

PM1350 Power Module

MOOV^{base}

High efficiency modular charging for industrial applications

Designed for installation in charging cabinets where each module delivers up to 1350 W.

The module is controlled by a system controller via CAN bus and is capable of charging a wide range of battery types.





Features

Safe and Robust

- Advanced safety design and error detections safeguard the user, battery and charger
- Galavanized steel enclosure and user-serviceable fan for use in tough industrial environments

Scalable Modular Design

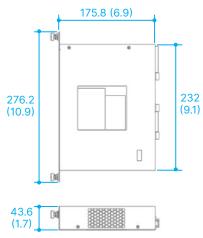
- Connect in parallel to achieve desired charge current level
- Redundant operation
- Individual modules can be turned off allowing greater system efficiency

Simple Integration

- CAN bus allows easy control via a system controller
- System error and warning information communicated
- Backplane connection enables fast installation

Global Compatibility

- Wide ranging AC input allows worldwide grid connection
- Safety and EMC approvals for North America, Europe and Australia
- Efficiency exceeds CEC requirements



Dimensions in mm (inches)

© Copyright – Delta Energy Systems (Germany) GmbH – All rights reserved. All information and specifications can be modified without prior notice.

Specifications

AC Input AC Input Rated Voltage 100 to 240 V _{AC} 1PH AC Input Voltage Range 85 to 265 V _{AC} AC Input Voltage Range 85 to 265 V _{AC} AC Input Frequency 50 / 60 Hz (47 to 63 Hz) Maximum AC Input Current 13.5 A Power Factor 0.98 to 0.999 Efficiency ≥ 91% DC Output 24 V model 36 V / 48 V model DC Output Voltage Range 9 to 35 V ₀ C 12 to 70 V _{BC} DC Output Voltage Accuracy ± 0.5% Maximum Charge Current for AC Input Voltage < 160 V _{AC} / ≥ 180 V _{AC} 40 A / 45 A 26 A / 26 A Load Current Accuracy ± 2% Maximum Output Power for AC Input Voltage < 160 V _{AC} / ≥ 180 V _{AC} 1200 W / 1350 W Environmental Conditions 1200 W / 1350 W Storage Temperature -10 °C to +70 °C (+14 °E to 158 °F) ¹⁰ Storage Temperature -10 °C to +85 °C (-40 °E to +185 °F) Maximum Operating Altitude 2,000 m (6,651 ft) Mechanical Design Dienensions (L x W x H) 232 x 175.8	Part Number	PM1350		
AC Input Rated Voltage 100 to 240 V _{AC} 1PH AC Input Voltage Range 85 to 265 V _{AC} AC Input Frequency 50 / 60 Hz (47 to 63 Hz) Maximum AC Input Current 13.5 A Power Factor 0.98 to 0.999 Efficiency ≥ 91% DC Output 24 V model 36 V / 48 V model DC Output Voltage Range 9 to 35 V _{DC} 12 to 70 V _{DC} DC Output Voltage Accuracy ± 0.5% 40 A / 45 A 26 A / 26 A Load Current Accuracy ± 2% 50 for 0 V _{AC} / ± 180 V _{AC} 200 W / 1350 W Conger Temperature -10 °C to +70 °C (+14 °F to 158 °F) ¹⁰ 50 for 38 °C (-40 °F to +185 °F) Relative Humidity 15% to 95%, non-condensing 50 × 17 in) Operating Temperature -40 °C to +85 °C (-40 °F to +185 °F) 50 × 17 in) Relative Humidity 15% to 95%, non-condensing 50 × 17 in) Maximum Operating Altitude 2,000 m (6,651 ft) 50 × 17 in) Maxinger 20 × 175 8 × 43.6 mm (9.1 × 6.9 × 1.7 in) 276.2 mm (10.9 in) including front panel Weight 2.0 × 175 8 × 43.6 mm (9.1 × 6.9 × 1.7 in) 276.2 mm (10.9 in) including front panel Colling For perature				
AC Input Voltage Range 85 to 265 V _{sc} AC Input Frequency 50 / 60 Hz (47 to 63 Hz) Maximum AC Input Current 13.5 A Power Factor 0.98 to 0.999 Efficiency ≥ 91% DC Output 24 V model 36 V / 48 V model DC Output Voltage Range 9 to 35 V _{oc} 12 to 70 V _{oc} DC Output Voltage Accuracy ≠ 0.5% 26 A / 26 A Maximum Charge Current for AC Input Voltage < 160 V _{sc} / ≥ 180 V _{sc} 26 A / 26 A Load Current Accuracy ≠ 2%		100 to 240 V 104		
AC Input Frequency 50 / 60 Hz (47 to 63 Hz) Maximum AC Input Current 13.5 A Power Factor 0.98 to 0.999 Efficiency ≥ 91% DC Output Voltage Range 9 to 35 V _{bc} 12 to 70 V _{bc} DC Output Voltage Range 9 to 35 V _{bc} 12 to 70 V _{bc} DC Output Voltage Accuracy ± 0.5% Maximum Charge Current for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Voltage < 160 V _{Ac} / ≥ 180 V _{bc} = 2% Maximum Output Power for AC Input Storage Temperature -10 °C to +70 °C (+14 °F to 158 °F) ¹⁰ Storage Temperature -40 °C to +85 °C (-40 °F to +185 °F) Relative Humidity 15% to 95%, non-condensing Maximum Operating Altitude 2,000 m (6,651 ft) Mechanical Design Dimensions (L x W x H) 232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panel Weight 2.0 kg (4.4 lb) Cooling Force air. Internal DC fan with fan speed control AC Input Connector FCI PwrBlade 3P backplane connector DC Output Protection Yes Over Voltage Protection Yes Short Circuit Protection Yes Short Circuit Protection Yes Over Temperature Protection Yes Short Circuit Protection Yes Output Fuse Yes Approvals Safety UL1564 / CSA C22.2 107.2-01, IEC 60.950 - 1, IEC 62.886-1 Safety Marks cuRus / CE / RCM Protection Class 1 EMC Immunity EN 61000-6-2				
Maximum AC Input Current13.5 APower Factor0.98 to 0.999Efficiency \geq 91%DC Output24 V model36 V / 48 V modelDC Output Voltage Range9 to 35 Voc12 to 70 VocDC Output Voltage Accuracy \pm 0.5%Maximum Charge Current for AC InputMaximum Charge Current for AC Input40 A / 45 A $26 A / 26 A$ Load Current Accuracy \pm 2% $20 W / 1350 W$ Maximum Output Power for AC Input $1200 W / 1350 W$ $1200 W / 1350 W$ Poperating Temperature $-10 °C to +70 °C (+14 °F to 158 °F) °I$ Storage Temperature $-40 °C to +85 °C (-40 °F to +185 °F)$ Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical Design $232 \times 175.8 \times 43.6 mm (9.1 \times 6.9 \times 1.7 in)$ Dimensions (L x W x H) $232 \times 175.8 \times 43.6 nm (9.1 x 6.9 \times 1.7 in)$ 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air.Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Output ProtectionYesOver Current ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOver Temperature ProtectionYesOver Temperature ProtectionYesOver Temperature ProtectionYesOver Current ProtectionYesOutput FuseYesApprovalsUL1564 / CS				
Power Factor 0.98 to 0.999 Efficiency ≥ 91% DC Output 24 V model 36 V / 48 V model DC Output Voltage Range 9 to 35 Vbc 12 to 70 Vbc DC Output Voltage Accuracy ≠ 0.5% 40 A / 45 A 26 A / 26 A Voltage < 160 Vac / ≥ 180 Vac				
Efficiency $\geq 91\%$ 36 V / 48 V modelDC Output24 V model36 V / 48 V modelDC Output Voltage Range9 to 35 V _{0C} 12 to 70 V _{0C} DC Output Voltage Accuracy $\div 0.5\%$ $2 to 70 V_{0C}$ Maximum Charge Current for AC Input $40 A / 45 A$ $26 A / 26 A$ Load Current Accuracy $\pm 2\%$ $40 A / 45 A$ $26 A / 26 A$ Maximum Output Power for AC Input $1200 W / 1350 W$ $1200 W / 1350 W$ Portating Temperature $-10 °C to +70 °C (+14 °F to 158 °F) °I$ Storage Temperature $-40 °C to +85 °C (-40 °F to +185 °F)$ Relative Humidity $15\% to 95\%$, non-condensingMaximum Operating Altitude $2,000 m (6,651 ft)$ Mechanical Design $232 \times 175.8 \times 43.6 mm (9.1 × 6.9 × 1.7 in)$ Zf2 x mm (10.9 in) including front panel $20 kg (4.4 lb)$ CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PurBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Voltage ProtectionYesOver Voltage ProtectionYesOver Temperature ProtectionYesOver Serverse ProtectionYesOutput FuseYesApprovalsYesSafetyUL1564 / CSA C22.2 107.2 ol1, IEC 60350-1, IEC 62358-1SafetyIL1564 / CSA C22.2 107.2 ol1, IEC 60350-1, IEC 62358-1Safety MarkscJRus/CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class B </td <td>· · ·</td> <td colspan="2"></td>	· · ·			
DC Output24 V model36 V / 48 V modelDC Output Voltage Range9 to 35 Vpc12 to 70 VpcDC Output Voltage Accuracy± 0.5%40 A / 45 A26 A / 26 ALoad Current Accuracy± 2%40 A / 45 A26 A / 26 ALoad Current Accuracy± 2%1200 W / 1350 WMaximum Output Power for AC Input Voltage < 160 Vxc / ≥ 180 Vxc				
DC Output Voltage Range 9 to 35 Voc 12 to 70 Voc DC Output Voltage Accuracy ± 0.5% 26 A / 26 A Maximum Charge Current for AC Input Voltage < 160 V _{AC} / ≥ 180 V _{AC} 20 A / 45 A 26 A / 26 A Load Current Accuracy ± 2%	-		26 V// 48 V/model	
DC Output Voltage Accuracy $\pm 0.5\%$ Maximum Charge Current for AC Input Voltage < 160 V _{AC} / ≥ 180 V _{AC} 40 A / 45 A 26 A / 26 ALoad Current Accuracy $\pm 2\%$ Maximum Output Power for AC Input Voltage < 160 V _{AC} / ≥ 180 V _{AC} 1200 W / 1350 WEnvironmental Conditions 1200 W / 1350 WOperating Temperature $-10 \degree C$ to $+70 \degree C$ ($+14 \degree F$ to 158 \degree F) 10 Storage Temperature $-40 \degree C$ to $+85 \degree C$ ($-40 \degree F$ to $+185 \degree F$)Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude $2,000 \text{ m}$ ($6,651 \text{ ft}$)Mechanical Design $232 \times 175.8 \times 43.6 \text{ mm}$ ($9.1 \times 6.9 \times 1.7 \text{ in}$) 276.2 mm (10.9 in) including front panelWeight $2.0 \log (4.4 \text{ lb})$ CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Voltage ProtectionYesOver Temperature ProtectionYesOutput FuseYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2 -01, IEC 60350-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2 -01, IEC 60350-1, IEC 62368-1Safety MarkscUR _{US} / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2				
Maximum Charge Current for AC Input Voltage < 160 $V_{AC} / \ge 180 V_{AC}$ $40 \text{ A} / 45 \text{ A}$ $26 \text{ A} / 26 \text{ A}$ Load Current Accuracy $\pm 2\%$ Maximum Output Power for AC Input Voltage < 160 $V_{AC} / \ge 180 V_{AC}$ $1200 \text{ W} / 1350 \text{ W}$ Environmental ConditionsOperating Temperature $-10 \degree C to +70 \degree C (+14 \degree F to 158 \degree F) \degree$ Ad $\degree C to +85 \degree C (-40 \degree F to +185 \degree F)$ Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude $2,000 \text{ m}$ (6,651 ft)Mechanical DesignDimensions (L x W x H)232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingInternal DC fan with fan speed control Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Voltage ProtectionYesOutput FuseYesApprovalsOutput FuseYesApprovalsOutput ProtectionYesApprovalsOutput FuseYesApprovals <td cols<="" td=""><td></td><td></td><td>IZ IO 70 VDC</td></td>	<td></td> <td></td> <td>IZ IO 70 VDC</td>			IZ IO 70 VDC
Voltage < 160 $V_{AC} / \ge 180 V_{AC}$ 40 A / 45 A26 A / 26 ALoad Current Accuracy $\pm 2\%$ Maximum Output Power for AC Input Voltage < 160 $V_{AC} / \ge 180 V_{AC}$ 1200 W / 1350 WEnvironmental Conditions1200 W / 1350 WOperating Temperature $-10 \circ C$ to $+70 \circ C$ ($+14 \circ F$ to $158 \circ F$) 10 Storage Temperature $-40 \circ C$ to $+85 \circ C$ ($-40 \circ F$ to $+185 \circ F$)Relative Hunidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6.51 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed control Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Temperature ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety Marks $cURus / CE / RCM$ Protection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S0011/32), class BEMC ImmunityEN 61000-6-2		± 0.5%		
Maximum Output Power for AC Input Voltage < 160 V_{Ac} / ≥ 180 V_{Ac} 1200 W / 1350 WEnvironmental ConditionsOperating Temperature-10 °C to +70 °C (+14 °F to 158 °F) ¹¹ Storage Temperature-40 °C to +85 °C (-40 °F to +185 °F)Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Softy MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2		40 A / 45 A	26 A / 26 A	
Voltage < 160 V _{Ac} / \geq 180V _{Ac} 1200 W / 1350 WEnvironmental ConditionsOperating Temperature-10 °C to +70 °C (+14 °F to 158 °F) "Storage Temperature-40 °C to +85 °C (-40 °F to +185 °F)Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical DesignDimensions (L x W x H)232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)Forced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorD C Output ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesApprovalsOutput FuseYesApprovalsOutput FuseYesApprovalsCoutput FuseYesApprovalsIL Colspan="2">Coutput FuseYesApprovalsCoutput FuseYesApprovals <td c<="" td=""><td>Load Current Accuracy</td><td colspan="2">± 2%</td></td>	<td>Load Current Accuracy</td> <td colspan="2">± 2%</td>	Load Current Accuracy	± 2%	
Operating Temperature-10 °C to +70 °C (+14 °F to 158 °F) ¹⁰ Storage Temperature-40 °C to +85 °C (-40 °F to +185 °F)Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorD Over Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	· · · ·	1200 W / 1350 W		
Storage Temperature-40 °C to +85 °C (-40 °F to +185 °F)Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, EC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Environmental Conditions			
Relative Humidity15% to 95%, non-condensingMaximum Operating Altitude2,000 m (6,651 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Operating Temperature	-10 °C to +70 °C (+14 °F	to 158 °F) 1)	
Maximum Operating Altitude2,000 m (6,651 ft)Mechanical Design232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelDimensions (L x W x H)232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 3P backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Storage Temperature	-40 °C to +85 °C (-40 °F	⁻ to +185 °F)	
Mechanical DesignDimensions (L x W x H)232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Relative Humidity	15% to 95%, non-conder	nsing	
Dimensions (L x W x H)232 x 175.8 x 43.6 mm (9.1 x 6.9 x 1.7 in) 276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Maximum Operating Altitude	2,000 m (6,651 ft)		
Dimensions (L x W x H)276.2 mm (10.9 in) including front panelWeight2.0 kg (4.4 lb)CoolingForced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Mechanical Design			
Forced air. Internal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Dimensions (L x W x H)			
CoolingInternal DC fan with fan speed controlAC Input ConnectorFCI PwrBlade 3P backplane connectorDC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesShort Circuit ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus/ CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Weight	2.0 kg (4.4 lb)		
DC Output ConnectorFCI PwrBlade 2P + 12S pin backplane connectorDC Output ProtectionYesOver Voltage ProtectionYesOver Current ProtectionYesShort Circuit ProtectionYesOver Temperature ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	Cooling			
DC Output ProtectionOver Voltage ProtectionYesOver Current ProtectionYesShort Circuit ProtectionYesOver Temperature ProtectionYesReverse ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	AC Input Connector	FCI PwrBlade 3P backplane connector		
Over Voltage ProtectionYesOver Current ProtectionYesShort Circuit ProtectionYesOver Temperature ProtectionYesReverse ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	DC Output Connector	FCI PwrBlade 2P + 12S pin backplane connector		
Over Current ProtectionYesShort Circuit ProtectionYesOver Temperature ProtectionYesReverse ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN S5011/32), class BEMC ImmunityEN 61000-6-2	DC Output Protection			
Short Circuit ProtectionYesOver Temperature ProtectionYesReverse ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Over Voltage Protection	Yes		
Over Temperature ProtectionYesReverse ProtectionYesOutput FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Over Current Protection	Yes		
Reverse ProtectionYesOutput FuseYesApprovalsSafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Short Circuit Protection	Yes		
Output FuseYesApprovalsUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Over Temperature Protection	Yes		
ApprovalsSafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Reverse Protection	Yes		
SafetyUL1564 / CSA C22.2 107.2-01, IEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Output Fuse	Yes		
SafetyIEC 60950-1, IEC 62368-1Safety MarkscURus / CE / RCMProtection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Approvals			
Protection Class1EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Safety			
EMC EmissionsFCC Part 15 Subpart B, EN 61000-6-4 (EN 55011/32), class BEMC ImmunityEN 61000-6-2	Safety Marks			
EMC Emissions 55011/32), class B EMC Immunity EN 61000-6-2	Protection Class	-		
	EMC Emissions	55011/32), class B		
Harmonic Currents EN 61000-3-2	EMC Immunity			
	Harmonic Currents	EN 61000-3-2		
RoHS Yes	RoHS	Yes		

Notes: An isolated supply is provided to power system components (12.0 VDC \pm 10%: 0 - 700 mA). Modules in parallel multiply this output current.

An isolated CAN bus supply is provided to power system CAN bus components (7.5 VDC \pm 10%: 0 -100 mA). 1) Output power may be derated above 45 °C (113 °F)



Delta Energy Systems (Germany) GmbH

Tscheulinstrasse 21, 79331 Teningen E-mail: IEV.sales@deltaww.com



www.deltaww.com

More information