



America

# CERTIFICATE

No. U8V 18 03 40762 069

**Holder of Certificate:** Northwest Power, Inc.  
4211 SE International Way, Suite F  
Milwaukie OR 97222  
USA

**Production Facility(ies):** 67768, 40762

**Certification Mark:**



**Product:** Switching power supply unit  
DC-DC Switching Power Supply

**Model(s):** MD-aa-X-bbcccccccc-d-e  
(DC MegaPAC series)  
(see certificate attachment for model matrix,  
license conditions and rating information)

**Parameters:**

Rated Input Voltage:	48 V DC
Rated Output Voltage:	2-95 V DC
Rated Input Current:	100 A max
Rated Output Power:	1600 W

**Tested according to:** CAN/CSA C22.2 No.60950-1:2007/A2:2014  
UL 60950-1:2007/R:2014-10  
EN 60950-1:2006/A2:2013

The product was voluntarily tested according to the relevant safety requirements noted above. It can be marked with the certification mark above. The mark must not be altered in any way. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. Certification is based on the TÜV SÜD "Testing and Certification Regulations". TÜV SÜD America Inc. is an OSHA recognized NRTL and a Standards Council of Canada accredited certification body.

**Test report no.:** 72133287-000

**Date,** 2018-03-19

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## Attachment to Certificate U8V 18 03 40762 069

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**DC MegaPAC series**

Model matrix: MD - aa - X - bbccccccc- d - e

**MD = Constant, DC MegaPAC series**

**aa = Number of outputs**

1 up to 16

**X = Input Voltage Vdc nominal (range)**

0 = 12 (10-20)                      2 = 28 (18-50)

1 = 24 (21-32)                      3 = 48 (42-60)

W = 24 (18-36)                      N = 48 (36-76)

**bb = Number of modules**

1 up to 16

**ccccccc = ConverterPACs Configuration (slots 1-8)**

M = ModuPAC (1, VI-200 module)

D = DualPAC (2, VI-J00 modules)

J = JuniorPAC (1, VI-J00 module)

R = RamPAC (1, VI-J00 module+RAM filter)

A = Airblock (No modules)

**d = Product Grade**

E = Economy 0C to 85C                      I = Industrial -40C to 85C

C = Commercial -20C to 85C                      M = Military -55C to 85C

**e = Output Voltage (Vdc) Nominal (up to 16 individual outputs)**

Z = 2.0                      V = 5.8                      P = 13.8                      J = 36.0

Y = 3.3                      T = 6.5                      2 = 15.0                      K = 40.0

0 = 5.0                      R = 7.5                      N = 18.5                      4 = 48.0

X = 5.2                      M = 10.0                      3 = 24.0

W = 5.5                      1 = 12.0                      L = 28.0

Sample model No.: MD-3-W-05MMMMMAAA-C-011

MD = DC MegaPAC series

03 = Three outputs

W = Input voltage 24Vdc (18-36)

05 = 5 modules

M = ModuPAC

A = Airblock

C = Commercial grade

011 = 3 outputs, Output-1: 5V, Output-2: 12V, Output-3: 12V

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**License Conditions:**

1. The equipment is intended for building-in and must be properly installed and earthed in the end application.
2. A fire enclosure and protection against electric shock and hazardous energy levels must be provided in the end product.
3. The input and output connections have not been evaluated for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use equipment.
4. The product requires a European approved 2-pole disconnect device in the input wiring.
5. Any required overcurrent protection is to be determined in the end application.
6. Outputs less than 60 Vdc meet SELV requirements.
7. This product has only been evaluated for use in a pollution degree 2 environment.
8. A heating test should be conducted in the end application. The maximum ambient temperature and the temperatures of the front end components should be considered. The baseplate temperatures of the ModuPACs are not to exceed 85°C under normal operating conditions.

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