LOAD TESTING / 60 Hz SERIES

1,250 kW Resistive load bank

Dual-voltage AC testing system | Model VBNK1.2MR



Proposed trailer-mounted configuration · Rear three-quarter design view

1,250 kW	480 / 240 V	1 kW
Rated load at 480 VAC	Three-phase, 60 Hz	Smallest step at 480 V

Built for demanding generator testing.

Configurable resistive loading for generator sets, alternators and electrical power systems. Offered in trailer-ready and trailer-mounted configurations, with a touchscreen HMI control platform and horizontal forced-air cooling.

01 / ELECTRICAL PERFORMANCE

Precision across the load range

18 individually selectable resistance steps at 480 VAC, with additional installed step capacity beyond the nominal rating.

Model	VBNK1.2MR
Rated capacity	1,250 kW at 480 VAC
Operating voltage	480 / 240 VAC, line-to-line
Frequency	60 Hz
Connection	Star (Y), three-phase, four-wire
Power factor	1.0 nominal (resistive load)
Rated current at 480 V	Approx. 1,504 A at 1,250 kW
Duty	Continuous at rated load, subject to operating conditions
Cooling / discharge	Forced air / horizontal
Control platform	Touchscreen HMI

LOAD STEP SCHEDULE · KW AT 480 VAC

01	1	02	1	03	2	04	2	05	5	06	5
07	10	08	10	09	20	10	20	11	50	12	50
13	100	14	100	15	100	16	200	17	200	18	500

1,376 kW
Sum of installed steps

+126 kW
Additional step capacity

+10.08%
Above rated capacity

Additional step flexibility

Multiple step combinations provide more selection flexibility. The continuous rated output remains 1,250 kW at 480 V; installed step capacity is not a guaranteed overload rating.

240 VAC operation: Reduced load capacity. With the same effective resistance, output at 240 V is 25% of the corresponding 480 V setting (312.5 kW at the 1,250 kW setting). Final selectable capacity at 240 V is subject to configuration confirmation.

02 / MECHANICAL DESIGN

Engineered for site mobility

Two configurations for integration into customer-owned trailers or supply as a complete towable industrial assembly.



Left-hand side — Five mesh grilles



Right-hand side — Five mesh grilles

OVERALL DIMENSIONS AND WEIGHT

WITH TROLLEY

1,600 × 3,000 × 3,000 mm

63.0 × 118.1 × 118.1 in (W × L × H)

2,700 kg

Approx. 5,952 lb

WITHOUT TROLLEY

1,600 × 3,000 × 2,100 mm

63.0 × 118.1 × 82.7 in (W × L × H)

2,100 kg

Approx. 4,630 lb

Turntable steering

Four-wheel industrial trolley with a front rotating axle, towing eye and heavy-duty chassis.

Horizontal ventilation

Five ventilated side doors per side; the lower door nearest the rear is solid for the control/switchgear zone.

900 mm trolley height

Approx. 35.4 in deck-height allowance; integrated rear reflectors and lights in the trailer configuration.

Trailer-ready alternative

Supply without trolley for integration into a suitable customer-selected trailer or mounting system.

Dimensions are nominal, width × length × height. Length excludes drawbar; confirm final transport envelope, axle loads and lifting details on the approved general arrangement. Public-road trailer compliance is not included unless separately agreed.

03 / EQUIPMENT ACCESS

A clear operator-side layout

Separated towing and operator ends, with a glass-covered control interface at the rear for visibility and access.



Front / towing end — Four solid access doors



Rear / operator end — HMI and safety labels

Protected operator interface

Glass-covered HMI and status lamps; external emergency-stop pushbutton at the lower-left rear door.

Dedicated equipment access

Solid front and rear access panels, with side mesh ventilation for the resistor section.

Ingress protection design

Control and switchgear compartment: IP55 design target. Ventilation openings: IP20 design target.

Safety and identification

Electrical and hot-surface caution labels, equipment identification plate and lifting eyes.

Product design views show the proposed enclosure and trolley arrangement. Nameplate and component markings in the design views are not controlling specifications.

04 / OPERATOR CONTROL

Intuitive load control

Touchscreen HMI platform with manual control, automatic load selection and programmable load sequences.



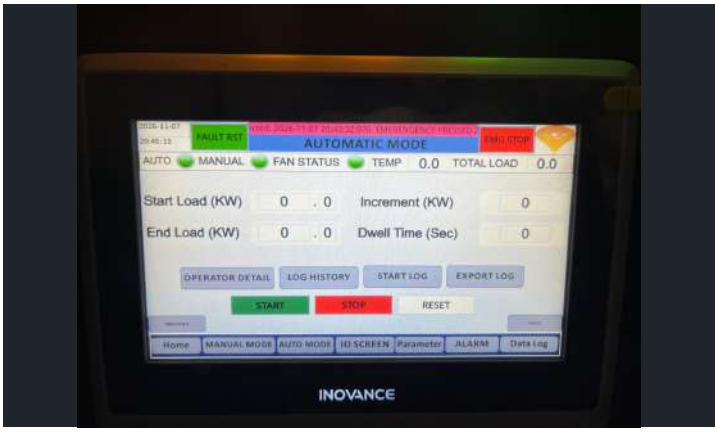
Manual mode

Select individual load steps and monitor the total selected load.



Automatic load selection

Enter the required load in kW and manage start, stop and reset commands.



Automatic mode

Set start and end load, increment and dwell time for a controlled loading profile.



Automatic load sequence

Program incremental load changes with holding time, pause and resume functions.

Operator workflow

Set the desired load, select the test mode, observe fan and temperature status, and manage the test from a single control interface.

Actual HMI photographs from the existing Volt Control System control platform. Screen values, step sizes and software parameters are examples; the VBNK1.2MR program will be configured for the offered rating and step schedule.

05 / TEST AUTOMATION & SUPPORT

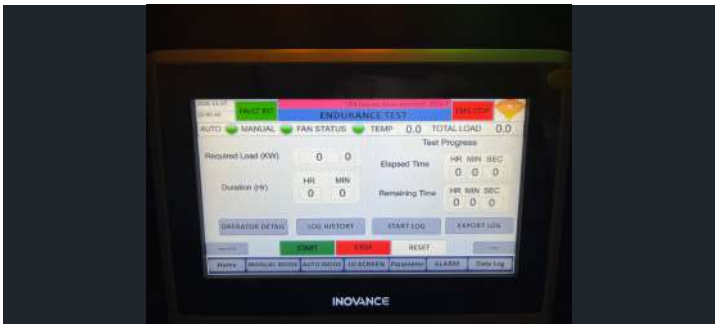
Configurable test routines

A flexible operator platform for repeated generator loading, timed tests and endurance testing.



Load cycle test

Configure on/off times and number of cycles; monitor cycle status.



Endurance test

Set required load and duration; view elapsed and remaining time.



Percentage sequence

Select percentage-based loading and timed test stages.



Timed percentage load

Configure a percentage load and test duration.

Test records and operational visibility

Operator details, log history, USB log export, alarms and fault reset are shown on the existing interface. Proposed protective functions include overtemperature, fan/airflow interlock, overcurrent and voltage supervision; final protection settings follow the engineering design.

MANUFACTURER & ENGINEERING

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Actual HMI reference screens. Technical specifications and general arrangement are subject to final engineering approval. Due to continuous improvement, dimensions and general arrangement may be revised.