

SCALA

Scala Next Modular UPS Series



**The Next Generation of Power Protection for
Mission Critical Application**

+ Compact + Scalable + Hot swappable

**Three Phase Online Double Conversion UPS
30 – 900 kVA**

The Specialist of innovative UPS Design

Scala Power Corporation , a company specialist in power and energy recovery systems with many years of experience in providing high availability power solutions for unpredictable evolution in IT Infrastructure. Our manufacturer's expertise naturally extends to a continuous innovation for complete range of services designed to facilitate the research, implementation and operation of our solutions.

As an industry-leading UPS provider, we're constantly working to ensure that our service standards meet your needs precisely. The experience and know-how of our servicing resources provide a dedicated support package which helps to ensure your data center can maximize availability , keeping low cost and maintaining a flexible infrastructure.



Scala Next

The Scala Next by Scala Power Corporation is the innovative and reliable solution for protecting critical applications in computer rooms , data centers , banks , healthcare , facilities , insurance and telecom.

The Scala Next is a next generation of world-class, redundant, scalable, high-efficiency power protection systems for business high availability , cost effective and flexible response to unpredictable demands.

Seamlessly integrating into today's state-of-the-art data center designs, the Scala Next UPSs are true modular system , built from swappable— all engineered into a design that is easily and efficiently serviceable. This architecture can scale power and runtime as demand grows or as higher levels of availability are required.

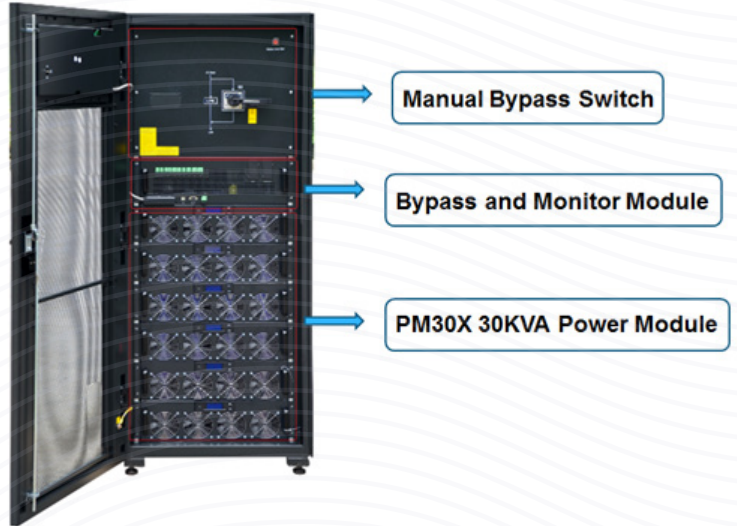
Highly manageable, each Scala Next offer features self-diagnostic capabilities and standardized modules that mitigate the risk of human error, resulting in increased overall data center reliability. Optional N+1 module-level redundancy further enhances power protection and peace of mind without increasing the footprint of your power protection solution.

Scala Next delivers high availability, extreme agility, and low total cost of ownership in an aesthetic form factor. With industry-leading power density, the Scala Next has the ability to fit seamlessly onto the data center floor or into the back room.

Available Model

Scala Next 1830

Designed to house 6 power modules to reach maximum capacity of 180 kVA and expandable to 540kVA by connecting three frames in parallel



Scala Next 3030

Designed to house 10 power modules to reach maximum capacity of 300 kVA and expandable to 900kVA by connecting three frames in parallel



Main feature and benefits

TRUE MODULAR design

Power expansion simply by adding power module without any downtime and extra space

HOT SWAP design

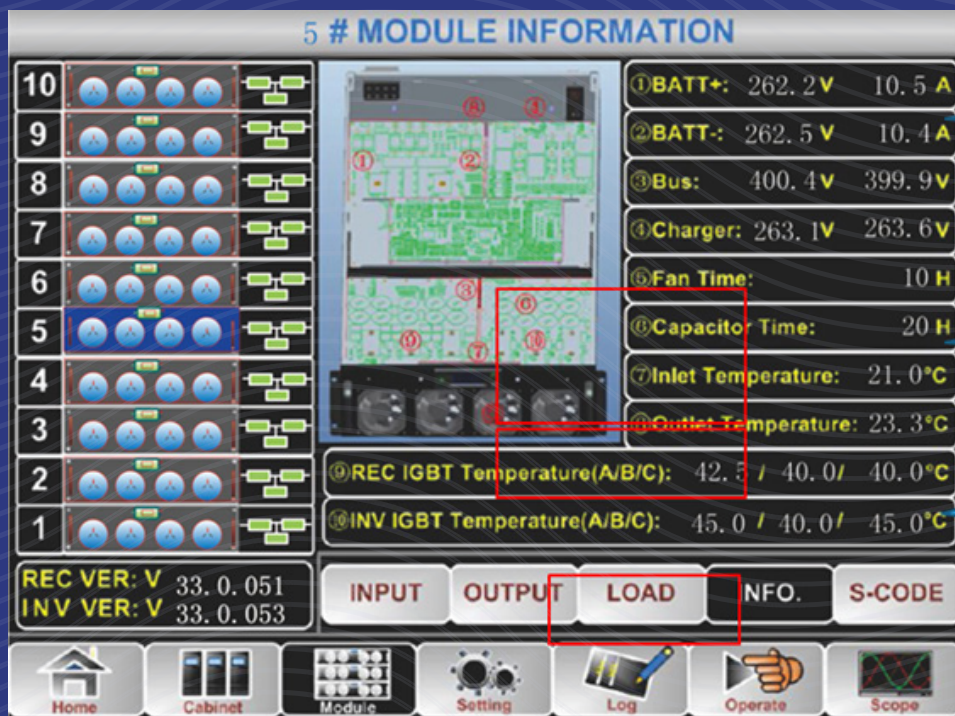
Power module can be replaced or added while another module continues protecting the load.

REDUNDANCY and CAPACITY

Power Frame can be paralleled for redundancy or expansion

Dual-mains input

Two separate power inputs for increased availability.



Intelligent battery charger

Running time of critical components

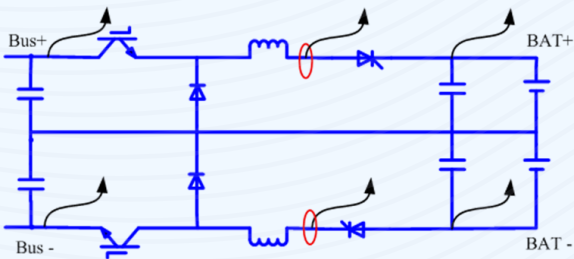
Thermal IGBT temperature in real time

LED light and LCD touch screen

10.4" touch colorful LCD screen, Multi languages to select , 896 history logs. Password control at different levels to manage access of UPS configuration

Independent Charger

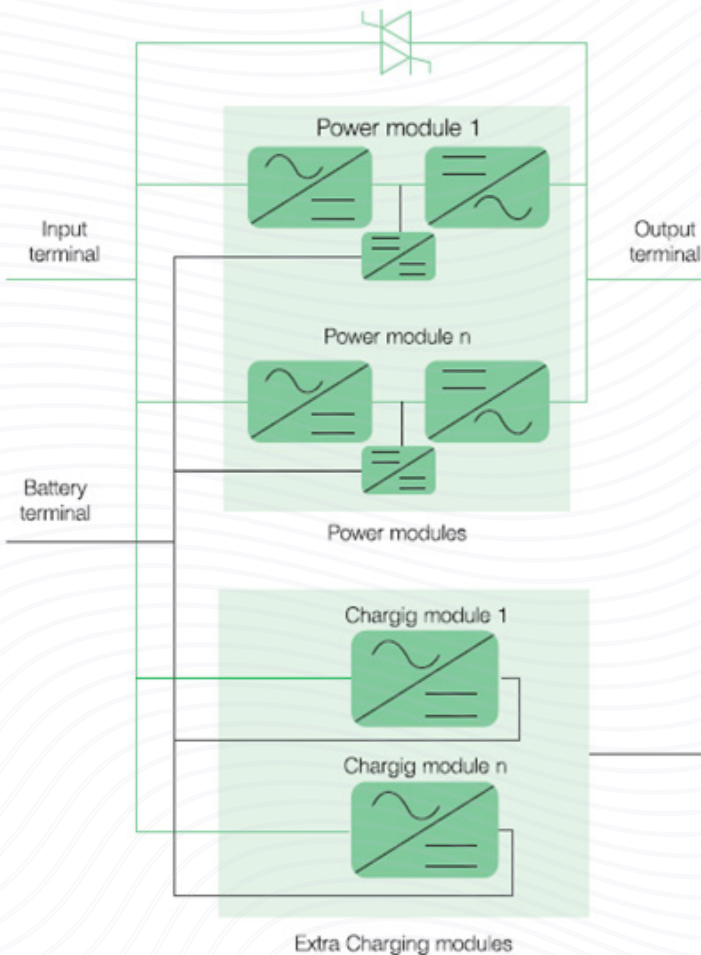
- Each Power has Independent Charger and full digital control
- Max Charger Current: 20%*Power, adjustable



Why Independent Charger?

- Independent DC bus, fault isolated.
- Fully digital controlled, charging voltage & current are regulated and settable
- The number of battery ranges from 32-44 ,settable
- Optimized battery management

More reliable
More flexible
Higher performance
Longer battery service life



Supercharger (Optional)

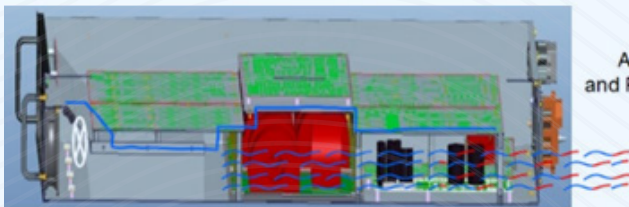
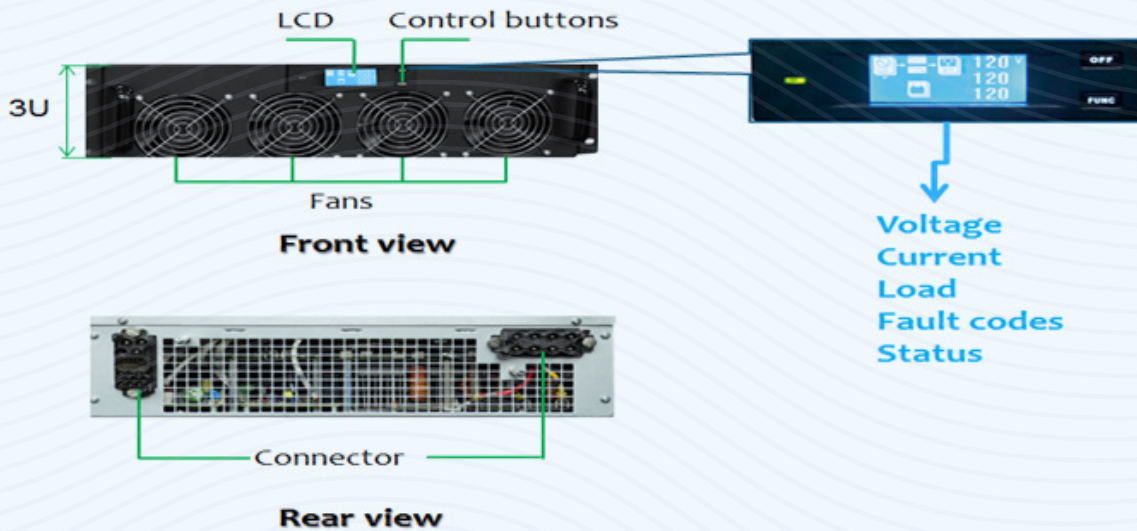
0-50A adjustable



Hot swappable

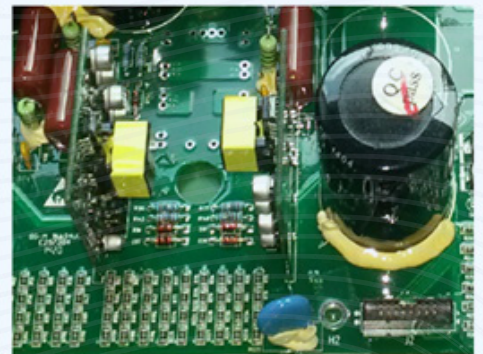
Power Module

Scala Next M30



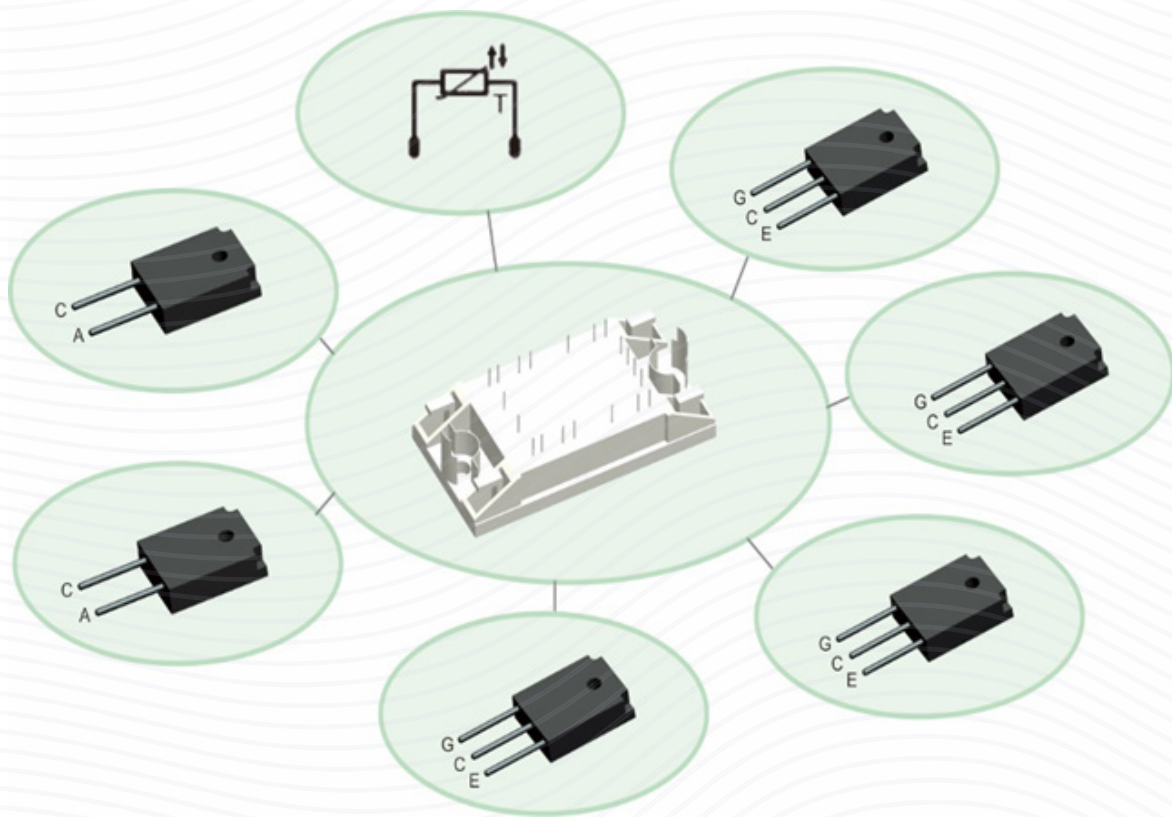
Keep PCB free of dust,
Higher reliability

Conformal Coating for
Power and Control
Boards



Modular IGBT design

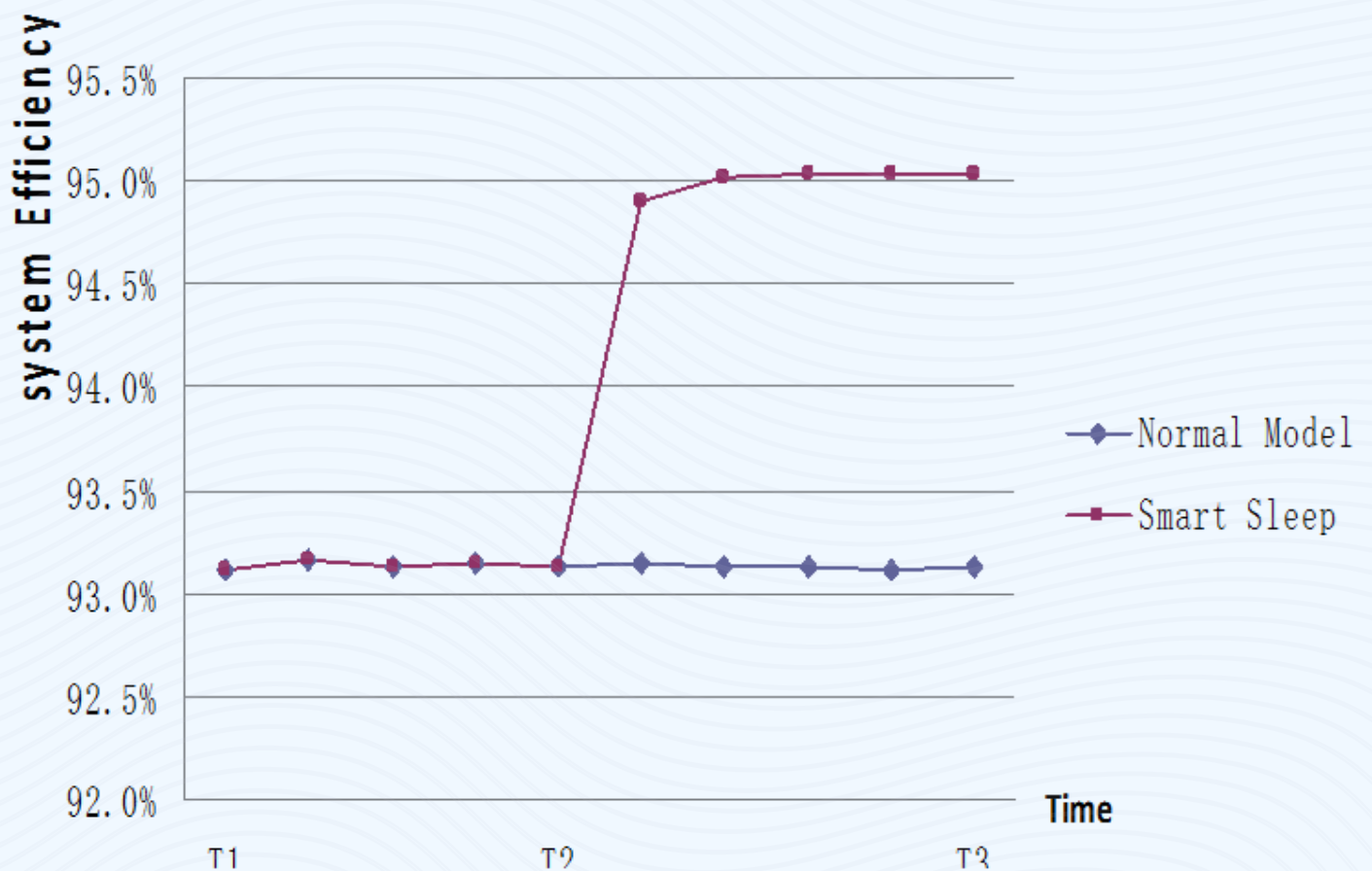
- IGBT Rectifier with PFC control to achieve input THDi <3% and input p.f is 0.99
- IGBT Inverter using 3 level IGBT power bridge technology with high frequency PWM modulation switching to perform high load factor and efficiency up to 96%.
- **DOUBLE DSP PRECISION CONTROLLER** for Rectifier, Inverter, Charger & Super Charger to achieve system stability, reliability and efficiency.



- One equals more
- Less fault points
- Smaller size
- Inner thermal sensor
- Higher reliability

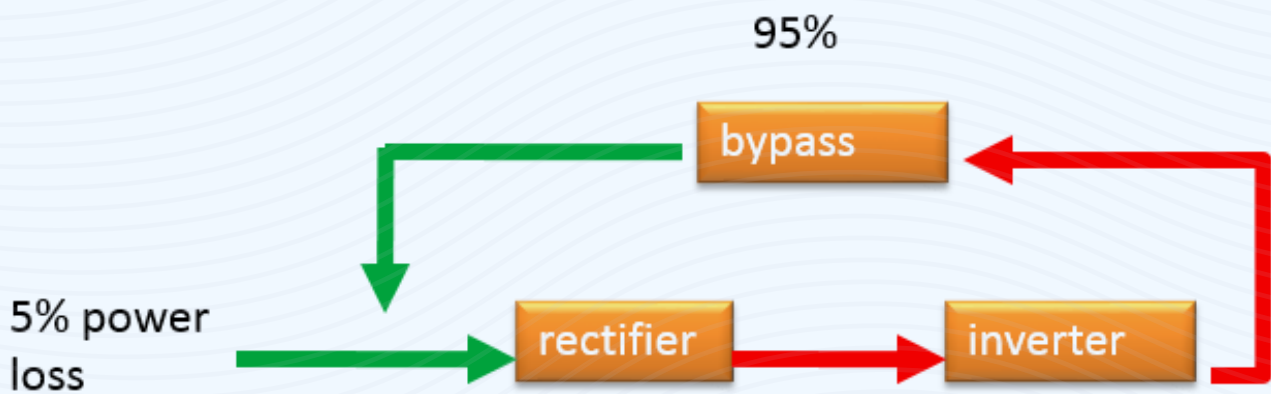
Smart Sleep function

- Increase system efficiency when in low load
- Easy setting, friendly for customers
- Power modules working in rotation, prolong the total life time



Self-aging

- Simulate different load conditions without connecting to real load
- Energy-saving, saving 95% energy cost
- Support on-site setting and factory testing



Technical Data Sheet

GENERAL		
Model	SCALANEXT	
Description	Modular , Scalable , Swappable , Transformerless Online Double Conversion UPS	
CABINET FRAME		
Part Number	SCALANEXT 1830	SCALANEXT 3030
Max capacity	180 kVA ; expandable to 540kVA (paralleling 3 units)	300 kVA ; expandable to 900kVA (paralleling 3 units)
Max # of modules/frame	6	10
Dimension (WxDxH)	600 x 1100 x 1600 mm	600 x 1100 x 2000 mm
Weight	165 kg	220 kg
Display	10.4" touch colour LCD+LED+Keyboard	
POWER MODULE		
Part Number	SCALANEXT M30	
Capacity	30 kVA / 27 kW	
Dimension (WxDxH)	460 x 790 x 134 mm	
Weight	34	
MAIN INPUT		
Grid System	3 Phases + Neutral + Ground	
Rated Input Voltage	380/400/415VAC (Line-Line)	
Rated Frequency	50/60Hz	
Input Voltage Range	304~478Vac (Line-Line),full load; 228V~304Vac (Line-Line),load decrease linearly according to the min phase voltage	
Input Frequency Range	40Hz~70Hz	
Input Power Factor	≥0.99	
Input Current THDi	<3% (full Linear Load)	
BYPASS INPUT		
Rated Bypass Voltage	380/400/415VAC (Line-Line)	
Rated Frequency	50/60Hz	
Bypass Voltage Range	Selectable, default -20%~+15% Upper limit: +10%, +15%, +20%, +25%; Lower limit: -10%, -15%, -20%, -30%, -40%	
Bypass Frequency Range	Selectable, ±1Hz, ±3Hz, ±5Hz	
Bypass Overload	110% Continuous; 110%~125% for 5min; 125%~150% for 1min;	
OUTPUT		
Rated Inverter Voltage	380/400/415VAC (Line-Line)	
Rated Frequency	50/60Hz	
Output Power Factor	0.9	
Voltage precision	±1.5%(0-100% linear load)	
Transient Response	<5% for step load (20% - 80% -20%)	
Transient recovery	< 30ms for step load (20% - 100% -20%)	
Output Voltage THDu	<1% (linear load)	
Inverter Overload	110%, 60min; 125%,10min; 150%,1min; >150%,200ms	
Frequency Regulation	50/60Hz±0.1%	
Synchronized Range	Settable, ±0.5Hz ~ ±5Hz, default ±3Hz	
Synchronized Slew Rate	Settable, 0.5Hz/s ~ 3Hz/s, default 0.5Hz/s	
BATTERY AND CHARGER		
Battery Rate Voltage	±240VDC	
Charger Voltage precision	1%	
Charger Power	max > 20% * total power	
EFFICIENCY		
Normal Operation	>95%	
Battery Operation	>95%	
ECO Opetation	>99%	
SYSTEM		
Optional	Supercharger 50A	
Interface	Standard:RS232, RS485, USB,Dry Contact; ,SNMP Card	
ENVIRONMENTAL		
Operation Temperature	0 ~ 40	
Storage Temperature	-40 ~ 70	
Relative Humidity	0 ~ 95% (Non condensing)	
Noise (1 meter)	65dB @ 100% load, 62dB @ 45% load	
STANDARDS		
General safety	EN50091-1/ IEC62040-1-1 / AS62040-1	
EMC	EN50091-2 / IEC62040-2 (C3) / AS62040-2	
Performance test	EN50091-3 / IEC62040-3 /AS62040-3(VFI SS111)	

SCALA

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