TSi-NPS VRP

NPS VRP

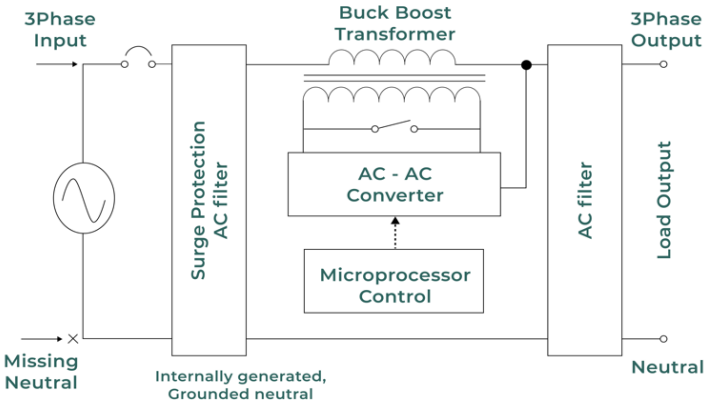
Three Phase 3kVA to 100kVA, ± 20%

NPS VRP is a cost-effective three phase automatic precision AC voltage regulator that ensures maintenance-free operation of electronic equipment over a wide range of input voltage range without having the need of an input neutral for carrying out its operation. TSi-NPS VRP series is designed to provide high precision power with a typical compensation time of 20 milliseconds to comply with the requirements of the ITIC curve for power supply to electronics.

Three phase as well as single phase versions are available.

How the NPS VRP works:

The high frequency Insulated Gate Bipolar Transistor (IGBT) driven converter takes the incoming AC power, measures it against the nominal voltage reference and then adds or subtracts a compensating voltage to achieve a precisely regulated 230 V output.



Features and Benefits:

- NPS VRP doesn't need input neutral.
- Ability to provide healthy output even if there is a break/failure of incoming neutral.
- Provides the output voltage within +/-1% of the nominal voltage with real-time optimum voltage compensation, as well as spike & noise control.
- Output load can be single phase as well as three phase.
- No change in wiring is required. Input will be three phase 4 wire and output will be three phase 5 wire.
- Static technology results in quiet operation, high product up-time & low maintenance.
- Internal surge voltage protection assures trouble-free operation.
- AC input circuit breakers and load over current protection prevents costly equipment damage.
- Tight control over electronic card failures, data corruption and machine breakdowns result in higher productivity, lower operating costs, and greater consumer comfort.
- Lightweight and compact size makes for ease of installation.

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Illustration of TSi-NPS VRP Technology

Note:

- In NPS VRP, distribution of load is required.
- Maximum capacity per phase will be 1/3rd of the equipment capacity. Example: 30KVA NPS VRP can be loaded maximum 10KVA single phase per phase.

Reliable TSi-NPS VRP Technology for Next Gen Electronic Machinery

Leads to

Bad power quality, Poor or broken Neutral
causing voltage disturbances like sags, swells, spikes, transients and HF noises.

Corrected through

Protection against

Shutdown and damages
sensitive electronic production machines, data corruption, tool breakages, loss of profits.

TSi - NPS-VRP

TSi's Secret

Corrects supply side disturbances due to sags/ swells/ spikes and supplies 'Pure Power' leading to no downtime in the production line.

All this is done within ITIC curve requirement of 20 milliseconds.

Technical Specifications

Model	NPS-VRP-3000-9339-200M
Electrical	
Capacity (in KVA)	3
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	5
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	4
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 610x610x640
Unpacked Weight (approx.)	85 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-6000-9339-200M
Electrical	
Capacity (in KVA)	6
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	11
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	9
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 610x610x640
Unpacked Weight (approx.)	85 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-10000-9339-200M
Electrical	
Capacity (in KVA)	10
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	18
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	14
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 610x610x640
Unpacked Weight (approx.)	105 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-15000-9339-200M
Electrical	
Capacity (in KVA)	20
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	27
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	22
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 610x610x640
Unpacked Weight (approx.)	140 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-20000-9339-200M
Electrical	
Capacity (in KVA)	20
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	36
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	29
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 610x610x640
Unpacked Weight (approx.)	145 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-25000-9339-200M
Electrical	
Capacity (in KVA)	25
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	45
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	36
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 660x660x720
Unpacked Weight (approx.)	150 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-30000-9339-200M
Electrical	
Capacity (in KVA)	30
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	54
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	43
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 660x660x720
Unpacked Weight (approx.)	180 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-40000-9339-200M
Electrical	
Capacity (in KVA)	40
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	72
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	58
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	As per Dimension Diagram of Cubical Type 660x660x720
Unpacked Weight (approx.)	210 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-50000-9339-200M
Electrical	
Capacity (in KVA)	50
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	90
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	72
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	Cabinet 1: As per Dimension Diagram of Cubical Type 660x660x720 + Cabinet 2: As per Dimension Diagram of Cubical Type 550x550x800
Unpacked Weight (approx.)	170 kg + 100 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-60000-9339-200M
Electrical	
Capacity (in KVA)	60
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	108
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	87
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	Cabinet 1: As per Dimension Diagram of Cubical Type 888x888x838 + Cabinet 2: As per Dimension Diagram of Cubical Type 550x550x800
Unpacked Weight (approx.)	210 kg + 120 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-70000-9339-200M
Electrical	
Capacity (in KVA)	70
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	126
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	101
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	Cabinet 1: As per Dimension Diagram of Cubical Type 888x888x838 + Cabinet 2: As per Dimension Diagram of Cubical Type 550x550x800
Unpacked Weight (approx.)	280 kg + 130 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-70000-9339-200MP
Electrical	
Capacity (in KVA)	70
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	126
AC Input Connector	L1, L2, L3 & Ground input BUSBAR. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	101
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output BUSBAR. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	Pad mounted
Overall Dimension (approx.)	As per Dimension Diagram of Panel Type 650x1020x2150
Unpacked Weight (approx.)	450 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

Technical Specifications

Model	NPS-VRP-100000-9339-200M
Electrical	
Capacity (in KVA)	100
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	180
AC Input Connector	L1, L2, L3 & Ground input wires. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	144
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output wires. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	4 High Quality Castor wheels, 2 with brakes
Overall Dimension (approx.)	Cabinet 1: As per Dimension Diagram of Cubical Type 888x888x838 + Cabinet 2: As per Dimension Diagram of Cubical Type 550x550x800
Unpacked Weight (approx.)	310 kg + 170 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

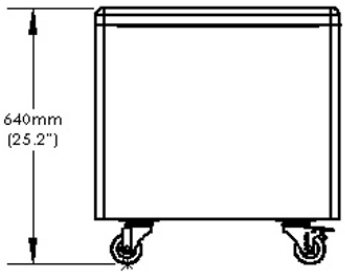
Technical Specifications

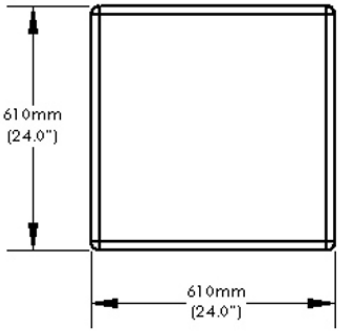
Model	NPS-VRP-100000-9339-200MP
Electrical	
Capacity (in KVA)	100
Switching Technology	20 kHz IGBT AC chopper/inverter
Voltage Compensation Time	20 ms typical
AC Input	
Nominal Input Voltage (V)	Three phase 400
Designed Input voltage range (V) (voltage regulation accuracy of +/-1%)	320 - 480
Input voltage range (V) (for relaxed output regulation within functional range of 200-250V P-N)	277 - 520
Nominal Operating Frequency	47 – 63 Hz
Maximum rated input current (A)	180
AC Input Connector	L1, L2, L3 & Ground input BUSBAR. Input neutral will not be used.
Overload & Short Circuit Protection	Through suitably rated input circuit breaker
AC Output	
Nominal Output Voltage (V)	Three phase 400
Efficiency	Typical 96% (under 20 – 100 % load condition)
Output Voltage Compensation Range	+/- 1 %
Maximum Rated Output Current (A)	144
System Status Indicator	Green LED ON-Normal operation - Amber LED ON-Bypass operation Red LED ON-Fault
Output Connector	L1, L2, L3, Neutral & Ground output BUSBAR. Fresh output neutral provided.
Surge Protection	Class II Surge Protection
Physical	
Cabinet Construction	RAL 7035 light grey powder coated CRCA cabinets
Automatic AC-AC Converter Bypass	Standard, will get activated when there is a fault condition
Cabinet Weather Protection Ratings	IP 20 (for use in protected indoor environments)
Display	Digital output voltage display thru selector switch
Mounting	Pad mounted
Overall Dimension (approx.)	As per Dimension Diagram of Panel Type 650x1020x2150
Unpacked Weight (approx.)	550 kg
Environmental	
Cooling Method	Forced air
Operating Temperature Range	0 to + 45 °C
Operating Humidity Range	10 to 90% relative humidity (non-condensing)

**NPS VRP doesn't need input neutral.*

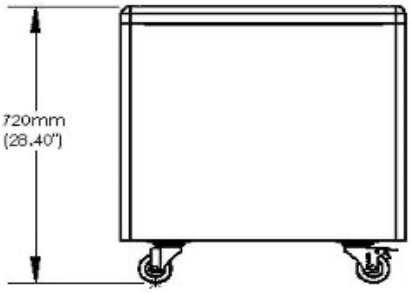
Dimension Diagrams

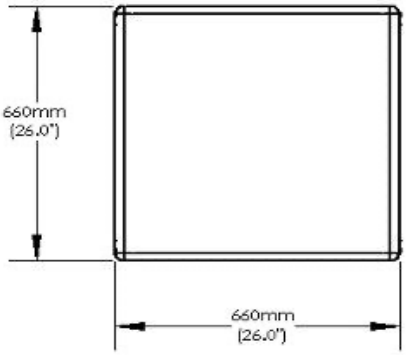
CUBICAL TYPE 610x610x640





CUBICAL TYPE 660x660x720

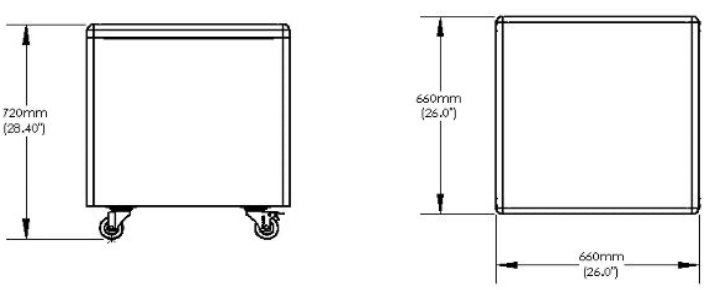




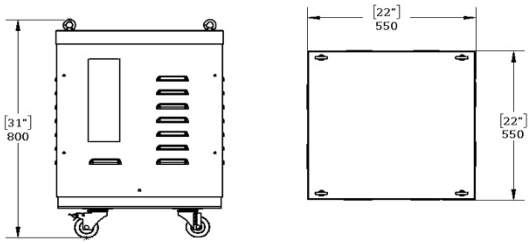
Technical Specifications

Dimension Diagrams

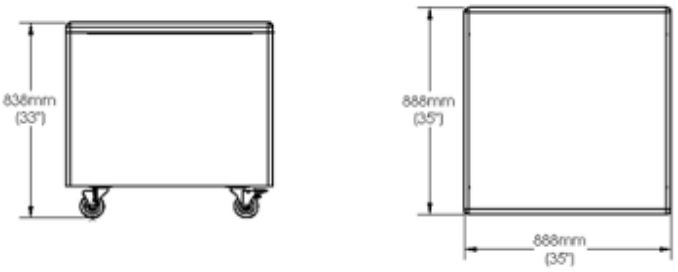
CUBICAL TYPE 660x660x720



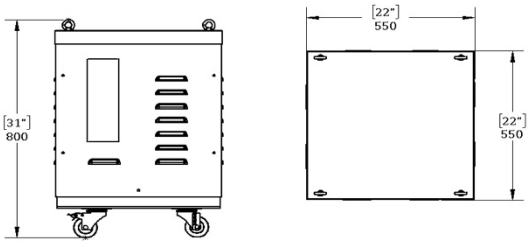
CUBICAL TYPE 550x550x800



CUBICAL TYPE 888x888x838

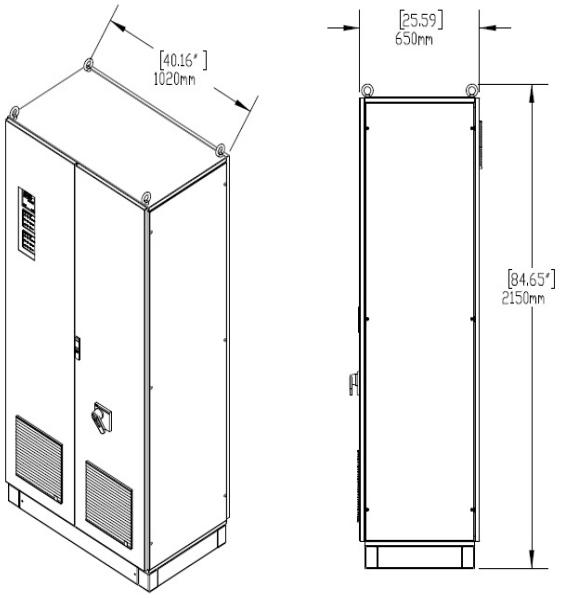


CUBICAL TYPE 550x550x800



Dimension Diagrams

PANEL TYPE 650x1020x2150



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