

## **MEGGITT** smart engineering for extreme environments

# RPS6U

## VM600 rack power supply

#### FEATURES

- >> From the Vibro-Meter<sup>®</sup> product line
- Power supply for VM600 system racks
- Input: AC-input and DC-input versions providing a wide input voltage range
- Output: +5 V<sub>DC</sub> and ±12 V<sub>DC</sub>
- Output over-voltage, short-circuit and overload protection
- Status indicators
- >> High-power, high-performance, high-efficiency
- Minimal derating within the operating temperature range

#### **APPLICATIONS**

Up to two RPS6U rack power supplies can be installed in a VM600 system rack for either redundant or non-redundant operation

#### DESCRIPTION

The RPS6U rack power supplies are designed for use in the VM600 series of machinery protection systems and condition and performance monitoring systems, from Meggitt Sensing Systems' Vibro-Meter product line.

The RPS6U is installed in the front of a VM600 system rack (ABE04x), which has a standard height of 6U, and connects via two high-current connectors to the VME bus of the rack's backplane. The rack power supply provides +5  $V_{DC}$  and ±12  $V_{DC}$  to all VM600 cards in the rack via the backplane.



A VM600 rack with one RPS6U power supply installed operates non-redundantly (without rack power supply redundancy) and can support a full rack of cards, such as 12 x MPC4 / IOC4T card pairs or 12 x XMx16 / XIO16T card pairs.



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#### **DESCRIPTION** (continued)

A VM600 rack with two RPS6U power supplies installed can operate redundantly (with rack power supply redundancy) for a full rack of cards. This means that if one RPS6U fails, the other will provide 100% of the power requirement and the rack will continue to operate, thereby increasing the availability of the machinery monitoring system.

Alternatively, a VM600 rack with two RPS6U power supplies installed can operate non-redundantly (without rack power supply redundancy). Typically, this is only necessary for a full rack of cards in applications where the operating environment requires RPS6U output power derating.

The number and type of RPS6U power supplies installed in a VM600 rack, together with the number of cards installed and the environmental conditions, helps determine the mode of operation of the RPS6U power supplies as either redundant or non-redundant. See also **Ordering information on page 14**. Various versions of the RPS6U rack power supply exist, allowing a rack to be powered from external AC or DC mains supplies with a range of supply voltages.

A power supply check relay, available at the rear of a VM600 rack, indicates that the power supplies are operating normally. Refer to the *ABE040 and ABE042 VM600 system rack* data sheet for additional information on power supply check relays.

In applications where the VM600 rack is powered by an AC mains supply, a VM600 auxiliary sensor power supply (ASPS) can also be included in the rack. The ASPS provides +24  $V_{DC}$  outputs which can be used by external hardware such as front-end transducers, signal conditioners and galvanic separation units.

For specific applications, contact your nearest Meggitt Sensing Systems representative.

#### SPECIFICATIONS

#### Electrical

(At 25°C (77°F) with nominal line input voltage and maximum combination power load, unless otherwise stated)

	AC-input version	DC-input	versions
Parameter	RPS6U AC	RPS6U 24 DC	RPS6U 110 DC
Nominal input (line) voltage	115/230 V <sub>AC</sub> or 220 V <sub>DC</sub>	24 V <sub>DC</sub>	110 V <sub>DC</sub>
Input voltage range	90 to 132 V <sub>AC</sub> and 180 to 264 V <sub>AC</sub> (autoranging) <i>or</i> 178 to 264 V <sub>DC</sub>	18 to 32 V <sub>DC</sub>	80 to 145 V <sub>DC</sub>
Input frequency	47 to 63 Hz	Not applicable	
Input current	$\begin{array}{c} \text{6.4 A}_{\text{RMS}} \text{ max. at 115 V}_{\text{AC}}.\\ \text{4 A}_{\text{RMS}} \text{ max. at 230 V}_{\text{AC}}. \end{array}$	30 A max.	6 A max.
Efficiency	84% typ.	83% typ.	85% typ.
Inrush current	<10 times the nominal input current	<10 times the nominal input current	<10 times the nominal input current
Nominal output (supply) voltages	+5 $V_{DC}$ up to 50 A, +12 $V_{DC}$ up to 8 A, -12 $V_{DC}$ up to -4 A	+5 V <sub>DC</sub> up to 50 A, +12 V <sub>DC</sub> up to 8 A, −12 V <sub>DC</sub> up to −4 A	+5 V <sub>DC</sub> up to 50 A, +12 V <sub>DC</sub> up to 8 A, −12 V <sub>DC</sub> up to −4 A
Output power See note 1	330 W max.	330 W max.	330 W max.

#### **SPECIFICATIONS** (continued)

	AC-input version	DC-input versions		
Parameter	RPS6U AC	RPS6U 24 DC	RPS6U 110 DC	
Factory adjustment	+5.41 V <sub>DC</sub> ±0.02 V, ±12.5 V <sub>DC</sub> ±0.05 V (at 60% max. output power)	+5.41 V <sub>DC</sub> ±0.02 V, ±12.5 V <sub>DC</sub> ±0.05 V (at 60% max. output power)	+5.41 V <sub>DC</sub> ±0.02 V, ±12.5 V <sub>DC</sub> ±0.05 V (at 60% max. output power)	
Load range	+5.35 $V_{DC}$ nom. (5.35 to 5.45 V accuracy with a load of 3 to 50 A). +12.5 $V_{DC}$ nom. (12.2 to 12.8 V accuracy with a load of 0 to 8 A). -12.5 $V_{DC}$ nom. (-12.2 to -12.8 V accuracy with a load of 0 to 4 A).	+5.35 $V_{DC}$ nom. (5.35 to 5.45 V accuracy with a load of 3 to 50 A). +12.5 $V_{DC}$ nom. (12.2 to 12.8 V accuracy with a load of 0 to 8 A). -12.5 $V_{DC}$ nom. (-12.2 to -12.8 V accuracy with a load of 0 to 4 A).	$\begin{array}{c} +5.35 \ \text{V}_{\text{DC}} \ \text{nom.} \\ (5.35 \ \text{to} \ 5.45 \ \text{V} \ \text{accuracy} \\ \text{with a load of 3 to 50 A}). \\ +12.5 \ \text{V}_{\text{DC}} \ \text{nom.} \\ (12.2 \ \text{to} \ 12.8 \ \text{V} \ \text{accuracy} \\ \text{with a load of 0 to 8 A}). \\ -12.5 \ \text{V}_{\text{DC}} \ \text{nom.} \\ (-12.2 \ \text{to} \ -12.8 \ \text{V} \ \text{accuracy} \\ \text{with a load of 0 to 4 A}). \end{array}$	
Ripple and noise (20 MHz bandwidth)	<50 mV <sub>PEAK-TO-PEAK</sub> for all outputs	<50 mV <sub>PEAK-TO-PEAK</sub> for all outputs	<50 mV <sub>PEAK-TO-PEAK</sub> for all outputs	
Line regulation (±10% change in nominal input)	<±1% for all outputs	<±1% for all outputs	<±1% for all outputs	
Load regulation (±40% change from 60% max. output power)	< $\pm$ 1% for +5 V <sub>DC</sub> output. < $\pm$ 2% for $\pm$ 12 V <sub>DC</sub> outputs.	< $\pm$ 1% for +5 V <sub>DC</sub> output. < $\pm$ 2% for $\pm$ 12 V <sub>DC</sub> outputs.	< $\pm$ 1% for +5 V <sub>DC</sub> output. < $\pm$ 2% for $\pm$ 12 V <sub>DC</sub> outputs.	
Output overvoltage protection	Yes, with automatic latch off	Yes, with automatic latch off	Yes, with automatic latch off	
Output short-circuit and overload protection	Yes, with automatic recovery	Yes, with automatic recovery	Yes, with automatic recovery	
Output power derating with convection cooling (natural ventilation)	2.5%/°C from 50 to 70°C for +5 V <sub>DC</sub> output. 4%/°C from 55 to 70°C for ±12 V <sub>DC</sub> outputs.	2%/°C from 50 to 70°C for +5 V <sub>DC</sub> output. 3%/°C from 60 to 70°C for ±12 V <sub>DC</sub> outputs.	2%/°C from 50 to 70°C for +5 V <sub>DC</sub> output. 3%/°C from 60 to 70°C for ±12 V <sub>DC</sub> outputs.	
Output power derating with forced-air cooling	No derating required	2.5%/°C from 60 to 70°C for +5 V <sub>DC</sub> output. No derating required for ±12 V <sub>DC</sub> outputs.	2.5%/°C from 60 to 70°C for +5 V <sub>DC</sub> output. No derating required for ±12 V <sub>DC</sub> outputs.	
Ordering number	200-582-500-02h	200-582-200-02h	200-582-600-02h	

Notes

In 2016, the RPS6U rack power supply was improved to provide a higher output power of 330 W with higher-performance and higherefficiency, which required a redesign of the underlying power supply circuitry.

The different versions of the RPS6U rack power supply in use are:

• Later versions of the RPS6U (PNR 200-582-x00-02h or later) that define the power as a total maximum output power of 330 W,

with nominal output (supply) voltages of +5  $V_{DC}$  up to 50 A, +12  $V_{DC}$  up to 8 A and –12  $V_{DC}$  up to 4 A.

Note: The total maximum output power of 330 W is a combination load for all outputs as the +5  $V_{DC}$  and ±12  $V_{DC}$  outputs are usually not simultaneously loaded to the maximum in practice.

For example, if the +5 V<sub>DC</sub> output is at its maximum rated load (5.35 V × 50 A = 267.5 W), then the combined loads on the +12 V<sub>DC</sub> and -12 V<sub>DC</sub> outputs must not exceed 62.5 W.

• Earlier versions of the RPS6U (PNR 200-582-x00-01h or earlier) that define the power as a rated power of 300 W, with nominal output (supply) voltages of +5  $V_{DC}$  up to 35 A, +12  $V_{DC}$  up to 6 A and -12  $V_{DC}$  up to 2 A.

#### **SPECIFICATIONS** (continued)

#### Environmental

Approvals

Temperature
Operating
Storage
Humidity
(according to IEC 60068-2-30)
Vibration
(according to IEC 60068-2-6)
Shock
(according to IEC 60068-2-27)
Drop test
(according to IEC 60068-2-31)
MTBF
(according to MIL-HDBK-217F)
Conformal coating

#### : 0 to 70°C (32 to 158°F)

- : -40 to 85°C (-40 to 185°F)
- : 5 to 95%, non-condensing
- : 10 to 55 Hz, 0.35 mm peak below resonance and 2 g peak above, 6 hours/axis
- : 6 g peak, 11 ms, half-sine pulse, 3 shocks/axis
- : 30° drop angle
- : >40000 hours at 70°C (158°F)
- : Applied to the circuitry of the power supply for additional environmental protection against chemicals, dust, moisture and temperature extremes

Conformity	<ul> <li>CE marking, European Union (EU) declaration of conformity.</li> <li>EAC marking, Eurasian Customs Union (EACU) certificate/declaration of conformity.</li> </ul>
Electromagnetic compatibility	<ul> <li>EN 55022 class "B".</li> <li>FCC Docket 20780 curve "B".</li> <li>IEC 61000-4-2: Performance criteria B, 4 kV contact discharge and 8 kV air discharge.</li> <li>IEC 61000-4-3: Performance criteria A, 10V/m.</li> <li>IEC 61000-4-4: Performance criteria A, 2 kV 5/50 ns, 5 kHz, direct</li> <li>IEC 61000-4-6: Performance criteria A, level 3</li> <li>IEC 61000-4-8: Performance criteria A, 50 Hz/30 A/m TR CU 020/2011.</li> </ul>
Electrical safety	: CSA/EN/UL 60950-1 second edition. TR CU 004/2011.
Environmental management Russian federal agency for technical	: RoHS and WEEE compliant : Pattern approval certificate CH.C.28.004.A N° 60224,
regulation and metrology (Rosstandart)	dated 11.11.2015

#### **SPECIFICATIONS** (continued)

Status indicators (LEDs)	
IN	: Green indicates that the external mains supply is present and is within the normal range.
	See Mechanical drawings (RPS6U panel) on page 6.
+5V	: Yellow indicates that the +5 V <sub>DC</sub> supply is being generated and is within the normal range
+12V	: Yellow indicates that the +12 $V_{DC}$ supply is being generated and is within the normal range
-12V	: Yellow indicates that the $-12 \; V_{DC}$ supply is being generated and is within the normal range
Connectors	
Rear	: Two high-current DIN 41612 type H15 connectors.
	Sharing of power supply voltages and signals via the VM600 rack backplane (ABE04x).
Physical	
Dimensions	: See Mechanical drawings (RPS6U panel) on page 6.
Weight (approx.)	: 2.4 kg (5.3 lb) approx

#### TOLERANCE TO INTERRUPTIONS IN THE MAINS SUPPLY

The table below shows the maximum permissible duration of an interruption (cut) to the external AC or DC mains supply used as the input voltage to an RPS6U rack power supply.

The maximum duration values depend on the maximum combination load for the RPS6U rack power supply, the number of RPS6U rack power supplies installed in the rack and the number of cards installed in the VM600 rack (the actual load). If an interruption lasts longer than the maximum permissible duration, then the VM600 cards installed in the rack may reset.

	Maximum duration of interruption to the supply input (ms)	
	At 10% of combination load	At 100% of combination load
One RPS6U AC rack power supply in the rack	190	10
Two RPS6U AC rack power supplies in the rack	250	20
One RPS6U 24 DC rack power supply in the rack	75	7
Two RPS6U 24 DC rack power supplies in the rack	150	14
One RPS6U 110 DC rack power supply in the rack	190	10
Two RPS6U 110 DC rack power supplies in the rack	250	20



#### **MECHANICAL DRAWINGS (RPS6U PANEL)**



Notes

Later versions of the RPS6U rack power supply (PNR 200-582-x00-02h or later) use the same front panel for both the AC-input and DC-input versions:

• For both versions, the LED (top) used to indicate the status of the external mains supply is labeled "IN".

Earlier versions of the RPS6U rack power supply (PNR 200-582-x00-01h or earlier) use different front panels for the AC-input and DC-input versions:

• For the AC-input version, the LED (top) used to indicate the status of the external mains supply is labeled "AC".

• For the DC-input version, the LED (top) used to indicate the status of the external mains supply is labeled "DC".

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## ASSOCIATED REAR PANELS

### (a) Standard DC version (ordering number: 200-582-920-NHh)



The wiring assembly for the rear panel includes the additional cabling (----) only when both RPS6U rack power supplies (PS1 and PS2) are AC-input versions operating with DC inputs (which requires a rear panel with a DC input).

### (b) DC version (ordering number: 200-582-993-NHh)



This version has two screw terminal strips for the DC power inputs, and individual inputs on each RPS6U. The wiring assembly for the rear panel includes the additional cabling (----) only when at least the first RPS6U rack power supply (PS1) is an AC-input version operating with a DC input (which requires a rear panel with a DC input).



#### (c) DC version with earth terminal (ordering number: 200-582-922-NHh)

This version has a screw terminal strip for the DC power input and a special earth terminal (identified as M.A.L.T.).

#### (d) Special DC version (ordering number: 200-582-990-NHh)



This version has two screw terminal strips for the DC power inputs, intended for the connection of two independent DC mains supplies. Both inputs (terminal strips) are wired to the same point on the VM600 rack backplane through protection diodes, which allows the rack to continue operating if one of the DC mains supplies becomes defective. The wiring assembly for the rear panel includes the additional cabling (----) only when both RPS6U rack power supplies (PS1 and PS2) are AC-input versions operating with DC inputs (which requires a rear panel with a DC input).



#### (e) Standard AC version (ordering number: 200-582-910-NHh)



#### (f) AC version (ordering number: 200-582-911-NHh)



This version has a screw terminal strip for the AC power input and a mains switch.

#### (g) AC version (ordering number: 200-582-912-NHh)



This version has a screw terminal strip for the AC power input, but no mains switch.

#### (h) AC version (ordering number: 200-582-962-NHh)



This version has two AC sockets, intended for the connection of two independent AC mains supplies operating at 120  $V_{AC}$ . Both sockets are independently wired to a switching circuit on the VM600 rack backplane. The rack is normally powered by the PS1 AC mains supply. If this supply becomes defective, the switching circuit allows operation to continue automatically with the PS2 AC mains supply.



#### (i) AC version (ordering number: 200-582-963-NHh)



This version has two AC mains connectors and individual outputs to each RPS6U.

#### (j) AC version (ordering number: 200-582-960-NHh)



This version has two AC sockets, intended for the connection of two independent AC mains supplies operating at 230  $V_{AC}$ . Both sockets are independently wired to a switching circuit on the VM600 rack backplane. The rack is normally powered by the PS1 AC mains supply. If this supply becomes defective, the switching circuit allows operation to continue automatically with the PS2 AC mains supply.





This version has two screw terminal strips for the AC power input and individual outputs to mains switches.

#### (I) Special AC version (ordering number: 200-582-916-NHh)



This version has two screw terminal strips for the AC power input and individual outputs, but no mains switches.







This version has an AC socket and a DC screw terminal strip, intended for the connection of two independent mains supplies. These are wired separately to the VM600 rack backplane's AC and DC inputs, respectively. This allows the rack to continue operating if one of the mains supplies becomes defective.

The wiring assembly for the rear panel includes the additional cabling (----) only when both RPS6U rack power supplies (PS1 and PS2) are AC-input versions operating with DC inputs (which requires a rear panel with a DC input).

#### **ORDERING INFORMATION**

#### **RPS6U rack power supply**

To order please specify a type (RPS6U rack power supply), designation and ordering number from the table below.

	AC-input version	DC-input	versions
Designation	RPS6U AC	RPS6U 24 DC	RPS6U 110 DC
Ordering number See note 1	200-582-500-02h	200-582-200-02h	200-582-600-02h
Nominal input (line) voltage See note 2	115/230 V <sub>AC</sub> or 220 V <sub>DC</sub>	24 V <sub>DC</sub>	110 V <sub>DC</sub>

Notes

- 1. "h" represents the hardware version.
  - "h" increments are for minor modifications that have no effect on product interchangeability.
- The AC-input version of the RPS6U rack power supply can also operate with a 178 to 264 V<sub>DC</sub> input when used with of the following rear panels with a DC input: 200-582-920-NHh, 200-582-993-NHh, 200-582-990-NHh or 200-582-970-NHh.

#### VM600 system considerations - rack power supplies and cards

The maximum number of cards that can be installed in a VM600 system rack (ABE04x) depends on RPS6U power supply considerations: • The number of RPS6U power supplies installed in the rack: one or two.

- The power capability of the RPS6U power supplies installed in the rack: 330 or 300 W.
- When two RPS6U power supplies are installed in the rack, the mode of operation of the RPS6U supplies: redundant or non-redundant.
- The operating temperature of the environment where the VM600 rack is installed: RPS6U power supplies require either output power derating and/or forced-air cooling for operating temperatures of 50 °C (122 °F) or higher.

The maximum number of cards that can be installed in a VM600 system rack (ABE04x) also depends on individual VM600 card considerations, for example, the configuration of sensor power supplies and DC outputs for MPC4/IOC4T card pairs.

In general:

- A VM600 system rack with one RPS6U power supply (330 W) operates non-redundantly (that is, without rack power supply redundancy) and supports a full rack of cards, for example, up to 12 x MPC4/IOC4T or 12 x XMx16/XIO16T card pairs or any other combination of cards, for operating temperatures up to 50 °C (122°F).
- A VM600 system rack with two RPS6U power supplies (330 W) operating redundantly (that is, with rack power supply redundancy) supports a full rack of cards, for example, up to 12 x MPC4/IOC4T or 12 x XMx16/XIO16T card pairs or any other combination of cards, for operating temperatures up to 50 °C (122 °F).

When two RPS6U rack power supplies operate redundantly to supply power to the cards in a VM600 rack, the maximum current available for use by the cards is limited to the current available from a single RPS6U power supply.

- A VM600 system rack with two RPS6U power supplies (330 W) operating non-redundantly (that is, without rack power supply redundancy) supports any combination of cards under all circumstances, including operating temperatures up to 70°C (158°F).
- When two RPS6U rack power supplies operate non-redundantly to supply power to the cards in a VM600 rack, the maximum current available for use by the cards is limited to approximately 125% (x 1.25) the current available from a single RPS6U power supply because of the way in which the power supplies share the load. The current load is shared between the two RPS6U power supplies with a maximum ratio of 20 to 80%.

Note: A VM600 rack configuration with two RPS6U power supplies (330 W) operating non-redundantly to supply power to the cards is typically only necessary for a full rack of cards in an application where the operating environment requires RPS6U output power derating.

For a VM600 rack configuration that contains more than ten processing cards (MPC4 / IOC4T, AMC8 / IOC8T and/or XMx16 / XIO16T) together with a CPUM/IOCN "rack controller" and/or RLC16 relay cards, the power consumption of the rack should be calculated in order to determine the number of RPS6U power supplies required and the permitted modes of operation. Contact Meggitt Sensing Systems for further information.

#### **ORDERING INFORMATION** (continued)

#### Associated rear panels

To order please specify a type (Rear panel), designation and ordering number from the table below. (See also the drawings (a) to (k) in Associated rear panels on page 7 **on pages 4 to 9**.)

Drawing	Designation	Ordering number	Equivalent VM600SYS order option code
(a)	One DC input with screw-terminal connector that provides a common input to the RPS6U rack power supplies.	200-582-920-NHh	F200
(b)	Two DC inputs with screw-terminal connectors that provide individual inputs to the RPS6U rack power supplies.	200-582-993-NHh	F930
(c)	One DC input with screw-terminal connector that provides a common input to the RPS6U rack power supplies. Also provides a special earth terminal (identified as M.A.L.T.).	200-582-922-NHh	F220
(d)	Two DC inputs with screw-terminal connectors that provide a common input to the RPS6U rack power supplies. Supports redundant external power-supply systems.	200-582-990-NHh	F900
(e)	One AC input (120/230 $V_{AC}$ ) with mains socket and on/off switch that provides a common input to the RPS6U rack power supplies.	200-582-910-NHh	F100
(f)	One AC input (120/230 $V_{AC}$ ) with screw-terminal connector, on/off switch and rear-panel fuses that provides a common input to the RPS6U rack power supplies.	200-582-911-NHh	F110
(g)	One AC input $(120/230 V_{AC})$ with screw-terminal connector and rear- panel fuses that provides a common input to the RPS6U rack power supplies.	200-582-912-NHh	F120
(h)	Two AC inputs (120 $V_{AC}$ only) with mains sockets and on/off switches that provide a common input to the RPS6U rack power supplies. Supports redundant external power-supply systems.	200-582-962-NHh	F620
(i)	Two AC inputs (120/230 $V_{AC}$ ) with mains sockets and on/off switches that provide individual inputs to the RPS6U rack power supplies.	200-582-963-NHh	F630
(j)	Two AC inputs (230 $V_{AC}$ only) with mains sockets and on/off switches that provide a common input to the RPS6U rack power supplies. Supports redundant external power-supply systems.	200-582-960-NHh	F600
(k)	Two AC inputs (120/230 $V_{AC}$ ) with screw-terminal connectors, on/off switches and rear-panel fuses that provide individual inputs to the RPS6U rack power supplies.	200-582-915-NHh	F150
(I)	Two AC inputs (120/230 $V_{AC}$ ) with screw-terminal connectors and rear- panel fuses that provide individual inputs to the RPS6U rack power supplies.	200-582-916-NHh	F160
(m)	One AC input (120/230 $V_{AC}$ ) with mains socket and on/off switch and one DC input with screw-terminal connector that provide individual inputs to the RPS6U rack power supplies.	200-582-970-NHh	F700

Notes

All rear panels – (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l) and (m) – are available as a "standard" version suitable for European and interactional markets.

and international markets.

All AC-input rear panels – (e), (f), (g), (h), (i), (j), (k), (l) and (m) – are available as an "ASPS" version suitable for use with the VM600 auxiliary sensor power supply (ASPS).

Some AC-input and DC-input rear panels – (a), (d), (e) and (h) – are available as a "CSA" version suitable for North American and international markets.

(Continued on the next page)

#### **ORDERING INFORMATION** (continued)

(Continued from the previous page)

The rear panels -(d), (h) and (j) - with two input connectors that provide a common input to the RPS6U rack power supplies installed in the VM600 rack support external mains power-supply system redundancy.

All AC-input rear panels – (e), (f), (g), (h), (i), (j), (k), (l) and (m) – are supplied with a mains power supply lead (no lead is supplied for the DC-input versions). See **Mains power supply leads (power cords) on page 16**.

AC-input rear panels with mains sockets have an IEC type C14 connector (IEC 60320) that mates with the plug (type C13) used by the supplied mains power supply leads.

Some rear panels - (a), (b), (c), (d), (e), (f), (g) and (m) - are 2 slots wide / 8 HP (TE).

Other rear panels – (h), (i), (j), (k) and (l) – are 4 slots wide / 16 HP (TE).

(The width of a 19" rack is measured in horizontal pitch (HP) units of 5.08 mm (0.2"), also known as standard width (TE) units. For the ABE04x rack, a one slot wide (one card position) blank panel corresponds to 4 HP (TE), a two slot wide blank panel corresponds to 8 HP (TE) and a four slot wide blank panel corresponds to 16 HP (TE).)

For the Ordering number, "NHh" represents the hardware version as follows:

"N" is either "0" for the "standard" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for the "CSA" version of a rear panel (certified and marked "CE") or "2" for "

"H" increments are for major modifications that can affect product interchangeability.

"h" increments are for minor modifications that have no effect on interchangeability.

For additional information on the Equivalent VM600SYS order option codes (Fxxx), refer to the ABE040 and ABE042 VM600 system rack data sheet.

#### Mains power supply leads (power cords)

To order please specify a type (Mains power supply lead), designation and ordering number from the table below.

Designation	Ordering number	Equivalent VM600SYS order option code
None – no mains cable.		H00
No plug – flying lead with wire-end ferrules.	957.18.13.0020	H01
J plug as per SEV 1011 (Switzerland).	957.18.13.0021	НСН
E+F plug as per CEE7/VII (Europe, Russia, Ukraine).	957.18.13.0022	HEU
G plug as per BS 1363 (UK, Hong Kong, Malaysia, Singapore).	957.18.13.0023	HUK
B plug as per JIS 8303 (Japan).	957.18.13.0024	HJP
B plug as per NEMA 5-15 (United States, Canada).	957.18.13.0025	HUS

Notes

The mains cables (power cords) are for the AC-input version of the RPS6U rack power supply. No cables are available for the DC-input versions. Rear panels with two AC inputs for independent mains supplies (ordering numbers: 200-582-96x-NHh) require two mains cables. For additional information on the Equivalent VM600SYS order option codes (Hxx), refer to the *ABE040 and ABE042 VM600 system rack* data sheet.

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#### **RELATED PRODUCTS**

ABE040 and ABE042	VM600 system rack	: Refer to corresponding data sheet
ABE056	VM600 slimline rack	: Refer to corresponding data sheet
ASPS	VM600 auxiliary sensor power supply	: Refer to corresponding data sheet

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