

7 GENERAL TECHNICAL DATA

Data Book

DB_ME_MECH-iB-G07 15Y - 40Y_062024_EN R32

[SI System]

MECH-IB-G07			15Y	18Y	23Y	27Y	35Y	40Y
Power supply			V/ph/Hz					
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
Cooling capacity	(1)	kW	14,93	17,79	21,03	27,73	32,51	38,19
Total power input	(1)	kW	4,825	5,232	6,504	8,415	9,902	11,88
EER	(1)	kW/kW	3,085	3,403	3,231	3,290	3,283	3,210
COOLING ONLY (EN14511 VALUE)								
Cooling capacity	(1)(4)	kW	15,00	17,90	21,10	27,80	32,70	38,40
EER	(1)(4)	kW/kW	3,100	3,400	3,250	3,310	3,300	3,230
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN COOLING								
Water flow	(1)	l/s	0,714	0,851	1,005	1,326	1,554	1,827
Pressure drop at the heat exchanger	(1)(4)	kPa	15,2	21,6	15,1	20,5	25,1	23,8
PERFORMANCE								
COOLING ONLY (GROSS VALUE)								
16°C/10°C								
Cooling capacity	(2)	kW	16,28	19,36	22,90	30,30	35,50	41,58
Total power input	(2)	kW	4,894	5,319	6,612	8,526	10,05	12,12
EER	(2)	kW/kW	3,333	3,647	3,464	3,552	3,515	3,438
23°C/15°C								
Cooling capacity	(3)	kW	18,54	21,97	26,02	34,60	40,49	47,21
Total power input	(3)	kW	4,962	5,414	6,736	8,640	10,22	12,42
EER	(3)	kW/kW	3,730	4,067	3,858	4,005	3,971	3,806
EXCHANGERS								
16°C/10°C								
Water flow	(2)	l/s	0,649	0,772	0,913	1,209	1,416	1,658
Pressure drop at the heat exchanger	(2)	kPa	12,6	17,8	12,4	17,0	20,8	19,6
23°C/15°C								
Water flow	(3)	l/s	0,555	0,658	0,780	1,037	1,213	1,414
Pressure drop at the heat exchanger	(3)	kPa	9,19	12,9	9,06	12,5	15,3	14,3
REFRIGERANT CIRCUIT								
Compressors nr.		N°	1	1	1	1	1	1
Number of capacity steps		N°	0	0	0	0	0	0
No. Circuits		N°	1	1	1	1	1	1
Regulation		STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS STEPLESS						
Min. capacity step		%	32	34	29	30	26	26
Refrigerant		R32	R32	R32	R32	R32	R32	
Theoretical refrigerant charge		kg	2,10	2,83	3,60	4,74	5,67	6,00
Oil charge		kg	1,00	1,00	1,00	2,30	2,30	2,30
Rc (ASHRAE)	(5)	kg/kW	0,14	0,16	0,17	0,17	0,18	0,16
FANS								
Quantity		N°	2	2	1	2	2	2
Air flow		m³/s	1,84	1,95	2,34	4,52	4,35	4,75
Total fans power input		kW	0,22	0,22	0,39	0,78	0,78	0,78
NOISE LEVEL								
Total sound Pressure	(6)	dB(A)	39	40	45	46	47	48
Total sound power level in cooling	(7)(8)	dB(A)	70	71	76	78	79	80
SIZE AND WEIGHT								
A	(9)	mm	900	900	1450	1450	1450	1700
B	(9)	mm	420	420	550	550	550	650
H	(9)	mm	1390	1390	1200	1700	1700	1700
Operating weight	(9)	kg	144	155	207	256	272	306

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12,00°C/7,00°C; Source (side) heat exchanger air (in) 35,0°C.
 2 Plant (side) cooling exchanger water (in/out) 16,00°C/10,00°C; Source (side) heat exchanger air (in) 35,0°C.
 3 Plant (side) cooling exchanger water (in/out) 23,00°C/15,00°C; Source (side) heat exchanger air (in) 35,0°C.
 4 Values in compliance with EN14511

- 5 Rated in accordance with AHRI Standard 550/590.
 6 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 7 Sound power on the basis of measurements taken in compliance with ISO 9614.
 8 Sound power level in cooling, outdoors.
 9 Unit in standard configuration, without optional accessories.
 - Not available
 Data certified in EUROVENT

8 TECHNICAL DATA SEASONAL EFFICIENCY IN COOLING (EN14825 VALUE)

Data Book
DB_ME_MECH-iB-G07 15Y - 40Y_062024_EN R32

[SI System]

ENERGY EFFICIENCY

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) Ambient refrigeration

MECH-iB-G07			15Y	18Y	23Y	27Y	35Y	40Y				
Prated,c	(1)	kW	15,0	17,9	21,1	27,8	32,7	38,4				
SEER	(1) (2)	-	5,23	5,40	5,66	5,39	5,46	5,24				
Performance η_s	(1) (3)	%	206,0	213,0	223,0	212,0	215,0	207,0				

Notes:

(1) Parameter calculated according to [REGULATION (EU) N. 2016/2281]

(2) Seasonal energy efficiency ratio

(3) Seasonal space cooling energy efficiency

The units highlighted in this publication contain R32 [GWP₁₀₀ 677] fluorinated greenhouse gases.

Data certified in EUROVENT

ENERGY EFFICIENCY

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2016/2281) High temperature process cooling

MECH-iB-G07			15Y	18Y	23Y	27Y	35Y	40Y				
Prated,c	(1)	kW	15,00	17,89	21,10	27,80	32,67	38,36				
SEPR HT	(1) (3)	-	7,52	7,91	7,85	7,34	7,72	6,84				

SEASONAL EFFICIENCY IN COOLING (Reg. EU 2015/1095) Process refrigeration at medium temperature

MECH-iB-G07			15Y	18Y	23Y	27Y	35Y	40Y				
Prated,c	(2)	kW	8,02	9,66	11,30	14,69	17,27	20,70				
SEPR MT	(2) (3)	-	4,06	4,34	4,30	3,83	4,10	4,22				

Notes:

(1) Seasonal energy efficiency of high temperature process cooling [REGULATION (EU) N. 2016/2281]

(2) Seasonal Energy Efficiency of Process Cooling at Medium Temperature [REGULATION (EU) N. 2015/1095]

(3) Seasonal energy efficiency ratio

The units highlighted in this publication contain R32 [GWP₁₀₀ 677] fluorinated greenhouse gases.