

## 15 to 500 HP

Special purpose multi-pulse magnetics can be manufactured to meet specific requirements of your application. Each autotransformer reduces the harmonic current at the input of the transformer as well as harmonic voltage distortion from non-linear loads applied to the outputs.

### Applications

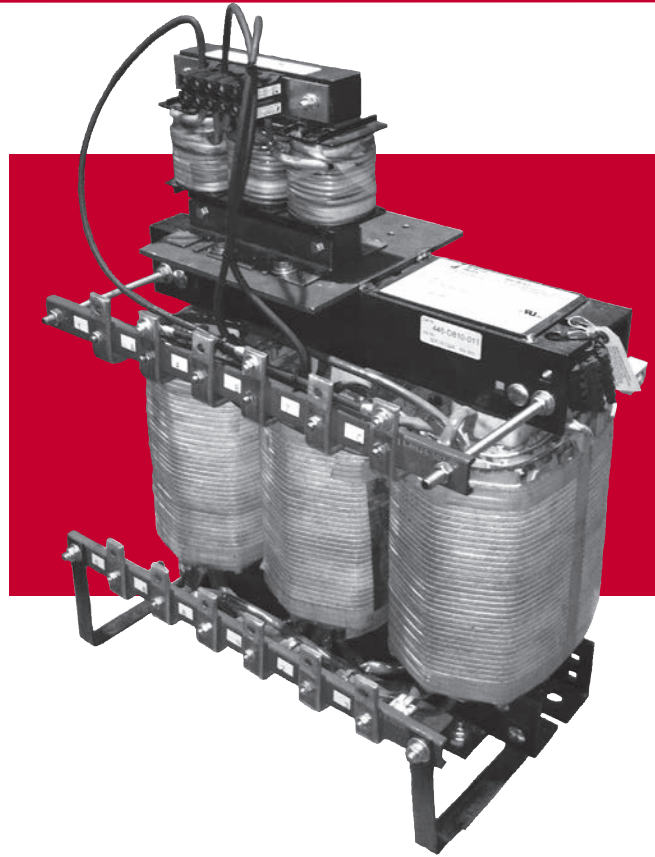
- Multi-pulse units are key in designing systems to mitigate the harmonic distortion generated by variable frequency drives and other digital equipment.
- Frequently used in large projects where harmonics increase heat and power usage. Savings can be generated with the proper application of these specially developed units.
- Typical applications for multi-pulse transformers
  - Water and wastewater treatment facilities
  - HVAC installations
  - Pump lift stations.

### Specifications

- Core and coil
- 60 Hz operation
- Three Phase: 15 – 500 kVA
- Aluminum windings
- 150°C temperature rise with 40°C ambient (customer supplied forced air cooling)
- 220°C insulation class
- Cores of high quality electrical steel

### Features, Functions, Benefits

- Reduces the neutral current and harmonic distortion generated by triplen harmonics



### Standards

- Built in accordance with NEMA, ANSI, UL and CSA standards

### Options and Accessories

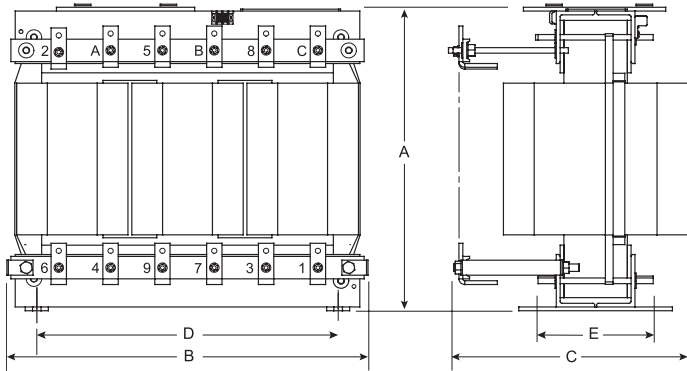
- 50 Hz
- Copper windings
- Other sizes and temperature rises available
- NEMA1 enclosures

### Approvals

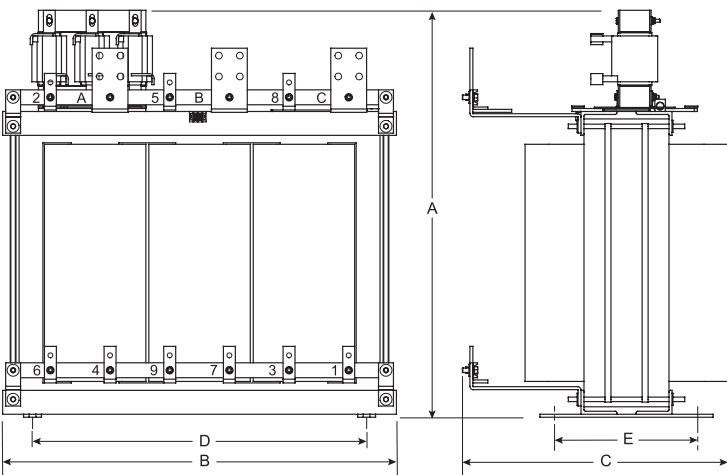


### Enclosure Figures

**Figure 35** without reactor



**Figure 36** with reactor



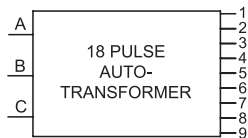
### Model Numbers

Model numbers for these units are developed to match unique needs. Contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com) for more information.

### Wiring Diagrams

**18-P A** Wiring Diagram & Connections

**Wiring Diagram**

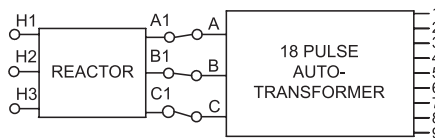


**Connections**

Primary Volts	Primary Lines Connect To
480	A, B, C
Secondary Volts	Secondary Lines Connect To
421	1-9

**18-P B** Wiring Diagram & Connections

**Wiring Diagram**



**Connections**

Primary Volts	Primary Lines Connect To
480	H1, H2, H3
Secondary Volts	Secondary Lines Connect To
421	1-9

For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)

**18-Pulse Autotransformer**

3-Phase, 60 Hz, 480V, Aluminum windings

**18-pulse Autotransformer (3 output: 421V) without reactor. Fan assist required**

HP / kVA	Enclosure Figure	Height (A) inches	Width (B) inches	Depth (C) inches	(D) inches	(E) inches	Est Ship Wgt	Wiring Diagram	Air Flow Req'd
15	35	12.75	22.9	12.2	18	6	150	18-P A	300 LFM
20	35	13	21	23	18	6	167	18-P A	300 LFM
25	35	12.7	17.9	12.7	15.9	7.5	207	18-P A	300 LFM
30	35	12.7	17.9	12.7	15.9	7.5	211	18-P A	300 LFM
40	35	15	20.25	14.4	16	6	251	18-P A	300 LFM
50	35	18.5	19.6	12.6	14	5.75	304	18-P A	300 LFM
60	35	16.75	20.1	11.75	14	6.5	400	18-P A	300 LFM
75	35	17.8	20.1	13.25	16.1	6.9	425	18-P A	300 LFM
100	35	20.6	22.9	13.25	18	6.5	450	18-P A	300 LFM
125	35	21.5	22.9	13.6	16	7.5	541	18-P A	300 LFM
150	35	20	23.6	15.5	19.6	7.6	665	18-P A	300 LFM
200	35	22.4	28.3	16	24	8	643	18-P A	300 LFM
250	35	23.6	28.3	16.1	24	8.5	747	18-P A	300 LFM
300	35	38.75	28.1	29	24	9	1,066	18-P A	300 LFM
350	35	39.75	29.25	29	24	10	1,175	18-P A	500 LFM
400	35	26.9	29.75	17.5	25	10	1,357	18-P A	500 LFM
450	35	48.5	32	29	25	10	1,357	18-P A	500 LFM
500	35	51	32.5	29	28	10	1,495	18-P A	500 LFM

**18-pulse Autotransformer (3 output: 421V) with reactor. Fan assist required**

HP / kVA	Enclosure Figure	Height (A) inches	Width (B) inches	Depth (C) inches	(D) inches	(E) inches	Est Ship Wgt	Wiring Diagram	Air Flow Req'd
15	36	17.75	22.9	12.2	18	6	157	18-P B	300 LFM
20	36	25.75	18.75	23	TBD	TBD	182	18-P B	300 LFM
25	36	18.43	17.9	12.7	15.9	7.5	222	18-P B	300 LFM
30	36	18.9	17.9	12.7	15.9	7.5	227	18-P B	300 LFM
40	36	22	20.25	14.4	16	6	276	18-P B	300 LFM
50	36	25.5	19.6	12.6	14	5.75	329	18-P B	300 LFM
60	36	23.75	20.1	11.75	14	6.5	425	18-P B	300 LFM
75	36	26.8	20.1	13.25	16.1	6.9	470	18-P B	300 LFM
100	36	29.6	22.9	13.25	18	6.6	502	18-P B	300 LFM
125	36	30.5	22.9	13.62	16	7.5	596	18-P B	300 LFM
150	36	29	23.6	15.5	19.6	7.6	720	18-P B	300 LFM
200	36	31.4	28.3	16	24	8	713	18-P B	300 LFM
250	36	35.1	23.4	16.1	24	8.5	857	18-P B	300 LFM
300	36	50.1	28.1	29	24	9	1161	18-P B	300 LFM
350	36	51.1	29.25	29	24	10	1275	18-P B	500 LFM
400	36	38.3	29.75	17.5	25	10	1467	18-P B	500 LFM
450	36	59.9	32	29	25	10	1467	18-P B	500 LFM
500	36	62.4	32.5	29	28	10	1615	18-P B	500 LFM

See website for additional kVA, copper windings and temperature options.

Housing dimensions subject to change without notice. Consult website or factory where dimensions are critical.

For further information, contact an Application Engineer at 800-892-3755, [technical\\_services@jeffersonelectric.com](mailto:technical_services@jeffersonelectric.com)

