

Procedure For Selecting Models And Calculating Capacity - Sanyo SPW- CR365GXH56 Technical Data Manual

Mini eco-i system

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68

69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118

119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168

169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218

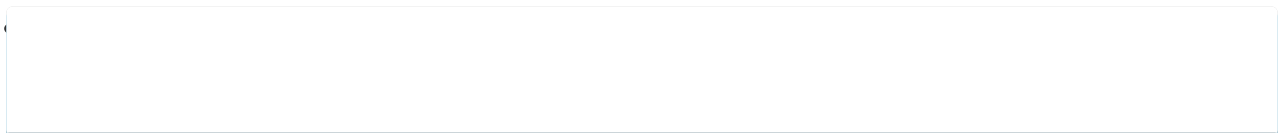
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268

269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318

319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345

Table Of Contents

346



•

[Table of Contents](#)

-

Troubleshooting

•

Bookmarks



1. Model Selecting and Capacity Calculator

1-2. Procedure for Selecting Models and Calculating Capacity

I Model Selection Procedure

Select the model and calculate the capacity for each refrigerant system according to the procedure shown below.

Calculation of the indoor air-conditioning load

Selection of an air conditioning system

Design of the control system

Preliminary selection of indoor and outdoor units

Check of the tubing length and elevation difference

Calculation of the corrected outdoor unit capacity

Calculation of the corrected capacity for each indoor unit

Calculation of the actual capacity for each indoor unit

Recheck of the actual capacity for each indoor unit

Design of tubing

Calculation of additional refrigerant charge amount

Design of electrical wiring capacity

G

Calculate the maximum air-conditioning load for each room or zone.

G

Select the ideal air conditioning system for air conditioning of each room or zone.

G

Design a suitable control system for the selected air conditioning system.

G

Make preliminary selections that are within the allowable range for the system.

G

Check that the length of refrigerant tubing and the elevation difference are within the allowable ranges. 2-4, 2-15 - 2-16

G

Capacity correction coefficient for outdoor temperature conditions2-4, 2-6 - 2-7

G

Capacity correction coefficient for tubing length and elevation difference 2-4, 2-8

G

Heating capacity correction coefficient for frosting/defrosting2-4, 2-7

G

Capacity correction coefficient for indoor temperature conditions2-4, 2-8

G

Capacity distribution ratio based on the tubing length and elevation difference....2-4, 2-15 - 2-16

G

Calculate the corrected indoor/outdoor capacity ratio, based on the corrected outdoor unit capacity and the total corrected capacity of all indoor units in the same system. Use the result to calculate the capacity correction coefficient for the indoor units.2-4 - 2-8

G

Multiply the corrected capacity of each indoor unit by the capacity correction coefficient to calculate the actual capacity for each indoor unit. 2-6

G

If the capacity is inadequate, reexamine the unit combinations.

Example 1: Increasing the outdoor unit capacity 2-17 - 2-18

Example 2: Increasing the indoor unit capacity 2-17 - 2-18

G

Create a tubing design which minimizes the amount of additional refrigerant charge as much as possible.2-14 - 2-15

G

If tubing extension is expected in the future, create the tubing design with adequate consideration for this extension.

G

Select the tubing size for the main tube (LA) up to the No. 1 distribution joint based on the rated cooling capacity of the outdoor unit. Select tubing sizes after the distribution point based on the total rated cooling capacity of the connected indoor units.

G

Calculate the additional refrigerant charge from the diameters and lengths of the refrigerant tubing. Even if the gas tubing diameter was increased, determine the additional refrigerant charge based only on the liquid tubing size. 2-21

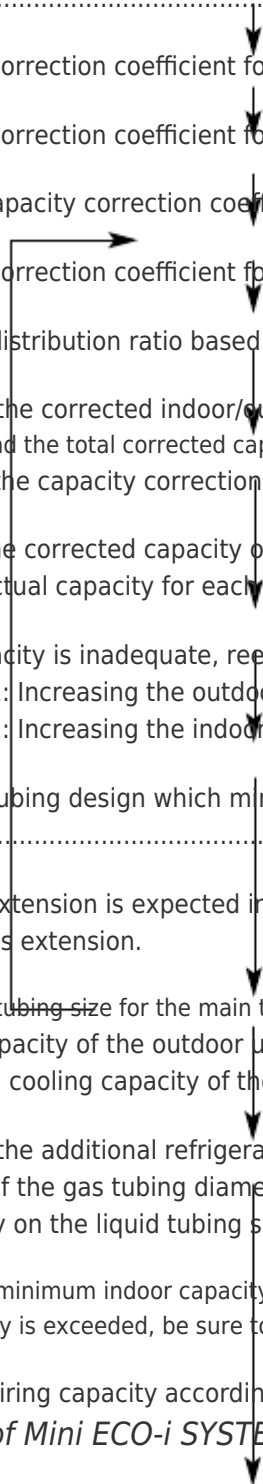
G

Check the minimum indoor capacity (limit density) with respect to the amount of refrigerant. If the limit density is exceeded, be sure to install ventilation equipment or take other corrective steps. 2-22

G

Select a wiring capacity according to the method of power supply. 2-32

Design of Mini ECO-i SYSTEM



[Table of Contents](#)

[Previous Page](#)
[Next Page](#)

1
...
8
9
10
11
12
13
14
15

Quick Links:

[Technical Data](#)

[Outdoor Units](#)

Troubleshooting

[I Troubleshooting 124](#)

[I Troubleshooting 136](#)

Related Manuals for Sanyo SPW-CR365GXH56

[Air Conditioner Sanyo Mini ECO-i SPW-ASR74GXH56\(A/B\) Installation Instructions Manual](#)

System air conditioner (49 pages)

[Air Conditioner Sanyo MINI ECO-i SPW-CR365GXH56B Service Manual](#)

(252 pages)

[Air Conditioner Sanyo SPW-X253G56 Service Manual](#)

Split system (72 pages)

[Air Conditioner Sanyo 2-WAY ECO-i SPW-C0705DXHN8 Service Manual](#)

Multi system (143 pages)

[Air Conditioner Sanyo SPW-C1155DXHN8 Technical Data & Service Manual](#)

2-way eco-i multi system (242 pages)

[Air Conditioner Sanyo SPW-X253GH56 Service Manual](#)

Split system (105 pages)

[Air Conditioner Sanyo SPW-U253GH56 Service Manual](#)

Split system air conditioner (108 pages)

[Air Conditioner Sanyo SPW-D253GH56 Service Manual](#)

Split system (108 pages)

[Air Conditioner Sanyo SPW-C0705DZH8 Technical Data Manual](#)

3-way eco-i multi system 5 series (703 pages)

[Air Conditioner Sanyo SPW-C483GYH8 Service Manual](#)

Eco multi system (235 pages)

[Air Conditioner Sanyo SPW-C256VH Technical Data & Service Manual](#)

4-way air discharge semi-concealed wall-mounted ceiling-mounted concealed-duct (517 pages)

[Air Conditioner Sanyo SPW-CR1503GDYH8 Technical Data & Service Manual](#)

W-eco multi system series (377 pages)

[Air Conditioner Sanyo SPW-FTR124EH56 Installation And Operation Manual](#)

Dc inverter air conditioner for refrigerant r410a (32 pages)

[Air Conditioner Sanyo Big PACi 18 Series Technical Data & Service Manual](#)

Big pack i dc inverter (275 pages)

[Air Conditioner Sanyo SPW-CR363GVH8 Service Manual](#)

(262 pages)

[Air Conditioner Sanyo SPW-XR253GH56 Technical Data & Service Manual](#)

(223 pages)

Related Content for Sanyo SPW-CR365GXH56

[SA-99G Cooling Capacity](#)

Sanyo SA-99G

[XM18AAB New Refrigerant R410A Cannot Be Used For Earlier Models](#)

Sanyo XM18AAB

[SAP-K71GH Cooling Capacity](#)

Sanyo SAP-K71GH

[CM2472 Cooling Capacity](#)

Sanyo CM2472

[SAP-K71GJA-S Cooling Capacity](#)

Sanyo SAP-K71GJA-S

[Mini ECO-i SPW-ASR74GXH56\(A/B\) Selecting The Installation Site](#)

Sanyo Mini ECO-i SPW-ASR74GXH56(A/B)

[SA-58S5 Cooling Capacity](#)

Sanyo SA-58S5

[SPW-C0705DZH8 Procedure For Selecting Models And Calculating Capacity](#)

Sanyo SPW-C0705DZH8

This manual is also suitable for:

[Spw-cr485gxh56Spw-cr605gx56Spw-cr605gxh56Spw-cr365gxh8Spw-cr485g xh8Spw-cr605gxh8](#) ... [Show all](#)

[Save PDF](#)