

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Amikon cover with selected official Vibro-Meter pages

VM600 ABE040

VM600 ABE040 204-040-100-011

MACHINERY MONITORING SYSTEM RACK

OFFICIAL SOURCES

Parker Meggitt ABE040/ABE042 rack architecture reference DS 268-001, selected original pages; legacy power constraints remain applicable. Selected pages retain their original content, color and aspect ratio.

vibro-meter®

VM600^{Mk2}/VM600 ABE040 and ABE042 system racks



**VM600^{Mk2} ABE040 system rack
(empty)**

KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- 19" system racks with a standard height of 6U
- Robust aluminium construction
- Modular concept allows specific cards to be added for machinery protection and/or condition monitoring
- Cabinet or panel mounting
- Backplane supporting the VME bus, the VM600^{Mk2}/VM600 system's Tacho, Raw and Open collector (OC) buses, and power supply distribution
- Uses the VM600^{Mk2}/VM600 RPS6U rack power supply: AC and/or DC input versions
- Power supply check relay

APPLICATIONS

- VM600^{Mk2}/VM600 machinery protection and/or condition monitoring systems



DESCRIPTION

The VM600^{Mk2}/VM600 ABE040 and ABE042 system racks are used to house hardware for the VM600^{Mk2}/VM600 series of machinery protection and/or condition monitoring systems, from Parker Meggitt's vibro-meter® product line.

Two types of VM600^{Mk2}/VM600 ABE04x system rack are available: the ABE040 and the ABE042. These are very similar, differing only in the position of the mounting brackets. Both racks have a standard height of 6U and provide mounting space (rack slots) for up to 15 single-width VM600^{Mk2}/VM600 modules (card pairs), or a combination of single-width and multiple-width modules (cards). These racks are particularly suitable for industrial environments, where equipment must be permanently installed in 19" cabinets or panels.

The different versions of ABE04x system rack enable different mounting options to support various markets and applications.



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SPECIFICATIONS *(continued)*

Rack slots
(module (card) positions)

- : Front of rack:
 - 12 × slots – module (card) positions 03 to 14 – for processing modules (cards) such as MPC4^{Mk2}, XMx16, MPC4 and/or AMC8.
 - 2 × slots – module (card) positions 00 to 01 – for rack controller and communications interface modules (cards) such as CPUM^{Mk2} or CPUx.
 - 1 × slot – module (card) position 02 – reserved for application-specific modules (cards).

Rear of rack:

- Up to 19 × slots – module (card) positions 00 to 18 – for associated input/output modules (cards) such as IOC4^{Mk2}, XIO16T, IOC4T and/or IOC8T, IOCN^{Mk2} or IOCx, and relay modules (cards) such as RLC16^{Mk2}, RLC16 and/or IRC4.
- Up to 4 × slots – module (card) positions 17 to 20 – for associated rear panels for inputs to the VM600^{Mk2}/VM600 RPS6U rack power supply or supplies.

See also Mechanical drawings – front and rear views on page 6.

Note: In general, associated input/output modules (cards) are required while relay modules (cards) are optional.

For safety reasons, any VM600^{Mk2}/VM600 rack slot not populated by a module (card) must be covered by a blank panel(s).

Rack slot number coding

- : For modules (cards) installed in the rear of an ABE04x rack, an electronic keying mechanism known as slot number coding is used to help ensure that the module (card) is installed in the correct slot, as defined by the configuration (that is, by the VibroSight[®] or VM600 MPSx software).

For ABE04x racks, the rack's slot numbers are fixed (hard-wired) and slot number coding requires that a module's slot number is set to match the rack slot (module (card) position) where it is installed.

Slot number coding range

- : 3 to 14

Slot number coding defaults

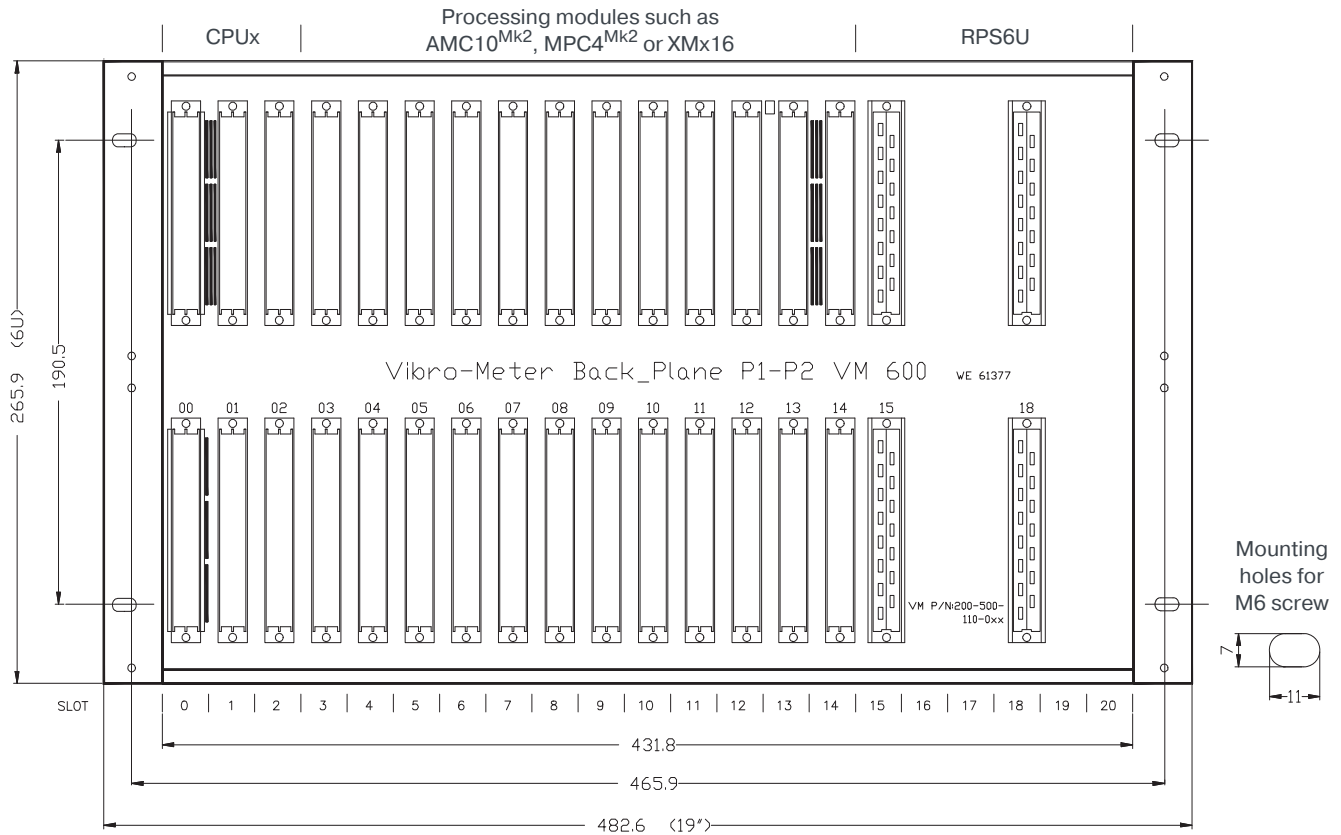
- : Fixed (hard-wired) as follows:
 - Slot 03 = 3 (0011 binary)
 - Slot 04 = 4 (0100 binary)
 - ...
 - Slot 13 = 13 (1101 binary)
 - Slot 14 = 14 (1110 binary).

Galvanic separation

- : Galvanic separation units (GSIxxx) are available for accelerometer and proximity systems mounted in explosive atmospheres. These units cannot be supplied by the rack and require an external power supply. They must be mounted outside the rack in a remote housing or in a cabinet.

MECHANICAL DRAWINGS – FRONT AND REAR VIEWS

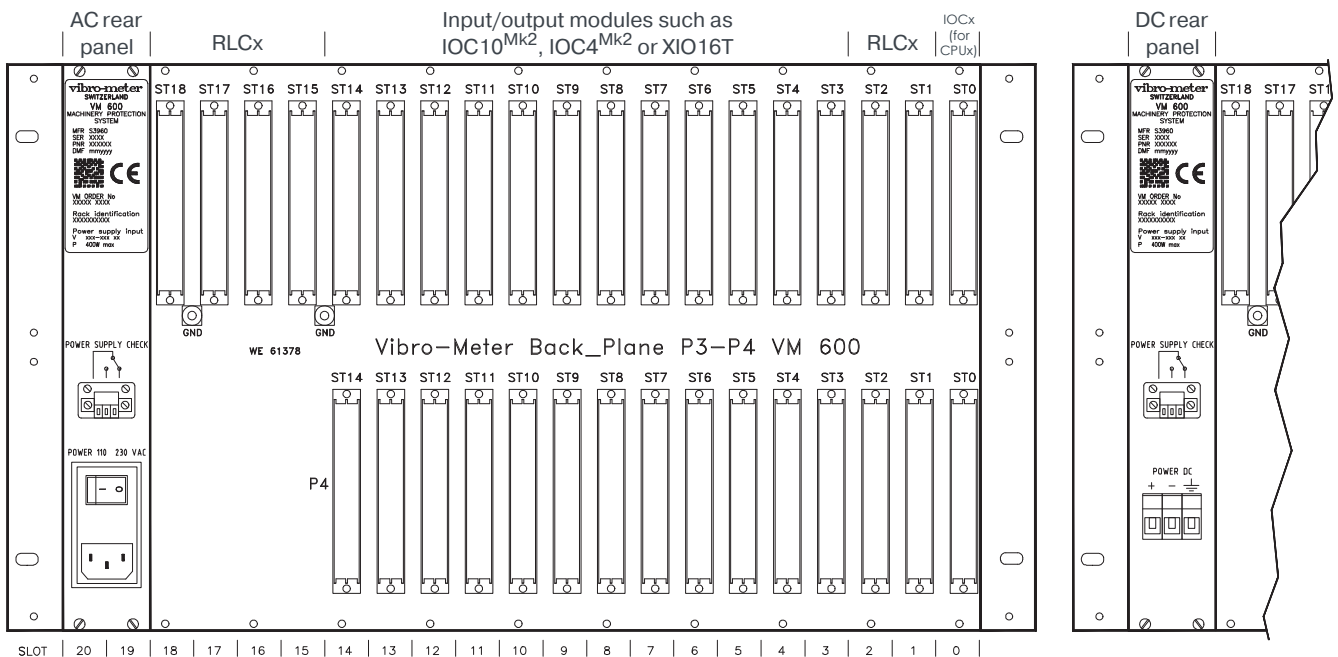
Front view of ABE040 and ABE042



(With AC-input RPS6U rack power supply)

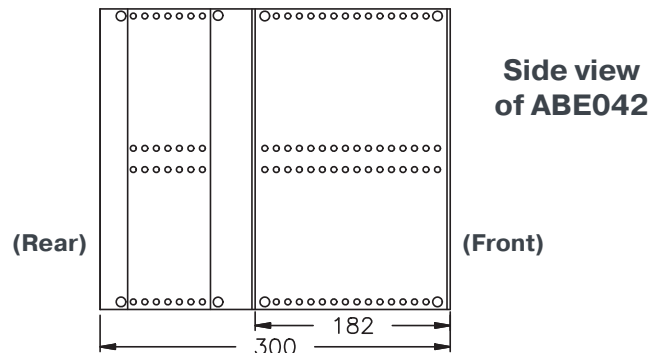
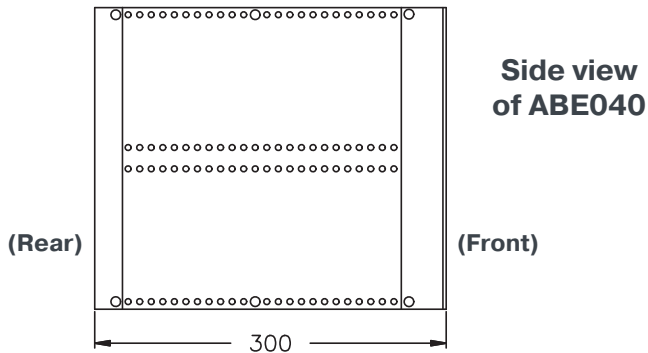
Rear view of ABE040 and ABE042

(With DC-input RPS6U rack power supply)

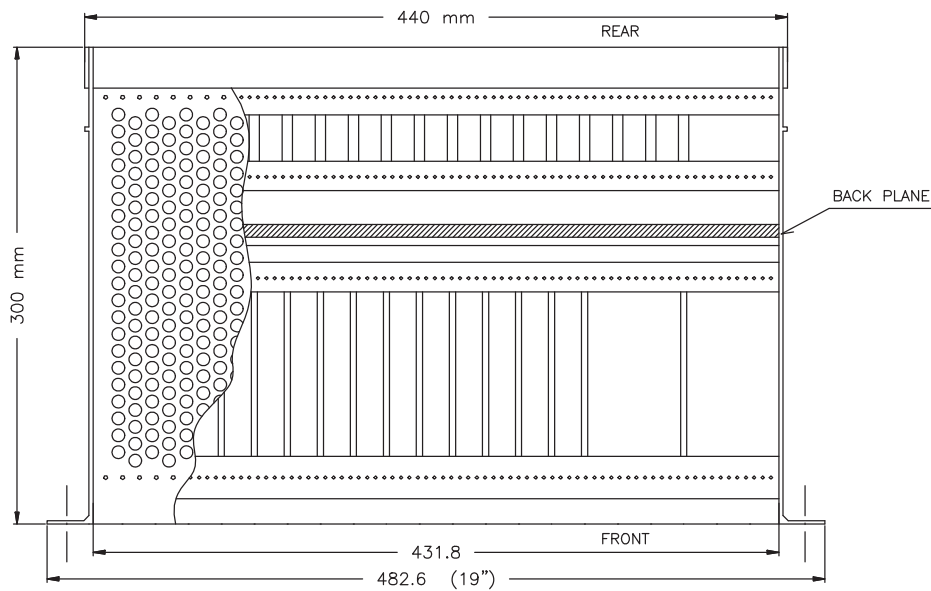


Note: All dimensions in mm (in) unless otherwise stated.

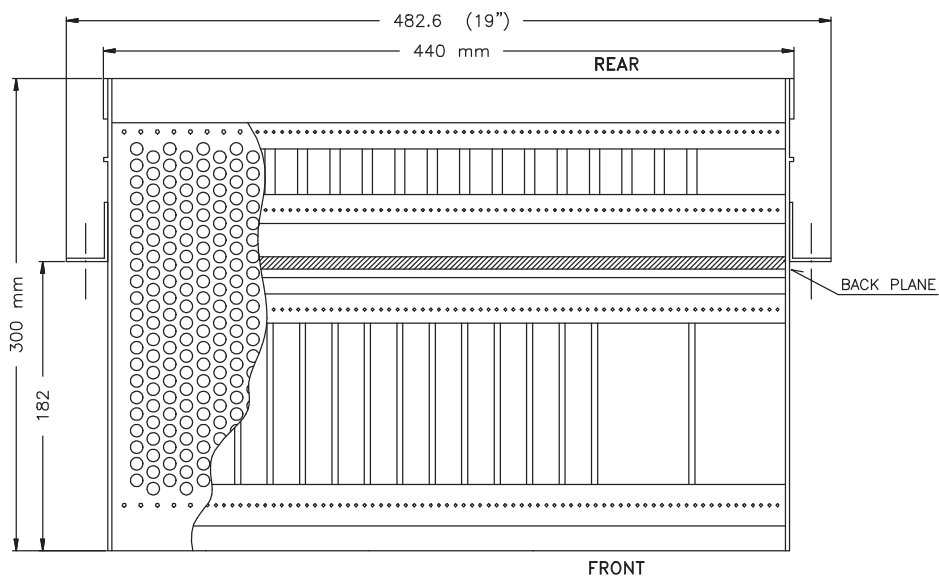
MECHANICAL DRAWINGS – SIDE AND TOP VIEWS



Top view of ABE040



Top view of ABE042



Note: All dimensions in mm (in) unless otherwise stated.

ORDERING INFORMATION

To order, please specify the version(s) of the VM600^{Mk2}/VM600 ABE04x system rack required ...

Type	Designation	Part number (PNR)
ABE040	Different versions of the VM600 ^{Mk2} ABE040 system rack: – Standard version	204-040-100-016
ABE040	Different versions of the VM600 ^{Mk2} /VM600 ABE040 system rack: – Standard version	204-040-100-015
	– Varnished version, with a conformal coating for additional environmental protection	204-040-100-015L
	– Separate circuits version, in accordance with the IEC 60255-5 standard	204-040-100-115
ABE042	Different versions of the VM600 ^{Mk2} /VM600 ABE042 system rack: – Version with mounting brackets positioned at the rear of the rack	204-042-100-01h
	– Varnished version, with a conformal coating for additional environmental protection	204-042-100-01hL
	Different blank panel kits for the front of a VM600 ^{Mk2} ABE04x system rack: – 1 × slot wide / 4 HP (TE)	200-505-011-012
	– 3 × slots wide / 12 HP (TE)	200-505-018-012
	Different blank panel kits for the rear of a VM600 ^{Mk2} ABE04x system rack: – 1 × slot wide / 4 HP (TE)	200-505-011-012
	Different blank panel kits for the front of a VM600 ABE04x system rack: – 1 × slot wide / 4 HP (TE)	200-505-015-011
	– 2 × slots wide / 8 HP (TE)	200-505-016-011
	– 3 × slots wide / 12 HP (TE)	200-505-018-011
	– 4 × slots wide / 16 HP (TE)	200-505-017-011
	Different blank panel kits for the rear of a VM600 ABE04x system rack: – 1 × slot wide / 4 HP (TE)	200-505-011-011
	– 2 × slots wide / 8 HP (TE)	200-505-012-011
	– 4 × slots wide / 16 HP (TE)	200-505-013-011

Notes

For North American (USA and Canada) and some other international markets, a “CSA” version of the VM600^{Mk2}/VM600 ABE04x system rack is required. Such a “CSA” VM600^{Mk2}/VM600 system rack is obtained by using only the following associated rear panels for connection of power supply inputs to the rack: PSB910, PSB920, PSB962, or PSB990.

Refer to the VM600^{Mk2}/VM600 RPS6U rack power supplies data sheet for further information on power supply inputs, associated rear panels (PSB9xx), mains power supply leads (power cords), etc.

In an ordering number (PNR), “h” represents the hardware version.

The standard version of the VM600^{Mk2} ABE040 system rack (PNR 204-040-100-016) and the standard version of the VM600^{Mk2}/VM600 ABE040 system rack (PNR 204-040-100-015 or earlier) are the same, except for the specific artwork/branding/finish. More specifically, the mounting brackets on the side of the ABE040 system rack are bare aluminium for the VM600^{Mk2} versions and painted for the VM600^{Mk2}/VM600 versions. See also Ordering guidelines on page 9.

For safety reasons, any VM600^{Mk2}/VM600 ABE04x system rack slot not populated by a module (card) must be covered by a blank panel(s). (The width of a 19” rack is typically measured in horizontal pitch (HP) units of 5.08 mm (0.2”), also known as standard width (TE) units. For the VM600^{Mk2}/VM600 ABE04x System racks, a 1 × slot wide blank panel suitable for covering one module (card) position corresponds to 4 HP (TE), a 2 × slots wide blank panel corresponds to 8 HP (TE), a 3 × slots wide blank panel corresponds to 12 HP (TE) and so on.)

When only one VM600^{Mk2}/VM600 RPS6U power supply is installed in a VM600^{Mk2}/VM600 ABE04x system rack (PS1 in rack slots 18 to 20), the unused power supply position (PS2 in rack slots 15 to 17) should be populated with a blank panel(s).