



ME

151 - 1202

UNIT DESCRIPTION

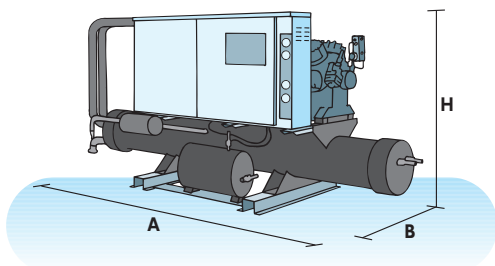
This series works with **refrigerant R407c**. This is a refrigerant fluid which ensures certain advantages from the ecological point of view as it does not contain chlorine and has a very low O.D.P. value. Compared with other chiller systems, the possibility offered by the ME series is to split the condensing part, normally air-cooled, from the evaporating part. It is a series of medium-size units that are very well suited to civil air conditioning plants in particular, as the ME unit can be installed in a restricted space and connected to the externally positioned condenser section. This system layout also means that noise levels can be kept down. It is also useful should water shortages arise, as it can be used to replace existing water/water units without the need for modifications to the user's system, since all that is required for this changeover is the connection of the freon circuit and electrical supply to the remote condenser.

STANDARD UNIT COMPOSITION

- Supporting structure made of galvanized epoxy powder coated steel with high tickness.
- Reciprocating semi-hermetic compressors.
- Thermally insulated shell and tube type evaporator.
- Liquid receiver complete with stopvalve.
- Expansion valves. Dryer filters. Sight glass.
- Electrical power and control panel complying with EN 60204-1/IEC 204-1 standards and interlock door mains isolator.
- Microprocessor control system.
- Non-freezing oil charge.
- Refrigerant charge.
- General testing and operational test carried out in the factory in accordance with European Standard EN 12055.



MODELS		151	201	251	301	302	351	401	402	501	502	601	602	702	802	1002	1202	
ME																		
Cooling capacity	① kW	39	51	64	74	82	94	110	103	129	128	152	149	185	223	261	314	
Power input	① kW	10	11	14	17	20	22	26	22	30	29	37	35	44	53	61	74	
Remote Condenser heat	① kW	49	62	78	91	102	116	136	125	159	157	189	184	229	276	322	388	
LIQUID RECEIVER																		
Liquid receiver capacity	n°x lt.	1x10	1x10	1x10	1x10	2x10	1x22	1x22	2x10	1x22	2x10	1x22	2x10	2x22	2x22	2x22	2x22	
OPERATING WEIGHT																		
ME	Kg.	449	469	479	524	752	564	593	780	724	840	753	900	1035	1085	1298	1410	
DIMENSIONS																		
A	② mm	2065	2065	2065	2065	2370	2070	2070	2070	2370	2370	2370	2370	2220	2220	2520	2920	
B	② mm	700	700	700	700	930	700	700	930	700	930	700	930	930	930	930	9300	
H	mm	1020	1020	1020	1020	1100	1100	1140	1150	1180	1150	1180	1150	1200	1200	1230	1230	



① **Data referred to:**
 Chilled water 12/7 °C
 Condensing temperature +47 °C

② **Free areas required:**
 Evaporate water connection side 500/620 mm
 Compressor discharge connections side 500/2200 mm
 Opposite side to compressor discharge connections 500 mm
 Electrical panel side

MAIN FUNCTIONS OF THE CVM CONTROLS

	20	300	300	20	
Voltage and frequency supply control	-	•	•	•	Compressor working hours balance system
Missing external consens led signal	•	•	•	•	Part-winding compressor start
Remote on/off by external volt-free contact	Opt.	Opt.	•	•	Pump-down when stopped
Cumulative fault warning alarm	•	•	•	•	Pump-down on starting
Evaporator inlet/outlet water temperature display	•	•	•	•	Led display of interface board correct operation
Compressor/circuit failure signal	•	•	•	•	Auto-diagnostic of the electrical part
Unit general-alarm signal	•	•	Par.	-	CVM-Master connection
Print-out of the temperature and pressure values (if any)	•	•	Par.	-	CVM-Interface connection
Configuration parameters print-out	•	•	Opt.	-	Landis Staefa communication gateway
Historical alarms and events memory and print-out	25	200	Par.	-	Johnson Controls communication gateway
Propor. regulating algorithm on the inlet water temp.	•	•	•	-	Communication protocol
Proportional+Integral regulating algorithm	Par.	Par.			
Compressors start sequence at unit start-up	-	Par.			
Delayed compressor start	•	•			
Compressor start per hour and restarting time control	•	•			
Compressor working-hours control and display	•	•			

ME and MED with CVM 20; MER with CVM 300
 •: standard
 -: not available
 Opt.: available upon request
 Par.: available modifying a value of the configuration parameters