



HIPOTRONICS
THE MEASURE OF A LEADER

HIGHER VOLTAGE Peschel® Variable Transformer

FEATURES

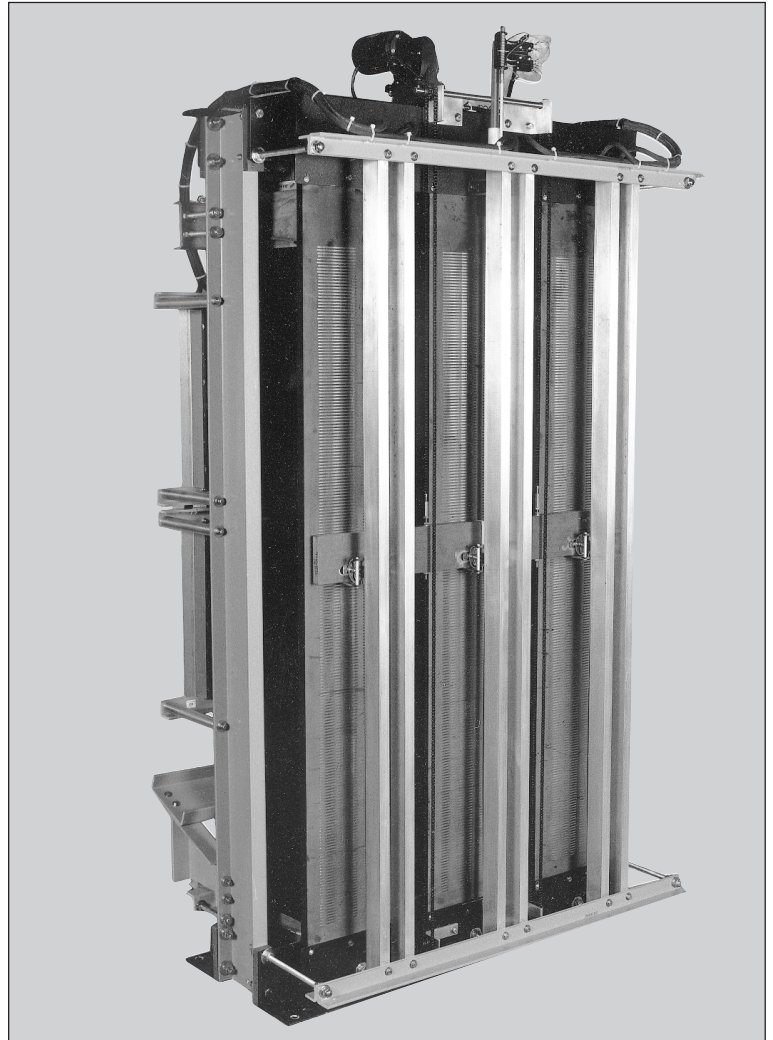
- Isolated primary-secondary
- Continuously adjustable output
- Rated for continuous duty
- No added phase imbalance
- No added harmonics
- Low impedance
- Up to 15 times step-up
- Proven designs
- Dry-type construction
- Motorized output control

BENEFITS

- No need for separate isolation
- Ease of operation
- Negligible output distortion
- Requires less space
- No transformer oil issues
- Easy to maintain

APPLICATIONS

- HV laboratories
- Transformer testing
- Motor testing
- HV component testing
- HV life testing
- Replacement for tap transformers & switches



*Cat. No. 15D48P-690Y7
Peschel Variable Transformer*

DESCRIPTION

The PVT is the solution to the problem of supplying variable voltage at high power to a wide variety of loads. The unique design of the PVT provides for the transformation and commutation of variable voltage at levels that are unattainable with conventional designs. This data sheet presents the Higher Voltage group of PVT models. The Peschel Variable Transformer has now been in production for over 15 years. These models are proven, field tested designs that have been produced by Hipotronics for use in various types of high voltage/high power test equipment. The PVTs listed here have been designed specifically to handle high voltage and high power applications. Each PVT is rated for continuous duty at full current and full output voltage. Each of these unique models provide line isolation directly within the variable transformer. This feature eliminates the need for and the cost of separate isolation transformers.

SPECIFICATIONS

INPUT VOLTAGE: 480V, 3 Phase, 60Hz						
CATALOG NUMBER	OUTPUT VOLTAGE	OUTPUT AMPS	kVA	% RES	DIMENSION W x D x H (in.)	WEIGHT LBS
15D48P-120Y4	0 -1200	40	83	0.6	32 x 24 x 44	1600
15D48P-120Y7	0 -1200	70	145	0.6	32 x 24 x 44	1700
15D48P-120Y14	0 -1200	140	290	0.6	48 x 70 x 44	3800
15D48P-240Y4	0 - 2400	40	166	0.3	35 x 28 x 65	2150
15D48P-240Y7	0 - 2400	70	290	0.3	35 x 28 x 65	2400
15D48P-240Y14	0 - 2400	140	580	0.3	48 x 72 x 65	5500
15D48P-416Y4	0 - 4160	40	288	0.25	40 x 30 x 72	3100
15D48P-416Y7	0 - 4160	70	500	0.25	40 x 30 x 72	3500
15D48P-416Y14	0 - 4160	140	1000	0.25	60 x 80 x 72	8000
15D48P-690Y4	0 - 6900	40	457	0.23	45 x 33 x 83	4000
15D48P-690Y7	0 - 6900	70	800	0.23	45 x 33 x 83	4500
15D48P-690Y14	0 - 6900	140	1600	0.23	60 x 90 x 83	10,000
EFFICIENCY	98%			NOTES: 1. All models are supplied with a 15 second rate of rise, DC motor drive system. 2. Other input and output voltages are available, please contact the factory for information.		
DUTY	Continuous to 50° C Ambient					
HUMIDITY	95% non-condensing					
CONSTRUCTION	Dry-type with Cast Epoxy Coil Face					
COOLING	Convection or fan cooled					
OUTPUT DISTORTION	Negligible					
OUTPUT IMBALANCE	Less than 1%					
SHORT CIRCUIT OVERLOAD	10 to 12 times rated					
IMPEDANCE	3% to 5% varies with position					

COIL FACE

In addition to the epoxy casting process the coil face is sanded to expose the copper turns. These coil turns are then nickel plated to protect the coil face from wear, oxidation and corrosion. This causes the mechanical wear to occur on the replaceable, sliding copper contacts.

OVERLOAD PROTECTION

The PVT has a very low impedance characteristic. The internal impedance is low enough to pass 20 times normal current. Unless specified and quoted the PVT does not include overload protection. The user must provide adequate overload protection.

LONG LIFE - LOW MAINTENANCE

The PVT has been designed to very high industry standards and will last many years. Proper preventative maintenance and inspection procedures should be performed to insure the maximum life expectancy. The "Users Manual", supplied with each PVT, outlines procedures that should be followed.

RATINGS

PVTs are designed with sufficient safety margins and the coils are wound with Class H insulated wire to enable full current ratings with ambient temperatures up to 50°C. Diode heat sinks are designed to keep diode junction temperatures far below rating.

NOTE: Because Hipotronics has a policy of continuous product improvement, it reserves the right to change design and specifications without notice.

DIODES

The diode switching circuit utilizes standard, stud mounted, silicon rectifiers. In this application the diodes are selected for their forward voltage drop. There is no PIV stress placed on the diodes, thus eliminating the possibility of overvoltage failure.

OTHER PVT INFORMATION

For specifications about lower voltage models and general design and capability information about the PVT please contact our sales office at the numbers listed below.

OPTIONS

All PVTs are available with metallic enclosures both indoor and outdoor types. All models can be configured with controls, metering and output regulation. Please contact our sales office and request Data Sheet: PVT-DS3.

For further information, contact:

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