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ductable water chiller and heat pump **MCC**

The series MCC of the air cooled water chillers and heating pumps has been designed for indoor installation, for residential and commercial applications, when duct connection is required.

The series MCC has been designed and developed with the 410 A refrigerant, in fact the unit reaches excellent level of energetic efficiency thanks to the optimization of the heat exchangers in the type of plates and the distribution of the refrigerant.

The logic of the PLUG&PLAY on the hydraulic side- already present (DNA) in all our water chillers models - here is going alongside with the PLUG&PLAY on the fans group : Auto - adaptive control of the air flow and the constant fan speed modulations (condensation control on pressure basis) reduces the installation costs and timing.

> **PLUG&PLAY ON AIR SIDE:**
Autoadatptive air flow depending on:
- pressure drop on air side
- inlet air temperature

All units comes with modulating continuous fan speed control that adjust the rpm of the motor depending on the air temperature and air pressure drop, using a cutting-phase device.
Air outlet can be vertical or horizzontal (optional).

> **HYDRAULIC PLUG&PLAY**
3 different hydraulic kits are available to enable an easy installation of MCC units in the cooling and heating system:
- B version: standar unit with evaporator
- P version: unit with evaporator, pump and expansion vessel
- S version: unit with evaporator, pump, expansion vessel and water tank

> **SIMPLIFIED MAINTENANCE**
Centrifugal fans are directly coupled to the eletric motor without using pulley and belt system.
The compressor and technical compartment is completly separated from the fan compartment in order to perform check operation while the unit is operating .
Easily accessible electronic microprocessor control.

> **ELECTRONIC MICROPROCESSOR CONTRO PANEL**

Brand new technology, it allows the connection with ERGO

Adjustable set-point thanks to an outdoor temperature probe (optional).

The range is madde of 10 models cooling only, cwith cooling capacities from 6 to 37 kW and 10 models heat pump operation with heating capacity from 6 to 41 kW.
To simplify the way of making the order, Galletti offers 3 different solutions of hydraulic kit built in the unit, for only cooling only and heating pumps units.

WATER CHILLER

MCC..CB	basic unit (only evaporator)
MCC..CP	unit with pump and expansion vessel
MCC..CS	unit with buffer tank ,pump and expansion vessel

HEAT PUMP

MCC..HB	basic unit (only evaporator)
MCC..HP	unit with pump and expansion vessel
MCC..HS	unit with buffer tank ,pump and expansion vessel

MCC > TECH. INFO

MCC RATED TECHNICAL DATA*

MCC		06M	06	07M	07	09M	09	12	15	18	22	25	33	37
Power supply	V-Hz	230/1/50	400/3/50	230/1/50	400/3/50	230/1/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
COOLING ONLY MODELS														
Cooling capacity	**kW**	**5,7**	**5,7**	**6,9**	**6,95**	**9,2**	**9,25**	**12**	**14,6**	**18**	**22,3**	**25,5**	**33,1**	**36,7**
Water flow	l/h	980	980	1187	1195	1582	1591	2064	2511	3095	3835	4385	5692	6311
Water pressure drop	kPa	4	4	4	4	35	35	39	56	38	45	47	41	38
Pump available head	kPa	55	55	52	52	130	130	120	120	110	125	98	95	97
Power input (CB)	kW	2,61	2,58	3,17	3,03	4,81	4,61	5,70	6,40	7,50	8,95	12,1	14,9	16,3
EER cycle	W/W	3,03	3,08	2,83	3,02	3,16	3,41	3,16	3,24	3,27	3,21	3,07	3,04	2,98
EER fan included (CB)	W/W	2,18	2,21	2,18	2,29	2,19	2,31	2,35	2,52	2,40	2,49	2,34	2,22	2,25
Power input (CP-CS)	kW	2,75	2,72	3,31	3,17	5,18	4,98	6,07	6,77	7,87	9,32	12,65	15,45	16,85
HEAT PUMP MODELS														
Heating capacity	kW	6,4	6,4	7,75	7,65	10,2	9,95	13,1	15,5	19,2	23,8	28,2	36,4	40,6
Cooling capacity	kW	5,6	5,6	6,75	6,8	9,0	9,1	11,7	14,3	17,6	21,8	25,0	32,4	65,9
Water flow (heating)	l/h	1101	1101	1333	1316	1754	1711	2253	2665	3302	4093	4849	6259	6982
Water pressure drop (heating)	kPa	5	5	5	5	42	42	46	63	44	51	58	48	46
Pump available head (heating)	kPa	53	53	50	50	125	125	120	100	110	98	85	83	90
Power input (HB)	kW	2,86	2,94	3,38	3,23	5,20	4,90	6,10	6,72	7,75	9,20	12,3	15,2	16,7
COP cycle	W/W	3,00	2,90	2,92	3,06	3,09	3,32	3,12	3,22	3,34	3,31	3,32	3,25	3,19
COP fan included (HB)	W/W	2,24	2,18	2,29	2,37	2,22	2,31	2,38	2,53	2,48	2,59	2,54	2,39	2,43
Power input (HP - HS)	kW	3,00	3,08	3,52	3,37	5,57	5,27	6,47	7,09	8,12	9,57	12,85	15,75	17,25
GENERAL														
Centrifugal fans number		1	1	1	1	1	1	1	1	1	1	2	2	2
Rated air flow	m^3/h	2500	2500	2500	2500	5500	5500	5500	5500	6500	6500	11000	13000	13000
Available static pressure (rated A.F.)	Pa	91	91	85	85	140	135	130	120	120	110	125	95	90
Water content (without tank)	dm^3	2,5	2,5	2,7	2,7	3,3	3,3	3,5	4,1	4,4	5	6,1	7,3	7,8
Expansion tank	dm^3	1	1	1	1	5	5	5	5	5	5	8	8	8
Water tank	dm^3	20	20	20	20	36	36	36	36	96	96	155	155	155
Water connections	inches	1"	1"	1"	1"	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4	1"1/4
Dimension - Height	mm	1000	1000	1000	1000	1160	1160	1160	1160	1210	1210	1400	1400	1400
Dimensioni - Legnht	mm	1050	1050	1050	1050	1250	1250	1250	1250	1650	1650	2250	2250	2250
Dimensioni - Width	mm	600	600	600	600	730	730	730	730	800	800	800	800	800
Operation weight	kg	173	173	183	183	260	260	265	270	388	436	601	627	638
Total sound power	dB A	70	70	70	70	78	78	78	78	79	79	80	82	82

Heating capacity: outdoor air temperature 7°C dry bulb and 6.2°C wet bulb, water temperature 40°C/45°C

- Sound power level measured according to standards ISO 3741 - ISO 3744 and EN 29614-1
- Sound pressure level calculated with directional factor equal to 2 .

* PRELIMINARY DATA. In view of the improvement of the product, Galletti S.p.A. reserve the right to introduce changes either to technical data without and prior notice.

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