

Condensing unit

Cooling only Air cooled Outdoor installation

Capacity from 90 to 174 kW



The **MSAT** air-cooled condensing units have been designed for outdoor installation and for best energy efficiency in relation to reduced size. The compressors are of the hermetic Scroll type.

They are fitted with an innovative microprocessor control for regulating and optimising all unit functions, thereby increasing the energy efficiency.

An enamelled, hot-galvanised sheet metal load-bearing frame with prepainted aluminium outer panelling ensures maximum resistance to weathering. The base, made from painted galvanised metal sections with holes to facilitate lifting and earthing the unit, guarantees even weight distribution.

All the units are factory assembled and tested and ready for operation after connection, with consequent substantial reduction in installation costs.

functions and features



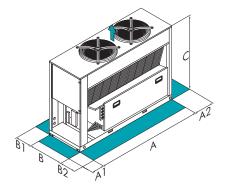






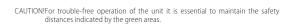


dimensions and clearances



Size – MSAT			292	323	404	464	524	564	604
A - Length mm		3250	3250	3250	3250	3250	3250	3250	
B - Width mm		1095	1095	1095	1095	1095	1095	1095	
C-Height		mm	2030	2030	2030	2030	2030	2030	2030
A1 mm		1500	1500	1500	1500	1500	1500	1500	
A2 mm		900	900	900	900	900	900	900	
B1 mn		mm	1500	1500	1500	1500	1500	1500	1500
B2		mm	1500	1500	1500	1500	1500	1500	1500
ST	Operating weight	kg	1225	1336	1486	1511	1534	1577	1612
LN	Operating weight	kg	1256	1367	1516	1544	1565	1607	1644

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.
ST Standard (ST)
LN Low noise (LN)





versions and configurations

VOLTAGE:

Supply voltage 400/3/50 without neutral (Standard) → 400T

ENERGY RECOVERY:

Energy recovery: not required (Standard)

٠D Partial energy recovery ▶ R Total energy recovery

ACOUSTIC CONFIGURATION:

Standard acoustic configuration (Standard) Low noise acoustic configuration → ST → LN

technical data

Size – MSAT	292	323	404	464	524	564	604		
▶ Cooling capacity	(1)	kW	90,1	106	121	137	152	162	174
Compressor power input		kW	25,9	29,2	32,6	38,9	45,4	49,6	53,3
Total power input	(2)	kW	30,4	33,7	39,1	45,4	51,9	56,2	59,9
Refrigeration circuits		Nr	2	2	2	2	2	2	2
No. of compressors		Nr	2	3	4	4	4	4	4
Type of compressors	(3)	-	scroll						
Sound pressure level	(4)	dB(A)	72	74	76	77	77	77	77

Notes

Data referred to the following conditions: Saturated suction temperature (SST) = 9.5 °C (Dew (1)

Point); Outdoor air temperature 35°C

Total absorbed power is given by the compressor absorbed power + fan absorbed power + auxiliary circuit absorbed power.

SCROLL = scroll compressor

(3)

The sound levels refer to the unit at full load, in the rated test conditions. The sound pressure level refers to a distance of 1m from the external surface of the units operating in an open field. Data referred to the following conditions: Saturated suction temperature (SST) = 9.5 °C (Dew Point); Outdoor air temperature 35°C

accessories

→ CCCA Copper / aluminium condenser coil with acrylic lining CCCA1 Condenser coil with Energy Guard DCC Aluminum

AMMX Spring antivibration mounts **PGFC** Finned coil protection grill ▶ PM Phase monitor

■ → RCMRX Remote control via microprocessor control **→ CMPB** Serial communication module to PC or BMS **PFCP** Power factor correction capacitors (cosfi > 0.9)

→ CBS Overload circuit breakers

■ → HGBPX Hot gas by pass (supplied separately)

■ > KCX Connection set

Key to symbols and notes

Accessories separately supplied

 $For compatibility \ between \ the \ various \ accessories, \ please \ refer \ to \ the \ dedicated \ Technical \ Bulletin \ or \ our \ website \ in \ the \ Systems \ and \ Products \ section.$