



- + Easy to install
- + Liquid cooled
- + Low maintenance, easy to own
- + Cable management
- + 10" screen
- + CCS1 / CCS2
- + CHAdeMO
- + Brandable exterior
- + Optional credit card reader
- + IP65

# RT175-S/175kW Specifications

INNOVATING YOUR FUTURE



## USER UNIT

<b>CONNECTORS</b>	Single: CCS   Dual: CCS and CHAdeMO
<b>CONNECTOR TYPE(S)</b>	<b>Worldwide:</b> CCS2 or CCS2 and CHAdeMO <b>US &amp; Canada:</b> CCS1 or CCS1 and CHAdeMO
<b>OUTPUT VOLTAGE</b>	200V - 920V DC
<b>OUTPUT CURRENT</b>	CCS: up to 350A CHAdeMO: up to 200A
<b>IP RATING</b>	IP65 (NEMA 3R)
<b>IK RATING</b>	IK10 (IK8 Screen)
<b>EFFICIENCY</b>	98.5% at full load (350A, 500V)
<b>OPERATING TEMPERATURE</b>	-30°C to 50°C (-22°F to 122°F)
<b>STORAGE TEMPERATURE</b>	-55°C to 80°C (-67°F to 176°F)
<b>CREDIT CARD READER</b>	Optional
<b>RFID READER</b>	Fitted standard
<b>DIMENSIONS</b>	2,011mm (67") (H) x 993mm (3'3") (W) x 531mm (1'9") (D) Note: Width excludes plugs
<b>WEIGHT</b>	277kg (611lb)
<b>AUTHENTICATION / PAYMENT</b>	RFID only OR Credit Card Reader with RFID
<b>CABLE REACH</b>	4.1m (13'5")
<b>CABLE MANAGEMENT</b>	Fitted standard
<b>COMPLIANCE</b>	UL NRTL certification FCC Class A

## A U S T R A L I A • U S A • E U R O P E

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## ISOLATED POWER UNIT

<b>INPUT VOLTAGE</b>	<b>Worldwide (400VAC):</b> 400VAC 3ph ±10%   50Hz ±10%   Derate the power below -10% to -15%   270A nominal   300A maximum (at low line level)	
	<b>US &amp; Canada (480VAC):</b> 480VAC 3ph ±10%   60Hz ±10%   Derate the power below -10% to -15%   225A nominal   250A maximum (at low line level)	
	<b>Canada (600VAC):</b> 600VAC 3ph ±10%   60Hz ±10%   Derate the power below -10% to -15%   180A nominal   200A maximum (at low line level)	
<b>INPUT OVERVOLTAGE CATEGORY</b>	Category III	
<b>OUTPUT VOLTAGE   POWER</b>	950V DC   Up to 178kW	
<b>ISOLATION BETWEEN AC MAINS &amp; EV</b>	Reinforced Isolating transformer with double/reinforced insulation	
<b>EFFICIENCY</b>	96% at full load	
<b>POWER FACTOR</b>	>0.99	
<b>TOTAL HARMONIC DISTORTION (THD)</b>	<5%	
<b>OPERATING TEMPERATURE</b>	-10°C to 50°C (14°F to 122°F)	5% to 95% RH Non Condensing (without optional cold kit)
	-30°C to 50°C (-22°F to 122°F)	5% to 95% RH Non Condensing (with optional cold kit)
<b>STORAGE TEMPERATURE</b>	-55°C to 80°C (-67°F to 176°F)	5% to 95% RH Non Condensing
<b>NETWORK CONNECTION</b>	Ethernet to User Unit	
<b>WEIGHT</b>	1004kg (2213.5lb)	
<b>DIMENSIONS</b>	2,110mm (6'11") (H) x 660mm (2'2") (W) x 1,060mm (3'6") (D)	
<b>IK RATING</b>	IK10	
<b>IP RATING</b>	IP55 (NEMA 3R)	
<b>WIRELESS UPLINK</b>	3G/4G cellular communications with failover redundancy	
<b>WIRED UPLINK</b>	Ethernet	
<b>POWER SUPPLY</b>	Battery-backed UPS functionality for reliable telemetry at all times	
<b>SOFTWARE SUPPORT</b>	OCPP v1.6J support for management and billing	
<b>SECURITY</b>	SSH with EC keys and unique password for manufacturer diagnostics	
<b>POWER CONTROL</b>	Supports OCPP charging profiles (OCPP v1.6J)	
<b>CONTROL PLATFORM</b>	Included in the Power Unit	
<b>POWER SHARING</b> (Optional)	Configurable site-level power demand management	

## EMC

<b>EMC</b>	<b>Worldwide:</b>	EMC Directive	Immunity: Class A	Emissions: Class A
	<b>USA:</b>	FCC	Immunity: Class A	Emissions: Class A

## AC GRID INTERFACE

<b>VOLTAGE</b>	<b>Worldwide (400VAC):</b> 400VAC 3ph ±10%
	<b>US &amp; Canada (480VAC):</b> 480VAC 3ph ±10%
	<b>Canada (600VAC):</b> 600VAC 3ph ±10%
<b>FREQUENCY</b>	<b>Worldwide:</b> 50Hz ±10%
	<b>US &amp; Canada:</b> 60Hz ±10%
<b>MAXIMUM CURRENT AT LOW LINE LEVEL</b> (Nominal voltage -10%) <b>AND PF = 0.99</b>	<b>Worldwide (400VAC):</b> 300A
	<b>US &amp; Canada (480VAC):</b> 250A
	<b>Canada (600VAC):</b> 200A
<b>OVER CURRENT PROTECTION DEVICE REQUIRED (OCPD) IN SITE DISTRIBUTION BOARD</b>	<b>Worldwide (400VAC):</b> 300A Circuit Breaker (recommended) (The circuit breaker nominal rating MUST not exceed 300A in order to maintain primary protection for the LV transformer in the IPU) (If a 350A circuit breaker is used the buried cable gauge MUST be increased)
	<b>US &amp; Canada (480VAC):</b> 320A UL Listed Circuit Breaker (recommended) (The circuit breaker nominal rating MUST not exceed 320A in order to maintain primary protection for the LV transformer in the IPU)
	<b>Canada (600VAC):</b> 250A UL Listed Circuit Breaker (recommended) (The circuit breaker nominal rating MUST not exceed 250A in order to maintain primary protection for the LV transformer in the IPU)
<b>FAULT CURRENT LIMITING FUSES IN SITE DISTRIBUTION BOARD</b>	Current limiting fuses or a UL recognised current limiting circuit breaker MUST be installed if available fault current exceeds 18kA Note: The IPU has an option to upgrade the SCCR to 100kA
<b>RESIDUAL CURRENT MONITORING IN SITE DISTRIBUTION BOARD</b> (Optional)	If a residual current monitoring device is required by local regulation it shall be of time delay type
<b>UNDER-VOLTAGE RELAY IN SITE DISTRIBUTION BOARD</b> (Optional)	The isolated power unit includes circuitry to locally isolate the charger's power circuit if the safety loop monitoring the door switches and tilt sensors is triggered. The IPU can also be isolated upstream in the event of a safety loop trigger event by including an under-voltage relay coil on the feeder circuit breaker in the site distribution board. Tritium Veefil chargers should only be installed by a licensed contractor and a licensed electrician, in accordance with all local and national codes and standards to meet current NEC and NFPA 70E requirements. This may include additional, lockable disconnect mechanisms within line of sight of the supplied equipment.
<b>MINIMUM BURIED CABLE SIZE FOR AC LINK</b> (Length of AC link cables and system efficiency should be considered when sizing cables)	<b>Worldwide (400VAC):</b> Twin 70mm <sup>2</sup> Cu for L1, L2, L3 Single 70mm <sup>2</sup> Cu for PE
	<b>US &amp; Canada (480VAC):</b> Twin 3/0 Cu for L1, L2, L3 Single 3/0 Cu for PE
	<b>Canada (600VAC):</b> Twin 1/0 Cu for L1, L2, L3 Single 1/0 Cu for PE
<b>MAXIMUM LENGTH OF BURIED CABLES FOR MINIMUM AC LINK CABLE SIZE SPECIFIED</b>	200m (656ft) (To maintain feeder voltage drop below 3%)

Note: This specification is correct at the date of release (listed at the bottom). For the most recent specification, see the website.

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