

<i>DESCRIPTION</i>		<i>Q.TY</i>
1-	WSAT-XIN 71 Air cooled water chiller for outdoor installation R410A-400TN-IOM11X	1

Customer: VTS HUNGARY KFT	Offer Referent:	Offer n: 442151/Rev.1- Sep 8, 2017- pg 2
Intended use:	Application: SCHOOLS	

WSAT-XIN 71 Air cooled water chiller for outdoor installation (R410A-400TN-IOM11X)**COMPRESSOR**

Size 21-31-41

Rotating hermetic compressor controlled by inverter, equipped with motor protection device for over-temperatures, over-currents and excessive temperatures of the supply gas. It is installed on antivibration mounts and it is equipped with oil charge. A guard heater with automatic insertion prevents the refrigerant from diluting the oil when the compressor stops.

Size 51-171

Scroll hermetic compressor controlled by inverter, equipped with motor protection device for over-temperatures, over-currents and excessive temperatures of the supply gas. It is installed on anti-vibration mounts and it is equipped with oil charge. A guard heater with automatic insertion prevents the refrigerant from diluting the oil when the compressor stops.

STRUCTURE

Structure made entirely in Zinc-Magnesium plate that guarantees excellent mechanical characteristics and high corrosion strength over time.

Zinc-magnesium base painted with polyester powder RAL 9001

PANELLING

External pre-painted zinc-magnesium panelling that ensures superior resistance to corrosion for outdoor installation and eliminates the need for periodical painting. The panels can be easily removed to fully access internal components and are lined with sound-proof material on the inside to contain the unit's sound levels

INTERNAL EXCHANGER

Direct expansion brazed-plate exchanger in AISI 316 stainless steel with great exchange surface complete with external thermal / anticondensate insulation.

The exchanger comes complete with:

- antifreeze heater to protect the water side exchanger, preventing the formation of frost if the water temperature falls below a set value.

EXTERNAL EXCHANGER

Direct expansion finned exchanger, made from copper pipes in staggered rows and mechanically expanded to the fin collars. The fins are made from aluminium with a corrugated surface and adequately distanced to ensure the maximum heat exchange efficiency. The coils are complete with integral subcooling circuit which assures the correct refrigerant feeding of the expansion valve. This circuit prevents the formation of frost on the exchanger during winter operation. The unit is fitted as standard with coil protection grills.

FAN

PREMIUM Version Gr. 21-141 and EXCELLENCE Gr. 21-71:

Propeller fans with aluminium pressure die-cast blades, directly driven by single-phase external rotor electric motor complying with VDE 0530/12.84, complete with thermal protection, IP 54 class according to DIN 40 050 norm. The impellers are located in aerodynamically shaped nozzles to increase the efficiency and minimize the sound level, and protected by fan guards.

EXCELLENCE Version GR. 81-171:

Axial fans with sickle profile blades terminating with "Winglets", directly coupled to the electronic controlled motor (IP54), driven by the magnetic switching of the stator. The brushless technology and the special supply increase both the life expectancy and the efficiency. As a result the electric consumption is reduced up to 50%. Fans are located in aerodynamically shaped structures to increase efficiency and reduce noise level. The assembly is protected by accident prevention guards. Supplied with variable speed control.

REFRIGERANT CIRCUIT

The refrigeration circuit is complete with:

- electronic expansion valve
- inversion valve of the 4-way cycle
- filter dryer
- liquid receiver
- inlet liquid separator
- pressure probes
- low pressure safety
- high pressure safety

TRAY

Thermoformed ABS condensate collection tray fitted with drain pipe.

ELECTRICAL PANEL

The Capacity Section includes:

- fans and auxiliary circuit fuse
- compressor overload protection and timer
- isolating transformer for auxiliary circuit power supply

The control section includes:

- compressor overload protection and timer
- relay for remote cumulative fault signal
- defrosting cycle optimization
- condenser control
- Set point compensation with outdoor temperature
- double set-point management

The control keypad includes:

- Multifunction keys for ON/OFF control, cold and hot operation mode, display and alarm
- reset, daily or weekly schedule.
- Display

WATER CIRCUIT

- water side safety valve
- drain valve
- Steel mesh strainer
- flow switch (size 21-71)
- differential pressure switch (Size 81-171)

PREMIUM Version Size 21-141:

Circulator with cast-iron body and impeller, equipped with single-phase electric motor with IP44-protection complete with thermoformed insulated casing.

EXCELLENCE Version Gr. 21-121:

Circulator with cast-iron body and impeller, equipped with direct current Brushless motor with IP44-protection complete with thermoformed insulated casing.

EXCELLENCE Version Gr. 131-171:

Centrifuge electropump, with AISI-type 304 stainless steel body and impeller.

The electropump is equipped with three-phase electric motor with IP55-protection and complete with thermoformed insulated casing.

For size 131-141-151 the connections are screwed.

For size 161-171 the connections are Victaulic type.

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UNIT CONFIGURATION		Q.TY
	Unit: WSAT-XIN 71	1
R410A	Refrigerant R-410A	1
LIQ3	Fluid with ethylene glycol of 30%	1
PRM	Premium	1
400TN	Supply voltage 400/3/50+N	1
IOM11X	English Installation and Operation Manual (Accessory separately supplied)	1
HYGU	user side hydronic assembly	1
AMRX	Rubber antivibration mounts (Accessory separately supplied)	1
PGFC	finned coil protection grill	1
KSAX	100-litre circuit breaker (Accessory separately supplied)	1
		q.ty
		1

SELECTED OPERATION CONDITIONS

COOLING			SELECTED		
external exchanger air intake	°C		35.0		
internal exchanger water outlet	°C		7.00		
Max. capacity required	kW		12.0		

GENERAL			SELECTED		
glycol % internal exchanger	%		30.0		
SOUND PRESSURE LEVEL AT DISTANCE			SELECTED		
Distance from unit	m		1.00		

THE TECHNICAL DATA ARE APPROXIMATE AND MAY BE MODIFIED BY THE MANUFACTURER WITH NO REQUIREMENT FOR ADVANCE NOTICE

TECHNICAL DATA REFER TO THE TECHNICAL BULLETIN

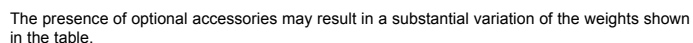
GENERAL			
COOLING			
Compressor power input	kW		4.87
Cooling capacity (EN14511:2013)	kW		13.1
Total power input (EN14511:2013)	kW		5.22
EER (EN 14511:2013)			2.50
Water flow-rate (User Side)	l/s		0.630
Useful pump discharge head	kPa		66.0
Refrigeration circuits	Nr		1.00
ESEER			4.12
WEIGHT AND DIMENSIONS			
Shipping length	mm		1130
Shipping depth	mm		460
Shipping height	mm		1364
Shipping weight	kg		177
Operating weight	kg		175
COMPRESSOR			
No. of compressors	Nr		1.00
Type of compressors			SCROLL INVERTER DC
EXTERNAL SECTION FANS			
Type of fans			AX

>>> EXTERNAL SECTION FANS			
Number of fans	Nr		2.00
Standard airflow	l/s		1996
Installed unit power	kW		0.150
INTERNAL EXCHANGER			
Water content	l		1.80
WATER CIRCUIT			
Max water side pressure	MPa		0.600
Safety valve calibration	kPa		600
F.L.A. - Pump	A		1.30
F.L.I. - Pump	kW		0.200
CONNECTIONS			
Water fittings			1" GAS F
ELECTRICAL DATA			
F.L.A. - FULL LOAD CURRENT AT MAX ADMISSIBLE CONDITIONS			
F.L.A. - Total	A		13.4
F.L.I. - FULL LOAD POWER INPUT AT MAX ADMISSIBLE CONDITIONS			
F.L.I. - Total	kW		6.20
M.I.C. MAXIMUM INRUSH CURRENT			
M.I.C. - Value	A		13.4

SOUND LEVELS

Sound power level (dB)								Sound pressure level	Sound power level
Octave band (Hz)									
63	125	250	500	1000	2000	4000	8000	dB(A)	dB(A)
77.0	71.0	69.0	67.0	63.0	59.0	50.0	40.0	54.0	69.0

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<i>DIMENSIONS (mm)</i>		
A - Length	B - Width	C - Height
1087	445	1234
<i>WEIGHT DISTRIBUTION (Kg)</i>		
Shipping weight	Operating weight	
177	175	