mercantile customers that commit EE/PDR resources to be counted toward compliance with EE/PDR benchmarks.

The Commission’s Order in Case No. 10-834-EL-EEC established a streamlined process to expedite review of these special arrangements by developing a sample application process for parties to follow for consideration of such programs implemented during the prior three calendar years. The attached Joint Application and affidavit conforms with AEP Ohio’s version of the streamlined sample application. As requested by Commission Staff, any confidential information referenced in the Joint Application has been provided confidentially to Commission Staff for filing in Commission Docket 10-1599-EL-EEC and subject to the confidentially protections of R.C. 4901.16 and OAC 4901-1-24(E). AEP Ohio respectfully requests that the Commission treat the two cases as associated dockets and that any confidential information provided to Staff for filing in connection with the Joint Application be subject to the protective order requested in Docket 10-1599-EL-EEC.

Cordially,

/s/ Tanner Wolfram
Attachment



Case No.: 19-0382-EL-EEC

Mercantile Customer: WEST-WARD COLUMBUS, INC.

Electric Utility: Ohio Power

Program Title or Description: AEP Ohio Business Incentives for Energy Efficiency: Self Direct Program

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. [10-834-EL-POR](#)

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application. Any confidential or trade secret information may be submitted to Staff on disc or via email at ee-pdr@puc.state.oh.us.

Section 1: Company Information

Name: WEST-WARD COLUMBUS, INC.

Principal address: 801 Wilson Road , Columbus, Oh 43228

Address of facility for which this energy efficiency program applies: 1809 Wilson Rd, Columbus, Oh 43228-9579

Name and telephone number for responses to questions:

Brett Libbe, West-Ward Columbus, Inc., (614) 272-4792

Electricity use by the customer (check the box(es) that apply):

- ☒ The customer uses more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)

See Confidential and Proprietary Attachment 4 – Calculation of Rider Exemption and UCT which provides the facility consumption for the last three years, benchmark kWh, and the last 12 months usage.

- ☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.) When checked, see Attachment 6 – Supporting Documentation for a listing of the customer’s name and service addresses of other accounts in the AEP Ohio service territory.

Section 2: Application Information

A) The customer is filing this application (choose which applies):

- ☐ Individually, on our own.
- ☒ Jointly with our electric utility.

B) Our electric utility is: Ohio Power Company

The application to participate in the electric utility energy efficiency program is "Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application."

C) The customer is offering to commit (choose which applies):

- ☐ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
- ☐ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
- ☒ Both the energy savings and the demand reduction from the customer's energy efficiency program. (Complete all sections of the Application.)

Section 3: Energy Efficiency Programs

A) The customer's energy efficiency program involves (choose whichever applies):

- ☒ Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, 4/15/2016 and the date on which the customer would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)).

The remaining life of the equipment varies and is not known with certainty. The future replacement date is unknown and has historically been at the end of equipment life. Replacement was completed early to achieve energy savings and to reduce future maintenance costs.

- ☐ Installation of new equipment to replace equipment that needed to be replaced. The customer installed new equipment on the following date(s):
- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s):
- ☐ Behavioral or operational improvement.

B) Energy savings achieved/to be achieved by your energy efficiency program:

- 1) If you checked the box indicating that your project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) - (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Unit Quantity (watts) = Existing (watts x units) - Installed (watts x units)

kWh Reduction (Annual Savings) = Unit Quantity x (Deemed kWh/Unit)

Annual savings: 618,792 kWh

See Confidential and Proprietary Attachment 5 - Self Direct Program Project Calculation for annual energy savings calculations and 10-1599-EL-EEC for the work papers that provide all methodologies, protocols, and practices used in this application for prescriptive measures, as needed.

- 2) If you checked the box indicating that you installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

- 3) If you checked the box indicating that your project involves equipment for new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: kWh

Please describe the less efficient new equipment that you rejected in favor of the more efficient new equipment.

- 4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

Section 4: Demand Reduction/Demand Response Programs

A) The customer's program involves (check the one that applies):

- ☒ Coincident peak-demand savings from the customer's energy efficiency program.
- ☐ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
- ☐ Potential peak-demand reduction check the one that applies):

➤ Choose one or more of the following that applies:

- ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
- ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.

B) On what date did the customer initiate its demand reduction program?

The coincident peak-demand savings are permanent installations that reduce demand through energy efficiency and were installed on the date specified in Section 3 A above.

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

Unit Quantity (watts) = Existing (watts x units) – Installed (watts x units)

KW Demand Reduction = Unit Quantity (watts) x (Deemed KW/Unit (watts))

67.1 kW

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for peak demand reduction calculation, and 10-1599-EL-EEC for the work papers that provide all methodologies, protocols, and practices used in this application for prescriptive measures, as needed.

Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) The customer is applying for:

☒ Option 1: A cash rebate reasonable arrangement.

OR

☐ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

OR

☐ Commitment payment

B) The value of the option that the customer is are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

☐ A cash rebate of \$_____. (Rebate shall not exceed 50% project cost. Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)

OR

☒ A cash rebate valued at no more than 50% of the total project cost, which is equal to \$ 11,250.00. (Attach documentation and calculations showing how this payment amount was determined.)

See Confidential and Proprietary Attachment 5 – Self Direct Program Project Calculation for incentive calculations for this mercantile program.

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

- ☐ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for ____ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

- ☐ A commitment payment valued at no more than \$_____. (Attach documentation and calculations showing how this payment amount was determined.)

OR

- ☐ Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of an ongoing efficiency program that is practiced by our organization. (Attach documentation that establishes your organization's ongoing efficiency program. In order to continue the exemption beyond the initial 24 month period your organization will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- ☐ Total Resource Cost (TRC) Test. The calculated TRC value is: _____
(Continue to Subsection 1, then skip Subsection 2)
- ☒ Utility Cost Test (UCT) . The calculated UCT value is: 12.08 (Skip to Subsection 2.)

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were _____.

Our program costs were _____.

The utility's incremental measure costs were _____.

Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were \$ 180,689.78

The utility's program costs were \$ 3,712.75

The utility's incentive costs/rebate costs were \$ 11,250.00.

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of your program including, but not limited to, make, model, and year of any installed and replaced equipment.

See Attachment 1 - Self Direct Project Overview and Commitment for a description of the project. See Attachment 6 - Supporting Documentation, for the specifications of the replacement equipment 10-1599-EL-EEC for the work papers that provide all methodologies, protocols, and practices used in this application for prescriptive measures, as needed. Due to the length of time since the equipment replacement, the make, model and year of the replaced equipment is not available.

- A copy of the formal declaration or agreement that commits your program to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;

See Attachment 2 - Self Direct Program Project Blank Application including Rules and Requirements. All confidentiality requirements are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 - Self Direct Program Project Completed Application.)

- 2) a description of any consequences of noncompliance with the terms of the commitment;

See Attachment 2 - Self Direct Program Project Blank Application including Rules and Requirements. All consequences of noncompliance are pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 - Self Direct Program Project Completed Application.

- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;

None required because the resources committed are permanent installations that reduce demand through increased efficiency during the Company's peak summer demand period generally defined as May through September and do not require specific coordination and communication to provide demand reduction capabilities to the Company.

- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,

See Attachment 2 – Self Direct Program Blank Application including Rules and Requirements granting such permission pursuant to the Retrospective Projects/Rules and Requirements that are part of the signed application which is provided as Confidential and Proprietary Attachment 3 – Self Direct Program Project Completed Application.

- 5) a commitment by you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

See Attachment 1 - Self Direct Project Overview and Commitment for the commitment to comply with any information and compliance reporting requirements imposed by rule or as part of the approval of this arrangement by the Public Utilities Commission of Ohio.

- A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.

The Company applies the same methodologies, protocols, and practices to Self Direct Program retrospective projects that are screened and submitted for approval as it does to prospective projects submitted through its Prescriptive and Custom Programs. The Commission has not published a technical reference manual for use by the Company so deviations can not be identified. The project submitted is a prescriptive project and energy savings are determined as described in Confidential and Proprietary Attachment 5 - Self Direct Program Project Calculation, and 10-1599-EL-EEC for the work papers that provide all methodologies, protocols, and practices used in this application for prescriptive measures, as needed.



Public Utilities Commission

Application to Commit
Energy Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only)

Case No.: 19-0382-EL-EEC

State of Ohio :

Zaid Shaikh, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

DNV GL Energy Services USA Inc. agent of Ohio Power

2. I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.

Zaid Shaikh Engineer
Signature of Affiant & Title

Sworn and subscribed before me this 25 day of January, 2019 Month/Year

Linda M. Schmidt
Signature of official administering oath

LINDA M. SCHMIDT
Print Name and Title

My commission expires on 7/31/2022



LINDA M. SCHMIDT
Notary Public, State of Ohio
My Commission Expires 7-31-2022



Self Direct Project Overview & Commitment

The Public Utility Commission of Ohio (PUCO) will soon review your application for participation in AEP Ohio's Energy Efficiency/Peak Demand Response program. Based on your submitted project, please select by initialing one of the two options below, sign and fax to 877-607-0740.

Customer Name	WEST-WARD COLUMBUS, INC.	
Project Number	AEP-18-23684	
Customer Premise Address	1809 WILSON RD, COLUMBUS, OH 43228-9579	
Customer Mailing Address	801 Wilson Road , COLUMBUS, OH 43228	
Date Received	7/5/2018	
Project Installation Date	4/15/2016	
Annual kWh Reduction	618,792	
Total Project Cost	\$31,284.66	
Unadjusted Energy Efficiency Credit (EEC) Calculation	\$15,000.00	
Simple Payback (yrs)	0.7	
Utility Cost Test (UCT) for EEC	12.08	
Utility Cost Test (UCT) for Exemption	0.04	
<i>Please Choose One Option Below and Initial</i>		
Self Direct EEC: 75%	\$11,250.00	<input checked="" type="checkbox"/> Initial: <u>BL</u>
EE/PDR Rider Exemption	12 Months (with possible extension up to 21 months after PUCO Approval)	<input type="checkbox"/> Initial: _____



Note: This is a one time selection. By selecting EEC, the customer will receive payment in the amount stated above. Selection of EE/PDR rider exemption, will result in the customer not being eligible to participate in any other energy efficiency programs offered by AEP Ohio during the period of exemption. In addition, the term of EE/PDR rider exemption is subject to ongoing review for compliance and could be changed by the PUCO.

If EEC has been selected, will the Energy Efficiency Funds selected help you move forward with other energy efficiency projects?

X YES _____ NO

Note: Exemptions for periods beyond 24 months are subject to look-back or true-up adjustments every year to ensure that the exemption accurately reflects the EEDR savings. Applicants must file for renewal for any exemption beyond 12 months.

Project Overview:

The Self Direct (Prescriptive and Custom) project that the above has completed and applied is as follows.

Installed VFDs on two of 125 HP Chilled Water Pumps which resulted in significant saving:

The documentation that was included with the application proved that the energy measures applied for were purchased and installed.

By signing this document, the Mercantile customer affirms its intention to commit and integrate the above listed energy efficiency resources into the utility's peak demand reduction, demand response, and energy efficiency programs. By signing, the Mercantile customer also agrees to serve as a joint applicant in any filings necessary to secure approval of this arrangement by the Public Utilities Commission of Ohio, and comply with any information and compliance reporting requirements imposed by rule or as part of that approval.

Columbus Southern Power Company

WEST-WARD COLUMBUS, INC.

By: [Signature]

By: [Signature]



Title: Manager

Title: UTILITY & ENERGY ENGINEER

Date: 10/19/2018

Date: OCT 19, 2018



Application Guidelines

Final Applications must be submitted before November 16, 2018 in order to qualify for incentives identified in this application.

Step 1. Verify Eligibility

- Customer must have a valid AEP Ohio account.
- Equipment/measure must be installed at facilities served by the AEP Ohio account.
- Project must produce permanent reduction in electrical energy use (kWh).
- All installed equipment must meet or exceed the specifications in the application.
- Please see [Efficient Products for Business, Process Efficiency and New Construction Terms and Conditions](#) or [Self-Direct Terms and Conditions](#) for program rules and regulations.

Step 2. Complete Applicant Information

- All fields in customer and project information sections must be completed.
- Contractor information must be completed if project is not self-performed.

Step 3. Complete the Incentive Worksheet(s)

- Find and read specifications related to the project.
- Choose the incentive category on the worksheet based on installed equipment and specifications.
- Complete all fields (fixture description, operating hours, etc.) on the related worksheet.

Step 4. Sign Customer Agreement

- Read the Terms and Conditions before signing and submitting the application.
- Sign Pre-Approval Agreement and submit the application to reserve funds.
- Sign Final Application Agreement and submit the application after the project is completed to receive funds.
- Complete Third Party Payment Release Authorization ONLY if incentive payment is to be paid to an entity other than AEP Ohio customer listed on the Applicant Information page.

Step 5. Submit Pre-Approval Application¹

(For Self-Direct applications, skip to Step 6)

- Submitting a Pre-Approval Application to determine qualification and reserve program funds for a project is strongly recommended.
- All process efficiency projects require pre-approval.
- Complete all fields in Pre-Approval Agreement.
- Pre-Approval Application must be submitted with:
 - Proposed scope of work (type and quantity of old and new equipment must be listed)
 - Specification sheets for all proposed equipment
 - W-9 form
- Submit application via email, fax or mail.
- An inspection may be required during application review; applicants requiring inspection will be contacted for scheduling.

Step 6. Submit Final Application

- Complete all fields for Final Application Agreement.
- Update the application if measures/equipment differs from pre-application.
- Final Application must be submitted with:
 - Dated and itemized material invoice
 - External labor invoice (if applicable)
 - If Pre-Approval Application was not submitted, include the documents listed on Step 5
- Submit application via email, fax or mail.
- An inspection may be required during application review; applicants requiring inspection will be contacted for scheduling.
- Self-Direct applications require additional steps. Please see the [Self-Direct Terms and Conditions](#) for details.

AEP Ohio Business Incentives Program

445 Hutchinson Avenue, Suite 300

Columbus, Ohio 43235

877-541-3048 | aepohiosolutions@clearesult.com

Visit our website at AEPohio.com/solutions

¹A Pre-Approval Application is not a guarantee of an incentive; the actual incentive will be based on the energy savings and equipment installed as determined in the Final Application. Funds are reserved for 90 days, unless an applicant is granted an extension. The program team reserves the right to contact the customer before the reservation expiration date to ensure that the project is moving forward. If the project is not underway, the reservation may be cancelled. Reserved funds are not transferable to other projects, facilities and/or customers. A waiting list will be established when funds become fully subscribed.



Application Checklist

Pre-Approval

- ☐ Completed Applicant Information
- ☐ Estimated Total Project Cost
- ☐ Estimated Completion Date
- ☐ Completed Incentives Requested Section of Application
- ☐ Applicable Incentive Worksheets Completed
- ☐ Completed and Signed Customer Agreement
- ☐ Equipment Specifications
- ☐ Proposed Scope of Work
- ☐ W-9 Form (Business Name Must Match Line 1 or 2 on the Form)

Final Application Only (Without Pre-Approval)

- ☐ Completed Applicant Information
- ☐ Completed Incentives Requested Section of Application
- ☐ Applicable Incentive Worksheets Completed
- ☐ Total Project Cost
- ☐ Completion date
- ☐ Completed and Signed Customer Agreement
- ☐ Completed Third-Party Payment Release Authorization (optional)
- ☐ Itemized Invoices
- ☐ Equipment Specifications
- ☐ Scope of Work
- ☐ W-9 Form (Business Name Must Match Line 1 or 2 on the Form)

Final Application (With Pre-Approval)

- ☐ Completed Applicant Information
- ☐ Assigned Project Number on Signature Page
- ☐ Total Project Cost
- ☐ Project Completion Date
- ☐ Completed and Signed Final Payment Agreement
- ☐ Completed Third-Party Payment Release Authorization (optional)
- ☐ Installed Equipment Specifications (if there were changes from pre)
- ☐ Itemized Invoices
- ☐ Updated Scope of Work (if there were changes from pre)
- ☐ Applicable Incentive Worksheets (if there were changes from pre)



Applicant Information

AEP Application Number AEP - _ _ - _ _ _ _ _

Application Type (Select One)

CUSTOMER INFORMATION

Business Name _____

Name as It Appears on Utility Bill _____

How many AEP Ohio Accounts are at the Project Site? _____

AEP Ohio Account Numbers for this Project¹ _____

Taxpayer ID _____ - _____ W-9 Tax Status (Select One) _____

MAILING ADDRESS - WHERE CHECK WILL BE SENT

Contact Name _____ Contact Title _____

Mailing Address _____ City _____ State OH _____ Zip _____

Phone _____ Ext. _____ Contact Email _____

How Did You Hear About the Program? (Select One) _____ AEP OH Energy Advisor _____

PROJECT INFORMATION

Project Name (if applicable) _____

☐ Check if mailing address and project site address are the same.

Project Site Address _____ City _____ State OH _____ Zip _____

Building Type (Select One) _____ Shift (Select One) _____

Annual Operating Hours _____ Building Area (sq. ft.) _____

Construction Type (Select One) _____ Does the facility have a data center? (Select One) _____

¹Please only enter the first eleven digits of the account number.



Applicant Information

CONTRACTOR INFORMATION

Company Name _____

Contact Name _____ Title of Contact _____

Mailing Address _____ City _____ State OH Zip _____

Phone _____ Ext. _____ Contact Email _____

PRIMARY CUSTOMER CONTACT INFORMATION

Contact Name _____ Title of Contact _____

Phone _____ Ext. _____ Contact Email _____

Who should we contact with questions about the application? ☐ Customer ☐ Contractor

Incentive Summary Table

INCENTIVE CATEGORY	TOTAL INCENTIVES
LIGHTING	
HVAC	
MOTORS & DRIVES	
COMPRESSED AIR	
REFRIGERATION/FOOD SERVICE	
AGRICULTURE	
MISCELLANEOUS	
PROCESS EFFICIENCY	
NC LIGHTING (SELF-DIRECT ONLY)	
TOTAL INCENTIVES	

AEP Application Number AEP - _ _ - _ _ _ _ _



Customer Agreement

APPLICATION AGREEMENT

By signing this document, I agree to program requirements outlined in the measure specifications, Terms and Conditions for the applicable program and Final Application Agreement. As an eligible customer, I verify the information is correct and request consideration for participation under this program. Furthermore, I concur that I meet all eligibility criteria in order to receive payment under this program.

[Link to Efficient Products for Business/Process Efficiency Terms and Conditions, and Final Application Agreement](#)

[Link to Self-Direct Terms and Conditions, and Final Application Agreement](#)

☐ Pre-Application ☐ Final-Application

Project Completion Year (Select One) _____

Self-Direct _____

Project Completion Date _____

Total Project Cost _____

Total Requested Incentive¹ _____

Total Self-Direct Requested Incentive² _____

Print Name

Date

AEP Ohio Customer Signature

PRINT APPLICATION

¹Incentives have a threshold of 50% of the project cost and total incentives paid to a threshold of \$25,000 and Bid4Efficiency above that.

²Self-Direct incentives are 75% of Total Requested Incentive, after 50% of the project cost threshold and tiering is applied.



Third Party Payment Release

THIRD PARTY PAYMENT RELEASE AUTHORIZATION (NOT APPLICABLE TO SELF-DIRECT)

Complete this section **ONLY** if incentive payment is to be paid to an entity other than the AEP Ohio customer.

Make checks payable to: Company/Individual _____

Mailing Address _____ City _____ State OH Zip _____

Phone _____ Ext. _____

Taxpayer ID of 3rd Party _____ - _____ W-9 Tax Status _____

By signing this document, I authorize the payment of the incentive to the third party named above and understand that I will not receive the incentive payment from AEP Ohio. I also understand that my release of the payment to a third party does not exempt me from the program requirements outlined in the measure specifications, Terms and Conditions, and Final Application Agreement.

Print Name

Date

AEP Ohio Customer Signature

PowerFlex® 750-Series AC Drives



Designed for Ease of Use, Integration and Application Flexibility



LISTEN.
THINK.
SOLVE.®

PowerFlex® 750-Series AC Drives The Power and Control You Need

With a complete power range of 0.75 to 1500 kW (1 to 2000 Hp) and 400/480 and 600/690 volt availability, the PowerFlex 750-Series is a comprehensive drive family providing productivity-enhancing benefits to a wide range of global applications.

The PowerFlex 750-Series of AC drives was designed with your needs in mind. Your need for flexibility, productivity and ease of use has been considered in every detail of these drives. The result is a family of AC drives that provides an exceptional user experience, from initial programming through operation.

This robust family of AC drives offers high performance for a wide variety of industrial applications. The PowerFlex 753 provides general purpose control for applications ranging up to 350 Hp/250 kW while the PowerFlex 755 provides maximum flexibility and performance up to 2000 Hp/1500 kW.

Consider these key features of the PowerFlex 750-Series drives and how they can help you maximize your productivity:

Simplified Integration with Logix – The PowerFlex 753 and 755 offer seamless integration into the Logix environment for simplified and enhanced configuration, programming, commissioning, diagnostics and maintenance. Using either Add-on Profiles or embedded instructions*, you'll be able to reduce engineering time – and related costs – while improving the configuration, control and collection of data.

Communications – The PowerFlex 750-Series supports a comprehensive range of network protocols to ease integration into your architecture. The PowerFlex 755 features an embedded EtherNet/IP™ port, allowing you to easily manage drive data over EtherNet/IP networks. In addition, a dual-port EtherNet/IP option module for the PowerFlex 750-Series provides flexible and cost-effective ways to apply EtherNet/IP, including Device Level Ring functionality.

Safe Torque-off and Safe Speed Monitor – Help protect personnel and equipment while reducing machine downtime with safety solutions up to and including PLe/SIL, Cat 3 and Cat 4. These safety options provide a choice for safety levels depending on your application requirements.

* PowerFlex 755 uses embedded instructions



The PowerFlex 753 and 755 AC drives offer more selection for control, communications, safety and supporting hardware options than any other drives in their class.

DeviceLogix™ – Controls outputs and manages status information locally within the drive, allowing you to operate the drive independently or complementary to supervisory control.

Configure for Your Application – Each drive has a slot-based hardware architecture that reduces unnecessary add-ons and gives you the flexibility to select option cards to suit your application and expand your drive for future needs. Supported hardware control options are common for the series to help reduce your inventory and spare parts requirements.

Predictive Diagnostics – Prevent unplanned downtime with predictive diagnostics and built-in protection features to help guard your investment. These settings allow the PowerFlex 750-Series to keep track of information that affects the life of the drive components. PowerFlex 755 drives 250 kW/350 Hp and larger have additional diagnostic features including built-in protection devices.

Application-matched Packaging – Gain additional flexibility with packaging options that address a range of application and environmental protection requirements.

Feedback – Options include Universal, Encoder and Dual Encoder feedback options. The Universal Feedback option includes multiple feedback interfaces to support a wide range of applications. Interfaces supported are Incremental, EnDat and Hiperface for Stegmann and Heidenhain high resolution feedback, SSI and BiSS for rotary and linear applications. The drives also provide automatic feedback loss switchover.



PowerFlex 753 AC Drive

The PowerFlex 753 is ideal for general purpose applications requiring speed or torque control up to 250 kW/350 Hp. Embedded I/O along with three option slots for safety, feedback, communications, 24V power or additional I/O make the drive a flexible, cost-effective solution.



PowerFlex 755 AC Drive

PowerFlex 755 is ideal for applications requiring positioning, speed or torque control up to 1500 kW/2000 Hp. The PowerFlex 755 is easily integrated with the embedded Ethernet port and has five option slots to support additional options for feedback, I/O, safety, communications, and auxiliary 24V DC control power.

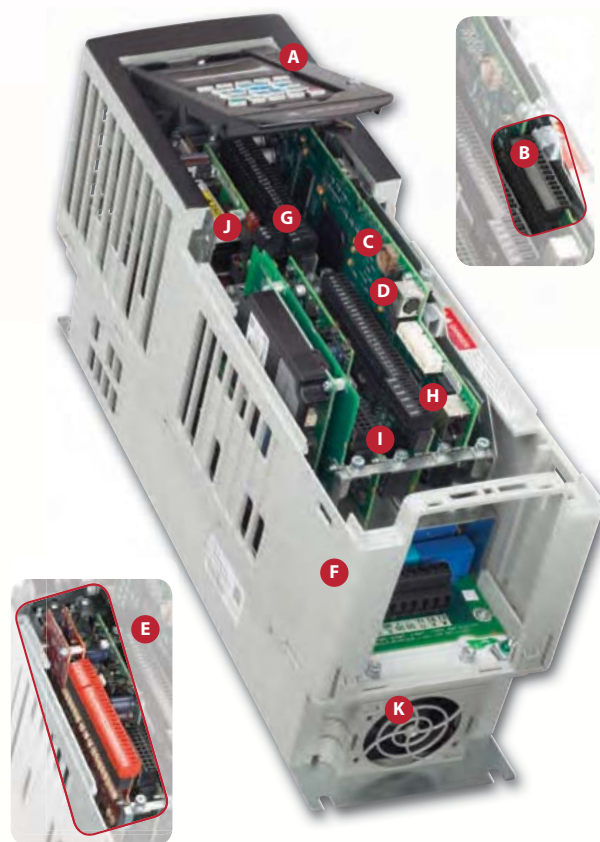
The PowerFlex 755 AC drive can be integrated with a ControlLogix® or CompactLogix™ Programmable Automation Controller (PAC) via drive instructions that are actually embedded in the PAC. This level of integration is specific to PowerFlex 755 drives on EtherNet/IP.

	PowerFlex 753	PowerFlex 755
400/480V 600V 690V	0.75 to 250 kW/1.0 to 350 Hp 1.0 to 300 Hp 7.5 to 250 kW	0.75 to 1400 kW/1.0 to 2000 Hp 1.0 to 1500 Hp 7.5 to 1500 kW
Logix Integration	<ul style="list-style-type: none"> Automatic Device Configuration (with 20-750-ENETR and Studio 5000**) Add-on Profiles 	<ul style="list-style-type: none"> Embedded instructions in Studio 5000** Automatic Device Configuration (with embedded port or 20-750-ENETR, and Studio 5000**) Add-on Profiles
DeviceLogix Control Technology	✓	✓
Safety Options: Safe Torque-Off, Safe Speed Monitor	✓	✓
Predictive Diagnostics	✓	✓
Option Slots	3	5 (3 for frame 1)
Communications	Option modules available for: <ul style="list-style-type: none"> EtherNet/IP™ Dual-port EtherNet/IP ControlNet™ DeviceNet™ And a variety of industrial networks 	Embedded Ethernet port standard Option modules available for: <ul style="list-style-type: none"> Dual-port EtherNet/IP ControlNet DeviceNet And a variety of industrial networks
I/O	Embedded I/O standard <ul style="list-style-type: none"> 3 Digital Inputs, 1 Relay Output, 1 Transistor Output, 1 Analog Input, 1 Analog Output, 1 PTC Input Option cards for additional I/O 	1 Digital Input standard <ul style="list-style-type: none"> Option cards for additional I/O
Motor Types	<ul style="list-style-type: none"> Induction Motors Permanent Magnet Motors (Interior) 	<ul style="list-style-type: none"> Induction Motors Permanent Magnet Motors (Surface and Interior)
Positioning	<ul style="list-style-type: none"> Indexing 	<ul style="list-style-type: none"> Indexing PCamming Electronic Gearing Position/Speed Profiling
Feedback	<ul style="list-style-type: none"> Incremental 	<ul style="list-style-type: none"> Incremental EnDat, Hiperface, SSI and BiSS Absolute
Application Sets	Oil Well <ul style="list-style-type: none"> Pump Jack & Pump Off Fibers <ul style="list-style-type: none"> PJump & Traverse 	Lifting <ul style="list-style-type: none"> Torqprove* Oil Well <ul style="list-style-type: none"> Pump Jack & Pump Off Fibers <ul style="list-style-type: none"> PJump & Traverse
Conformal Coating	✓	✓

* See publication PFLEX-BR009 for more information on crane/hoist applications.

** Also previous versions of RSLogix 5000 software.

PowerFlex 750-Series AC Drive



- A** High-definition LCD display allows for six lines of text for more meaningful explanations of parameters and events.
- B** Standard I/O on the PowerFlex 753 provides a cost-effective solution.
- C** Real-time clock provides time-stamped events vs. run-time data.
- D** Additional DPI for expanded programming capability.
- E** Increase safety performance levels with the Safe Speed Monitor option card which includes an embedded safety relay.
- F** Packaging options to meet application requirements.
- G** DeviceLogix embedded control technology provides function block programming for stand-alone control of basic applications.
- H** Easily configure, control and collect drive data with standard embedded Ethernet port on the PowerFlex 755.
- I** Slot-based mechanical architecture to support additional options for I/O, feedback, safety, communications and auxiliary power supply.
- J** Optional Auxiliary Power Supply maintains control and communications in event that main power is not present.
- K** Easily assessable heat sink and internal fans.

e-Tools Simplify and Enhance Use of PowerFlex 750-Series Drives

Add-on Profiles

For simplified AC drive start-up and reduced development time, we've integrated Allen-Bradley® PowerFlex drive configuration with Studio 5000™ Logix Designer software (formerly RSLogix™ 5000). This single-software approach simplifies parameter and tag programming while still allowing stand-alone drive software tool use on the factory floor.

Embedded Instructions

The PowerFlex 755 AC drive can be configured with drive instructions embedded in Allen-Bradley ControlLogix and CompactLogix Programmable Automation Controllers (PAC). These are the same configuration parameters and programming instructions used by Allen-Bradley Kinetix® servo drives, providing a common, enhanced user experience.



DriveTools™ SP Software Suite

A powerful PC-based software suite, for programming, configuring and troubleshooting.

- DriveExecutive™ – for online/offline configuration and management of drives and drive peripherals
- DriveObserver™ – for real-time trending of drive information



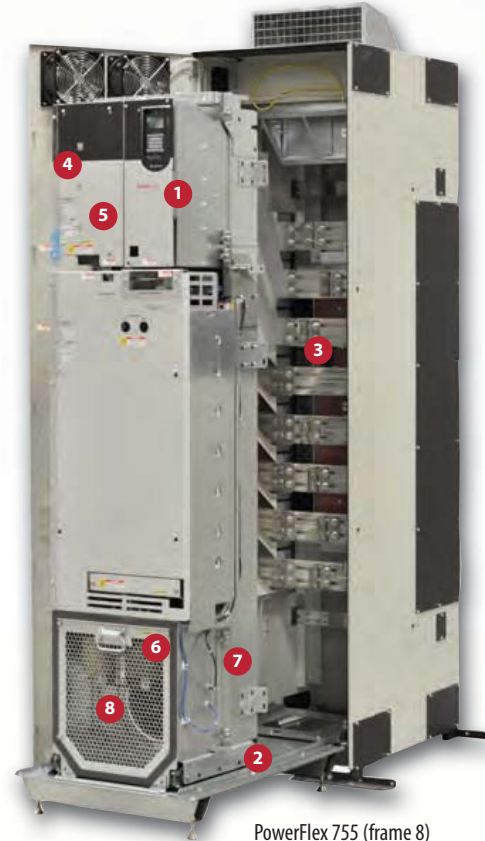
Connected Components Workbench™

Programming and configuration software supports all PowerFlex drives, Micro800™ controllers and PanelView™ component graphic terminals. This software leverages proven Rockwell Automation and Microsoft® Visual Studio® technologies for fast and easy controller programming, drive configuration and integration with the HMI editor.

PowerFlex 755 Floor Mount AC Drives

In addition to all the options and benefits available in the PowerFlex 750-Series, the PowerFlex 755 drives 250 kW/350 Hp and larger offer added benefits for maintenance and installation flexibility.

- 1 Control pod is common with smaller ratings providing embedded Ethernet port and 5 slots for option modules, and can be remote mounted (up to 23 m) for hassle-free access to low voltage control.
- 2 Roll in/out design makes the drive easy to install and service by allowing complete removal from cabinet, providing generous room for wiring behind the drive. Power wiring can stay connected while unit is rolled out.
- 3 Adjustable terminals provide flexibility for wiring preferences such as top or bottom entry.
- 4 Integrated fusing eliminates need for separately mounted drive short circuit protection. Status is reported from the drive to ease troubleshooting.
- 5 Replaceable surge protector reduces downtime after incoming transient voltage events. Status is reported from the drive to ease troubleshooting.
- 6 Integrated DC link inductor enhances protection from power system events, and reduces input harmonics.
- 7 Sealed cooling channel uses external air for main cooling, reducing contamination exposure for electronics.
- 8 Modular construction allows fast and easy replacement of parts (e.g., main blower, capacitor assembly, circuit boards), minimizing production downtime.



PowerFlex 755 (frame 8)
250 to 500 kW/350 to 600 Hp

PowerFlex 755 Drives with Option Bays

All PowerFlex 755 floor mount drives are available with a power option bay which provides a cost-effective solution for power disconnect and other popular power options. Based on customer specifications, components are correctly sized and optimized for the appropriate overload duty rating. By eliminating the need for accessory sizing and the possibility of installation errors, the option bay helps to reduce engineering and installation time and costs. Option Bays are available with both IP20 and IP54 environmental ratings.

View a video on the benefits of the PowerFlex 755 at:
<http://ab.rockwellautomation.com/Drives/PowerFlex-755>





Safety

To help you protect personnel and assets while improving machine uptime, the PowerFlex 750-Series is available with two safety options:

1. Safe Torque-Off option or
2. Safe Speed Monitor option.

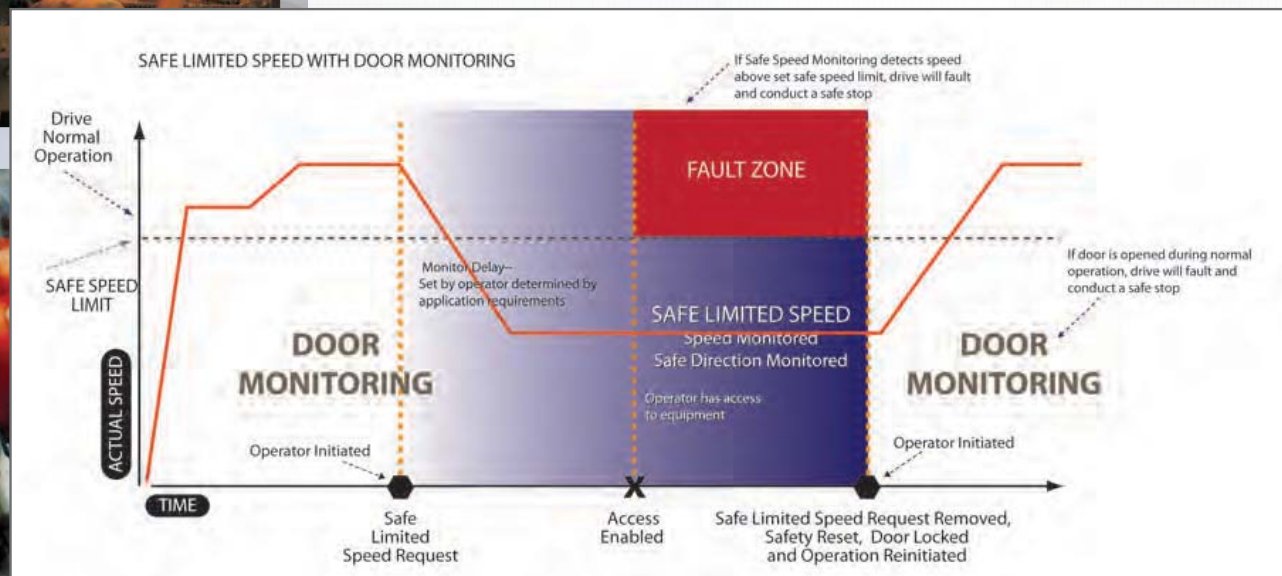
Safe Torque-Off is ideal for safety-related applications requiring removal of rotational power to the motor without removing power from the drive. Safe Torque-Off functionality offers the benefit of quick start-up after a demand on the safety system, helps reduce wear from repetitive start-up, and provides safety ratings up to and including SIL, PLe, and CAT 3.

The Safe Speed Monitor option provides a solution for applications that can benefit from access to a safety zone while there is limited motion. It helps you safely monitor and control the speed of your application, which allows operators to perform process or maintenance work without stopping the machine.

In addition, Safe Speed Monitor has an integrated monitoring relay to save additional panel-space installation labor. This option carries a safety rating up to and including SIL, PLe and Cat 4.

The Safe Speed Monitor option provides the following functionality:

- Safe Torque-Off
- Stop Categories 0, 1 and 2
- Safe Stop
- Safe Limited Speed
- Safe Maximum Speed
- Safe Maximum Acceleration
- Safe Direction
- Zero-Speed Monitoring
- Door Control and Monitoring
- Enabling switch input



The Right Packaging for Your Application

Because application conditions and environments vary, PowerFlex 750-Series drives are available with a choice of packaging options. From highly flexible IP00 open styles to MCC-style cabinets and other features that help provide additional protection, there's a PowerFlex 750-Series drive with the right packaging to help you meet productivity goals.

PowerFlex 755 Floor Mount Drives with IP00, NEMA/UL Open Type Ratings

The PowerFlex 755 IP00, NEMA/UL Open Type drives are designed to provide packaging flexibility, including the option for either vertical or horizontal mounting orientations. This option is available in PowerFlex 755 floor mount drives with ratings up to 1500 kW/2000 Hp.

PowerFlex 750-Series Drives with IP54/UL Type 12 Ratings

For applications requiring additional protection from harsh environments, PowerFlex 753 and 755 drives are available with IP54/UL Type 12 enclosures. These enclosures help protect the drive from dust and splashing water and are appropriate for moderately harsh indoor environments.



PowerFlex 750-Series drives are available with a variety of enclosure options and ratings including IP00, IP20, IP54 (above left) and an extra protection flange mount (above right).

Enclosure	Rating	Temperature Range	PowerFlex 753	PowerFlex 755
Wall Mount	IP00, IP20, NEMA/UL Open Type	0 – 50 °C 32 – 122 °F	X	X
Extra Protection Flanged Mount	Front: IP00, IP20 & NEMA/UL Open Type Back: IP66 & NEMA/UL Type 4X	Front: 0 – 50 °C 32 – 122 °F Back: 0 – 40 °C 32 – 104 °F	X	X
Extra Protection Wall Mount	IP54 & NEMA/UL Type 12	0 – 40 °C 32 – 104 °F	X	X
NEMA 1 Kit	Converts Open Type to NEMA/UL Type	0 – 40 °C 32 – 104 °F	X	X
Floor Mount	IP20, IP54, IP00	0 – 40 °C 32 – 104 °F		X*

* Floor mount drives are available for PowerFlex 755 higher power ratings (above 250 kW/350 Hp) only.
PowerFlex 755 higher power drives (ratings above 250 kW/350 Hp) are available in IP00, IP20 and IP54 enclosure ratings.

Premier Integration Simplifies Development, Use and Maintenance

By combining the advanced capabilities of the Rockwell Automation Integrated Architecture™ and the communication capabilities of PowerFlex drives, you can achieve an exceptional level of integration between drives and controllers. The benefits of this integration range from reduced development time to simplified maintenance.

To achieve this integration, PowerFlex drives use add-on profiles in Studio 5000™ Logix Designer software (formerly RSLogix™ 5000) to streamline drive installation. Add-on profiles minimize the need to individually program the required parameters and tags. The result is simplified programming, which puts an end to the need to frequently refer back to user manuals for specific parameter and tag information. And all PowerFlex drives on EtherNet/IP are able to take advantage of these add-on profiles.

In addition, Automatic Device Configuration (ADC) support for the PowerFlex 750-Series drives – shown below – helps reduce downtime.

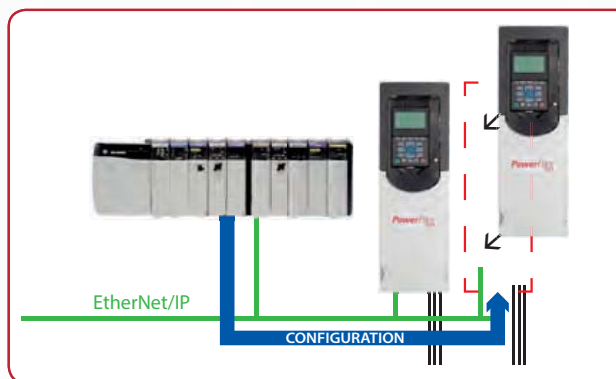
Easy-to-use tools help reduce development time and require no specialized knowledge – Wizards with advanced graphical interfaces walk you through drive parameter configuration.

Eliminate errors associated with using multiple software tools – Single development environment to configure and program your entire Logix drive system.

Access, edit and save drive information to the control system project with ease – Drive configuration is saved as part of the RSLogix project file (*.acd) and is also stored in the Logix controller, so there's no need to store and maintain multiple files – you only need one file.

Easily download global objects and faceplates – You can use the same tag names generated by the drive add-on profiles to utilize global objects and faceplates for a FactoryTalk® View HMI display

Easy to Maintain – Diagnostic, fault, alarm, and event information are integral to Studio 5000.



With Automatic Device Configuration (ADC), the Logix controller can automatically detect a replaced PowerFlex 753 or 755 drive and download all configuration parameters, eliminating the need for manual reconfiguration. (PowerFlex 753 AC drives require a dual-port EtherNet/IP communication card for ADC.)

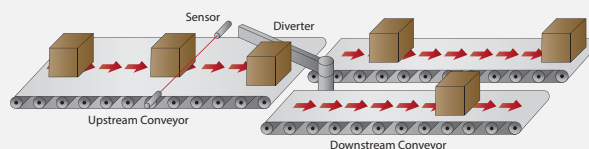
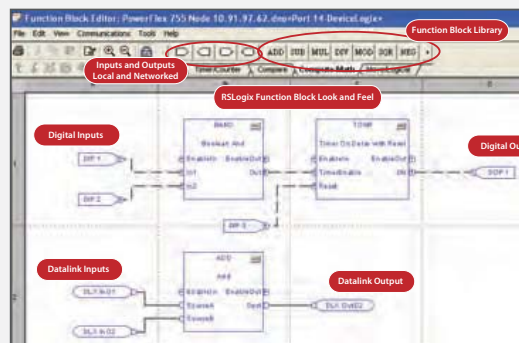
DeviceLogix™ Control Technology

DeviceLogix control technology provides you with the flexibility to customize a drive to more closely match your application needs. DeviceLogix controls outputs and manages status information locally within the drive, allowing you to operate the drive independently or complementary to supervisory control, helping to improve system performance and productivity.

You can use the PowerFlex 750-Series DeviceLogix to:

- Speed reaction time by processing in the drive, which reduces dependency on network throughput
- Provide scaling, selector switches, or other data manipulations not already built into the drive
- Read inputs/write outputs and exclusively control the drive
- Provide an option for decision-making if communication is lost with main controller
- Control other PowerFlex drives via a Peer-to-Peer EtherNet/IP network

DeviceLogix is easily programmed via: RSLogix 5000 and DriveTools SP v 5.01.

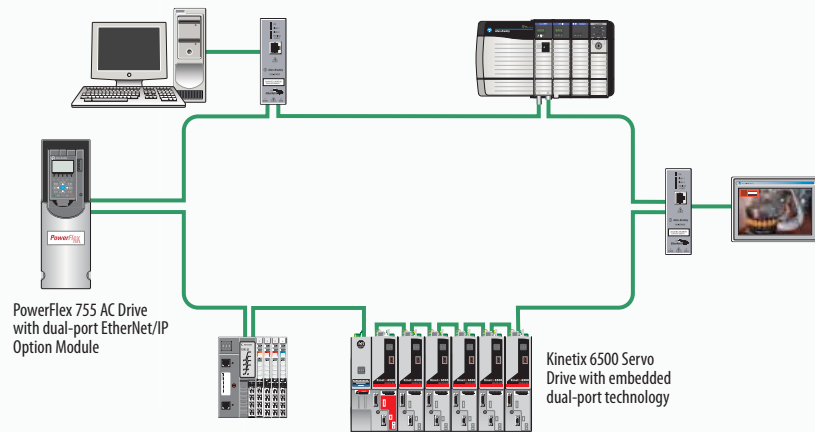


EtherNet/IP – A Single Network for Complete Machine Control

Connect Your Entire Enterprise

Benefit from the EtherNet/IP network for complete machine control that simplifies and enhances machine design.

- Low cost, high performance and easy to use as compared to a multi-network architecture
- Easily integrate any PowerFlex drive, I/O, smart actuators and any other EtherNet/IP connected device
- EtherNet/IP is an established, broadly-adopted network
- The PowerFlex 755 AC drive and Kinetix 6500 servo drive can reside on the same EtherNet/IP network and be programmed with a common set of motor control instructions available in ControlLogix and CompactLogix Programmable Automation Controllers



Device Level Ring (DLR) is an ODVA standard and provides fault tolerant connectivity for high drive availability. If one device on the EtherNet/IP network fails, the other devices are able to continue operation.

Dual-port EtherNet/IP Option Module for PowerFlex 750-Series AC Drives

The PowerFlex 750-Series Dual-port EtherNet/IP option module provides flexible and cost-effective ways to apply EtherNet/IP, and supports Ring, Linear and Star topologies as well as DLR functionality. DLR-based networks reduce configuration time and costs by minimizing the number of managed switches and reducing cabling needs. Users can create a single fault-tolerant DLR network that connects all components at the device level locally.

Information can be seamlessly communicated in real time to various levels of an organization, without requiring additional complexity. Getting real-time information at the right time and at the right levels of the manufacturing environment helps you enhance the agility of your business.

This solution supports optimal integration on a DLR level for the PowerFlex 755 via instructions embedded in the Logix controller, further enhancing integration into the Rockwell Automation Integrated Architecture. Only Allen-Bradley drives are able to offer optimal integration into the Integrated Architecture, providing simplified configuration, programming, commissioning, diagnostics and maintenance.



All PowerFlex 755 AC drives have a single embedded Ethernet port. This 750-Series option module provides the benefits of dual-port EtherNet/IP functionality for both the PowerFlex 753 and 755.

PowerFlex 753 and PowerFlex 755 AC Drive Specifications

Frame/Rating Cross-Reference						
Frame ¹	400V AC (540V DC) Input			480V AC (650V DC) Input		
	Amps	Normal Duty kW	Heavy Duty kW	Amps	Normal Duty Hp	Heavy Duty Hp
1	2.1	0.75	0.37	2.1	1	0.5
	3.5	1.5	0.75	3.4	2	1.5
	5	2.2	1.5	5	3	2
	8.7	4	2.2	8	5	3
	11.5	5.5	4	11	7.5	5
	15.4	7.5	5.5	14	10	7.5
2	2.1	0.75	0.75	2.1	1	1
	3.5	1.5	1.5	3.4	2	2
	5	2.2	2.2	5	3	3
	8.7	4	4	8	5	5
	11.5	5.5	5.5	11	7.5	7.5
	15.4	7.5	5.5	14	10	7.5
3	22	11	7.5	22	15	10
	30	15	11	27	20	15
	37	18.5	15	34	25	20
4	43	22	18.5	40	30	25
	60	30	22	52	40	30
5	72	37	30	65	50	40
	85	45	37	77	60	50
6	104	55	45	96	75	60
	140	75	55	125	100	75
	170	90	75	156	125	100
	205	110	90	186	150	125
7	260	132	110	248	200	150
	302	160	132	302	250	200
	367	200	160	361	300	250
	456	250	200	415	350	300

Frame	600V AC, Three-Phase Drives				
	Output Amps ²			Normal Duty Hp	Heavy Duty Hp
	Cont.	1 Min.	3 Sec.		
3	1.7 (0.9)	1.9 (1.4)	2.6 (2.6)	1	0.5
	2.7 (1.7)	3.0 (2.6)	4.1 (4.6)	2	1
	3.9 (2.7)	4.3 (4.1)	5.9 (7.3)	3	2
	6.1 (3.9)	6.7 (5.9)	9.2 (10.5)	5	3
	9 (6.1)	9.9 (9.2)	12.1 (13.5)	7.5	5
	11 (9)	12.1 (13.5)	16.5 (24.3)	10	7.5
	17 (11)	18.7 (16.5)	25.5 (29.7)	15	10
	22 (17)	24 (26)	33 (46)	20	15
4	27 (22)	30 (33)	41 (59)	25	20
	32 (27)	35 (41)	48 (73)	30	25
5	41 (32)	45 (48)	62 (86)	40	30
	52 (41)	57 (62)	78 (111)	50	40

Frame ¹	600V AC Input					690V AC Input				
	Output Amps ²			Normal Duty Hp	Heavy Duty Hp	Output Amps ²			Normal Duty kW	Heavy Duty kW
	Cont.	1 Min.	3 Sec.			Cont.	1 Min.	3 Sec.		
6	12 (9.1)	13.2 (13.7)	18 (18)	10	7.5	12 (9)	13.2 (13.5)	18 (18)	7.5	5.5
	18 (11.1)	19.8 (16.7)	27 (27)	15	10	15 (11.5)	16.5 (17.3)	22.5 (22.5)	11	7.5
	23 (18)	25.3 (27)	34.5 (34.5)	20	15	20 (15)	22 (22.5)	30 (30)	15	11
	24 (22)	26.4 (33)	36 (39.6)	20	20	23 (20)	25.3 (30)	34.5 (36)	18.5	15
	28 (23)	30.8 (34.5)	42 (42)	25	20	30 (23)	33 (34.5)	45 (45)	22	18.5
	33 (28)	36.3 (42)	49.5 (50.4)	30	25	34 (30)	37.4 (45)	51 (54)	30	22
	42 (33)	46.2 (49.5)	63 (63)	40	30	46 (34)	50.6 (51)	69 (69)	37	30
	53 (42)	58.3 (63)	79.5 (79.5)	50	40	50 (46)	55 (69)	75 (82.8)	45	37
	63 (52)	69.3 (78)	94.5 (94.5)	60	50	61 (50)	67.1 (75)	91.5 (91.5)	55	45
	77 (63)	84.7 (94.5)	116 (116)	75	60	82 (61)	90.2 (91.5)	123 (123)	75	55
	99 (77)	109 (116)	149 (149)	100	75	98 (82)	108 (123)	147 (148)	90	75
	125 (99)	138 (149)	188 (188)	125	100	119 (98)	131 (147)	179 (179)	110	90
	144 (125)	158 (188)	216 (225)	150	125	142 (119)	156 (179)	213 (214)	132	110
	192 (144)	211 (216)	288 (288)	200	150	171 (142)	188 (213)	257 (257)	160	132
7	242 (192)	266 (288)	363 (363)	250	200	212 (171)	233 (257)	318 (318)	200	160
	289 (242)	318 (318)	434 (436)	300	250	263 (212)	289 (289)	395 (395)	250	200

1 Frame ratings based on open type cabinet mount enclosures.

2 These drives have dual current ratings; one for normal duty applications, and one for heavy duty applications (in parenthesis). The drive may be operated at either rating.

PowerFlex 755 Floor Mount Drives*

380...400V AC, Three-phase and 540V DC Input Drives

Frame Size	Light Duty				Normal Duty				Heavy Duty			
	Output Amps			kW	Output Amps			kW	Output Amps			kW
	Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.	
8	540	594	NA	315	460	506	693	250	385	578	693	200
	585	644		315	540	594	821	315	456	684	821	250
	612	673		355	567	624	851	315	472	708	851	250
	750	825		400	650	715	975	355	540	810	975	315
	796	876		450	750	825	1125	400	585	878	1125	315
	832	915		450	770	847	1155	400	642	963	1155	355
9	1040	1144		560	910	1001	1365	500	750	1125	1365	400
	1090	1199		630	1040	1144	1584	560	880	1320	1584	500
	1175	1293		710	1090	1199	1638	630	910	1365	1638	500
	1465	1612		800	1175	1293	1872	710	1040	1560	1872	560
	1480	1628		850	1465	1612	2198	800	1090	1635	2198	630
	1600	1760		900	1480	1628	2220	850	1175	1763	2220	710
10	1715	1887		1000	1590	1749	2385	900	1325	1988	2385	710
	2330	2563		1400	2150	2365	3225	1250	1800	2700	3225	1000

480V AC, Three-phase and 650V DC Input Drives

Frame Size	Light Duty				Normal Duty				Heavy Duty			
	Output Amps			Hp	Output Amps			Hp	Output Amps			Hp
	Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.	
8	485	534	NA	400	430	473	666	350	370	555	666	300
	545	600		450	485	534	745	400	414	621	745	350
	590	649		500	545	600	818	450	454	681	818	350
	710	781		600	617	679	926	500	485	728	926	400
	765	842		650	710	781	1065	600	545	818	1065	450
	800	880		700	740	817	1110	650	617	926	1110	500
9	960	1056		800	800	880	1278	700	710	1065	1278	600
	1045	1150		900	960	1056	1440	800	795	1193	1440	700
	1135	1249		1000	1045	1150	1568	900	800	1200	1568	750
	1365	1502		1100	1135	1249	1728	1000	960	1440	1728	800
	1420	1562		1250	1365	1502	2048	1100	1045	1568	2048	900
	1540	1694		1350	1420	1562	2130	1250	1135	1703	2130	1000
10	1655	1821		1500	1525	1678	2288	1350	1270	1905	2288	1100
	2240	2464		2000	2070	2277	3105	1750	1730	2595	3105	1650

600V AC, Three-phase and 725V DC Input Drives

Frame Size	Light Duty				Normal Duty				Heavy Duty			
	Output Amps			Hp	Output Amps			Hp	Output Amps			Hp
	Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.	
8	355	391	NA	350	295	325	490	300	272	408	490	250
	395	435		400	355	391	533	350	295	443	533	300
	435	479		450	395	435	593	400	329	494	593	350
	460	506		500	435	479	639	450	355	533	639	350
	510	561		500	460	506	711	500	395	593	711	400
	545	600		550	510	561	765	500	425	638	765	450
9	690	759		700	595	655	918	600	510	765	918	500
	760	836		800	630	693	1071	700	595	893	1071	600
	835	919		900	760	836	1140	800	630	945	1140	700
	900	990		950	825	908	1260	900	700	1050	1260	750
	980	1078		1000	900	990	1368	950	760	1140	1368	800
	1045	1150		1100	980	1078	1470	1000	815	1223	1470	900
10	1220	1342		1200	1110	1221	1665	1100	920	1380	1665	1000
	1530	1683		1500	1430	1573	2145	1400	1190	1785	2145	1250

* A Roll-out Cart is required with Frame 8...10 drives to assist with power wiring and cabinet mounting.

PowerFlex 755 Floor Mount Drives*

690V AC, Three-phase and 932V DC Input Drives

Frame Size	Light Duty				Normal Duty				Heavy Duty			
	Output Amps			kW	Output Amps			kW	Output Amps			kW
	Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.		Cont.	1 Min.	3 Sec.	
8	330	363	NA	315	265	292	375	250	215	323	375	200
	370	407		355	330	363	473	315	265	398	473	250
	410	451		400	370	407	555	355	308	462	555	300
	460	506		450	415	457	639	400	370	555	639	355
	500	550		500	460	506	675	450	375	563	675	375
	530	583		530	500	550	750	500	413	620	750	400
9	650	715		630	590	649	885	560	460	690	885	450
	710	781		710	650	715	975	630	500	750	975	500
	790	869		800	710	781	1065	710	590	885	1065	560
	860	946		850	765	842	1170	750	650	975	1170	630
	960	1056		900	795	875	1350	800	750	1125	1350	710
	1020	1122		1000	960	1056	1440	900	795	1193	1440	800
10	1150	1265		1100	1040	1144	1560	1000	865	1298	1560	900
	1485	1634		1500	1400	1540	2100	1400	1160	1740	2100	1120

* A Roll-out Cart is required with Frame 8...10 drives to assist with power wiring and cabinet mounting.

Dimensions for PowerFlex 755 with IP00/IP20 Ratings***

Approximate Dimensions Millimeters (Inches)			
Frame	Height	Width	Depth
1	400.50 (15.77)	110 (4.33)	211 (8.31)
2	424.20 (16.7)	134.50 (5.30)	212 (8.35)
3	454 (17.87)	190 (7.48)	212 (8.35)
4	474 (18.66)	222 (8.74)	212 (8.35)
5	550 (21.65)	270 (10.63)	212 (8.35)
6	665.50 (26.20)	308 (12.13)	346.40 (13.64)
7	881.50 (34.70)	430 (16.93)	350 (13.78)
8	2453 (88.36)	600 (23.6)	600 (23.6)**
8	2453 (96.60)	600 (23.6)	800 (31.50)**
9	2453 (96.60)	1200 (47.20)	600 (23.6)**
9	2453 (96.60)	1200 (47.20)	800 (31.50)**
10	2453 (96.60)	1800 (70.90)	600 (23.60)**
10	2453 (96.60)	1800 (70.90)	800 (31.50)**

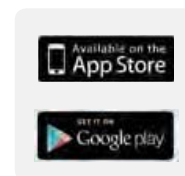
** Available in 600 mm and 800 mm depths to provide options based on cable entry and exit requirements. See publication PFLEX-5G002 or 750-TD001 for selection information.

***IP00 for frames 6 and 7

Energy Savings Calculators

See how installing a PowerFlex drive for your fan or pump applications can reduce energy costs when compared with a traditional flow control method.

Download the tools at:
<http://www.rockwellenergycalc.com>



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This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

6/18/2019 10:14:24 AM

in

Case No(s). 19-0382-EL-EEC

Summary: Application West-Ward Columbus, Inc. and Ohio Power Company for approval of a special arrangement agreement with a mercantile customer
electronically filed by Tanner Wolfram on behalf of Ohio Power Company