



- + 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

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USER UNIT

CONNECTORS	Single: CCS Dual: CCS and CHAdeMO
CONNECTOR TYPE(S)	Worldwide: CCS2 or CCS2 and CHAdeMO US & Canada: CCS1 or CCS1 and CHAdeMO
OUTPUT VOLTAGE	200V - 920V DC
OUTPUT CURRENT	CCS: up to 350A CHAdeMO: up to 200A
IP RATING	IP65 (NEMA 3R)
IK RATING	IK10 (IK8 Screen)
EFFICIENCY	98.5% at full load (350A, 500V)
OPERATING TEMPERATURE	-30°C to 50°C (-22°F to 122°F)
STORAGE TEMPERATURE	-55°C to 80°C (-67°F to 176°F)
CREDIT CARD READER	Optional
RFID READER	Fitted standard
DIMENSIONS	2,011mm (6'7") (H) x 993mm (3'3") (W) x 532mm (1'9") (D) Note: Width excludes plugs
WEIGHT	260kg (573lb)
SHIPPING WEIGHT	310kg (683lb) (estimate)
AUTHENTICATION / PAYMENT	RFID only OR Credit Card Reader with RFID
CABLE LENGTH	4.1m reach (13'5" reach)
CABLE MANAGEMENT	Fitted standard
COMPLIANCE	UL NRTL certification FCC Class A

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ISOLATED POWER UNIT

INPUT VOLTAGE	Worldwide (400VAC): 400VAC 3ph ±10% 50Hz ±10% Derate the power below -10% to -15% 270A nominal 300A maximum (at low line level)	
	US & Canada (480VAC): 480VAC 3ph ±10% 60Hz ±10% Derate the power below -10% to -15% 225A nominal 250A maximum (at low line level)	
	Canada (600VAC): 600VAC 3ph ±10% 60Hz ±10% Derate the power below -10% to -15% 180A nominal 200A maximum (at low line level)	
INPUT OVERVOLTAGE CATEGORY	Category III	
OUTPUT VOLTAGE POWER	950V DC Up to 178kW	
ISOLATION BETWEEN AC MAINS & EV	Reinforced Isolating transformer with double/reinforced insulation	
EFFICIENCY	96% at full load	
POWER FACTOR	>0.99	
TOTAL HARMONIC DISTORTION (THD)	<5%	
OPERATING TEMPERATURE	-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)
STORAGE TEMPERATURE	-55°C to 80°C (-67°F to -176°F) 5% to 95% RH Non Condensing	
NETWORK CONNECTION	Ethernet to User Unit	
WEIGHT	Without transformer: 500kg (1102lb) With transformer: 988kg (2178lb)	
SHIPPING WEIGHT	Without transformer: 590kg (1301lb) With transformer: 1078kg (2377lb)	
DIMENSIONS	2,147mm (7'1") (H) x 650mm (2'2") (W) x 1,055mm (3'6") (D)	
IK RATING	IK10	
IP RATING	IP55 (NEMA 3R)	
WIRELESS UPLINK	3G/4G cellular communications with failover redundancy	
WIRED UPLINK	Ethernet	
POWER SUPPLY	Battery-backed UPS functionality for reliable telemetry at all times	
SOFTWARE SUPPORT	OCPP v1.6J support for management and billing	
SECURITY	SSH with EC keys and unique password for manufacturer diagnostics	
POWER CONTROL	Supports OCPP charging profiles (OCPP v1.6J)	
CONTROL PLATFORM	Included in the Power Unit	
POWER SHARING (Optional)	Configurable site-level power demand management	

EMC

EMC	Worldwide:	EMC Directive	Immunity: Class A	Emissions: Class A
	USA:	FCC	Immunity: Class A	Emissions: Class A

AC GRID INTERFACE

VOLTAGE	Worldwide (400VAC): 400VAC 3ph ±10%
	US & Canada (480VAC): 480VAC 3ph ±10%
	Canada (600VAC): 600VAC 3ph ±10%
FREQUENCY	Worldwide: 50Hz ±10%
	US & Canada: 60Hz ±10%
MAXIMUM CURRENT AT LOW LINE LEVEL (Nominal voltage -10%) AND PF = 0.99	Worldwide (400VAC): 300A
	US & Canada (480VAC): 250A
	Canada (600VAC): 200A
OVER CURRENT PROTECTION DEVICE REQUIRED (OCPD) IN SITE DISTRIBUTION BOARD	Worldwide (400VAC): 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)
	US & Canada (480VAC): 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)
	Canada (600VAC): 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)
FAULT CURRENT LIMITING FUSES IN SITE DISTRIBUTION BOARD	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
RESIDUAL CURRENT MONITORING IN SITE DISTRIBUTION BOARD (Optional)	If a residual current monitoring device is required by local regulation it shall be of time delay type
UNDER-VOLTAGE RELAY IN SITE DISTRIBUTION BOARD (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.
MINIMUM BURIED CABLE SIZE FOR AC LINK (Length of AC link cables and system efficiency should be considered when sizing cables)	Worldwide (400VAC): Twin 70mm ² Cu for L1, L2, L3 Single 70mm ² Cu for PE
	US & Canada (480VAC): Twin 3/0 Cu for L1, L2, L3 Single 3/0 Cu for PE
	Canada (600VAC): Twin 1/0 Cu for L1, L2, L3 Single 1/0 Cu for PE
MAXIMUM LENGTH OF BURIED CABLES FOR MINIMUM AC LINK CABLE SIZE SPECIFIED	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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