MINIMUM INRUSH CURRENT MAX POWER FACTOR

AWS FAMILY

								М	cQua	ay EF	FICI	E١	
1	640	AWS	S Inverter						ESEER 5.8				
			820	AW	S PF	EMI	UM		ESE	ER 4	.6		
8													
ESEER						T	IPICA	L SC	REW	CHI	LLE	R I	
		750	AWS	XE					ESE	ER 4	.3		
	640 AWS SE							ESEER 4					
-													
	600 65	0 700	750 80	0 850	900	950	1000	1050	1100	1150	1200	1	

AWS INVERTER PROVIDES MINIMUM INRUSH CURRENT COMPARED TO TRADITIONAL STARTING METHODS.

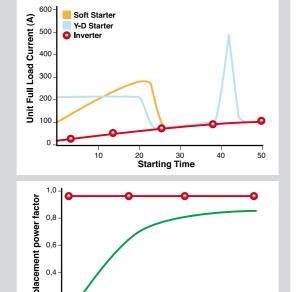
Real Coloring

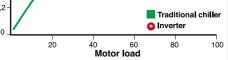
The use of variable speed motors eliminates the fluctuations on the power supply line and reduces the stress on the electrical equipment.

This allows to reduce size (and costs!) of the protection devices to be installed on the power supply line.

AWS INVERTER UNITS ARE FEATURING AN AMAZING 0.97 DISPLACEMENT POWER FACTOR AT WHATEVER CHILLER LOAD AND OPERATING CONDITION.

It allows minimum current absorption and consequently reducing the cost of the electrical installation. AWS Inverter does not require the installation of traditional capacitors for power factor correction and avoiding potential penalties related to reactive power.





STEP 1 'AWS' Family 620÷2000 kW R134a Single Screw with VFD

STEP 2

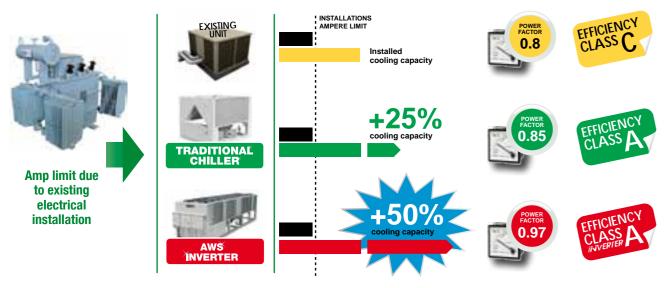




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INCREASE COOLING OUPUT WITHOUT CHANGING THE EXISTING POWER SUPPLY LINE!

AWS Inverter superior energy efficiency combined with the highest possible displacement power factor allows to increase the installed cooling capacity (up to +50%) without modifying the existing power supply line.





CHOOSE McQuay CHILLER



A Global Leader In System Solutions for Air Conditioning, Heating, Ventilating and Refrigeration









Engineered for flexibility and performance[™]

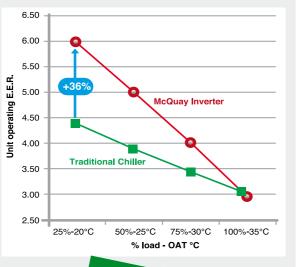


McQuay "AWS INVERTER" HIGHEST EFFICIENCY AT BOTH FULL AND PART LOAD

AWS Inverter series offers the highest EER part load values in the HVAC air cooled chiller Market, up to 36 % better than traditional technology. This allows a significant reduction of the system running costs in compliance with the most stringent requirements in terms of energy consumption and environmental

regulations. These aspects, together with Building Sustainable Design, are becoming more and more crucial factor in the real estate market. AWS Inverter leads the industry in energy efficiency, quiet operation and responsible refrigerant management: ideal for building owners who want to pursue Leadership in Energy and Environmental Design (LEED[®]).

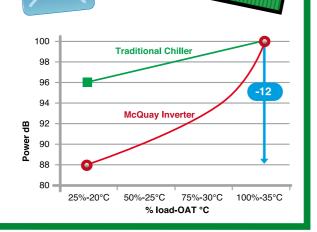
The combination of variable speed single screw compressor and chiller control logic allow to automatically modulate the fan speed to achieve the optimum head pressure set-point and consequencely the best global chiller energy performance at part load. Resulting ESEER values are 25% higher than traditional screw units, reaching the highest ESEER values for this technology.



12 dB(A) NOISE REDUCTION TO MEET THE MOST STRINGENT REGULATIONS

During the night, when the background noise is decreasing, the acoustical impact of a chiller becomes more critical for neighbors that want guiet. At these conditions the outdoor temperature is lower as well as the cooling load.

AWS Inverter works in partial regime and the inverter devices adjust the speed of compressors and fans supplying the required cooling output and providing better sound performances.



dB/

FROM 100% LOAD continuous **TO 8% LOAD**

EXTREMELY WIDE RANGE OF **OPERATION, WITH OUTSIDE** AMBIENT UP TO 50°C

AWS Inverter is equipped with McQuay single-screw compressor and its condensing section is properly sized in order to achieve +50°C ambient temperature and still allowing stepless unloading down to 8% capacity. (Referred to three compressors model) Differently from other technologies available on Market (eq. centrifugals) with single screw compressor no any unefficient "ON-OFF" operation will be experienced at part loads. Thanks to this unique design AWS Inverter is featuring one of the widest working envelope of the Market.





AWS Inverter Is equipped with on-board PID controller, with a standard user-friendly in-built display, or an optional graphical touch screen. Controller is ready to be integrated with a wide range of BMS through standad communication protocols. The controller's display allows viewing of the unit's operating status and its multi-button keypad and rolling wheel allows the operator easy access to the unit main functions.

modulation

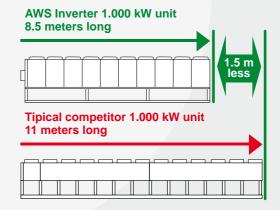


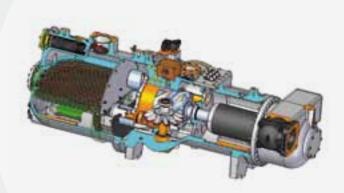
SAVING FOOTPRINT & INSTALLATION TIME

1991

12

AWS Inverter are lighter and smaller than other air cooled chillers available from the Market. Its compact footprint is ideal for replacement projects, allowing easy transport and installation thus resulting in structural elements cost savings.





SINGLE-SCREW COMPRESSOR: MCQUAY «IN HOUSE» TECHNOLOGY

Compressor, the "heart" of the chiller, is fully developed, manufactured and serviced by McQuay. McQuay Single Screw compressor inverter driven: the top of screw tecnology with integrated oil separator, best energy efficiency both at full and part loads and with a proven reliability thanks thousands

units running all around the World.

PLUG & PLAY UNIT CONCEPT

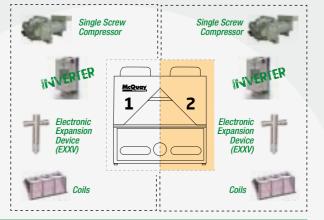
AWS Inverter design allows faster chiller installation with consequent reduction of commissioning cost.

- Standard factory functional test
- Full refrigerant and oil charge
- Integrated Control Logic
- Single evaporator
- Single main power connection point
- Optional on-board inline dual-pumps





PID CONTROLLER WITH OPTIMIZED MCQUAY SOFTWARE AND 'NETWORK READY' FEATURES



IN-BUILT REDUNDANCY "MULTIPLE UNITS" ON A SINGLE SKID

AWS Inverter is designed with 2 or 3 (depending on capacity) independent refrigerant circuits. All critical components (e.g. compressor, EEXV ecc...) are independent on each circuit allowing highest reliability standards.