

RC Technical Documentation
i-FR-Q2-G05-Z_0502_1102_201811_EN

REGULATION (EU) N. 2016/2281 FOR HIGH TEMPERATURE PROCESS CHILLERS

Ecodesign requirements for process chillers

MULTIFUNCTION UNITS AIR SOURCE

i-FR-Q2-G05-Z 0502 - 1102

Cooling Capacity Range 570 - 982 [kW] - (EN14511 VALUE)
Nominal Cooling Capacity at TdesignC Range 570 - 982 [kW]

EN



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1. REGULATION (EU) N. 2016/2281 FOR HIGH TEMPERATURE PROCESS CHILLERS

1.1 Scope of the document

This document is compliant with the Commission Regulation (EU) N. 2016/2281 regarding "REQUIREMENTS FOR PRODUCT INFORMATION" (Annex II, Point 5). In particular, it deals with high temperature process chillers and contains information required by Table 15 of the above-mentioned regulation, which is entitled "Information requirements for high temperature process chillers".

1.2 REGULATION (UE) N. 2016/2281 description

The COMMISSION REGULATION (EU) N. 2016/2281 of 30 November 2016, implementing Directive 2009/125/EC of the European Parliament and of the Council, establishes eco-design requirements for the placing on the market and/or putting into service of: air heating products with a rated heating capacity which does not exceed 1MW, cooling products and high temperature process chillers with a rated cooling capacity which do not exceed 2 MW, and all fan coil units. All these energy-related products are defined in Article 2 of the Regulation in question.

1.3 Description of the data declared by Mitsubishi Electric Hydronics & IT Cooling Systems

- High temperature process chiller: a product designed to cool down and continuously maintain the temperature of a liquid to provide cooling to a refrigerated appliance or system, whose aim is not to provide cooling for the thermal comfort of human beings. It is capable of delivering its rated refrigeration capacity at an indoor side heat exchanger outlet temperature of 7°C, at standard rating conditions.
- Rated refrigeration capacity (P): the refrigeration capacity that the high temperature process chiller is able to reach when operating at full load at a specific rating point, expressed in kW.
- Seasonal Energy Performance Ratio (SEPR): the efficiency ratio of a high temperature process chiller at standard rating conditions, representative of the variations in load and ambient temperature throughout the year, and calculated as the ratio between the annual refrigeration demand and the annual electricity consumption.
- Annual electricity consumption: result of the sum of the ratios between each bin-specific cooling demand and the corresponding bin-specific energy efficiency ratio, multiplied by the corresponding number of bin hours.
- Degradation coefficient for chillers: measure of efficiency loss due to cycling of the chiller.
- Capacity control: the ability of a chiller to change its cooling capacity by changing the volumetric flow rate of at least one of the fluids needed to operate the refrigeration cycle.
- Global warming potential (GWP) of the refrigerant: the 100-year climatic warming potential of one kilogram of a greenhouse gas relative to one kilogram of dioxide (CO₂).

2. RC CONTENTS UNIT

2.1 Table index

MULTIFUNCTION UNITS AIR SOURCE

i-FR-Q2-G05-Z 0502 - 1102

Cooling Capacity Range 570 - 982 [kW]

Nominal Cooling Capacity at TdesignC Range 570 - 982 [kW]

Units	Version	Size					Pag.
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i-FR-Q2-G05-Z	SL-CA	0652	0702	0802	0902	1002	10
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i-FR-Q2-G05-Z /CA /0652			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,21
Annual electricity consumption	Q	[kWh]	895476
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	624,80
Rated power input	D _A	[kW]	209,00
Rated energy efficiency ratio	EER _{DC,A}		2,99
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	583,15
Rated power input	D _B	[kW]	137,40
Declared energy efficiency ratio	EER _{DC,B}		4,25
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	541,49
Rated power input	D _C	[kW]	102,90
Declared energy efficiency ratio	EER _{DC,C}		5,26
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	499,84
Rated power input	D _D	[kW]	90,00
Declared energy efficiency ratio	EER _{DC,D}		5,56
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /CA /0702			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,21
Annual electricity consumption	Q	[kWh]	987446
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	686,60
Rated power input	D _A	[kW]	230,40
Rated energy efficiency ratio	EER _{DC,A}		2,98
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	640,83
Rated power input	D _B	[kW]	152,80
Declared energy efficiency ratio	EER _{DC,B}		4,20
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	595,05
Rated power input	D _C	[kW]	113,60
Declared energy efficiency ratio	EER _{DC,C}		5,24
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	549,28
Rated power input	D _D	[kW]	98,90
Declared energy efficiency ratio	EER _{DC,D}		5,56
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /CA /0802			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,66
Annual electricity consumption	Q	[kWh]	1061345
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	785,59
Rated power input	D _A	[kW]	263,60
Rated energy efficiency ratio	EER _{DC,A}		2,98
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	733,23
Rated power input	D _B	[kW]	168,10
Declared energy efficiency ratio	EER _{DC,B}		4,36
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	680,85
Rated power input	D _C	[kW]	121,50
Declared energy efficiency ratio	EER _{DC,C}		5,60
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	628,48
Rated power input	D _D	[kW]	105,30
Declared energy efficiency ratio	EER _{DC,D}		5,97
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /CA /0902			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,08
Annual electricity consumption	Q	[kWh]	1347093
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	912,30
Rated power input	D _A	[kW]	302,10
Rated energy efficiency ratio	EER _{DC,A}		3,02
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	851,48
Rated power input	D _B	[kW]	201,80
Declared energy efficiency ratio	EER _{DC,B}		4,22
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	790,66
Rated power input	D _C	[kW]	153,80
Declared energy efficiency ratio	EER _{DC,C}		5,14
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	729,84
Rated power input	D _D	[kW]	137,40
Declared energy efficiency ratio	EER _{DC,D}		5,31
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /CA /1002			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,00
Annual electricity consumption	Q	[kWh]	1457281
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	982,27
Rated power input	D _A	[kW]	327,40
Rated energy efficiency ratio	EER _{DC,A}		3,00
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	916,81
Rated power input	D _B	[kW]	220,40
Declared energy efficiency ratio	EER _{DC,B}		4,16
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	851,33
Rated power input	D _C	[kW]	166,70
Declared energy efficiency ratio	EER _{DC,C}		5,11
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	785,84
Rated power input	D _D	[kW]	148,10
Declared energy efficiency ratio	EER _{DC,D}		5,31
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /SL-CA /0652			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,25
Annual electricity consumption	Q	[kWh]	858429
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	602,30
Rated power input	D _A	[kW]	206,30
Rated energy efficiency ratio	EER _{DC,A}		2,92
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	562,15
Rated power input	D _B	[kW]	132,40
Declared energy efficiency ratio	EER _{DC,B}		4,25
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	521,99
Rated power input	D _C	[kW]	98,10
Declared energy efficiency ratio	EER _{DC,C}		5,32
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	481,84
Rated power input	D _D	[kW]	86,40
Declared energy efficiency ratio	EER _{DC,D}		5,58
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /SL-CA /0702			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,20
Annual electricity consumption	Q	[kWh]	944243
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	662,80
Rated power input	D _A	[kW]	226,20
Rated energy efficiency ratio	EER _{DC,A}		2,93
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	618,61
Rated power input	D _B	[kW]	146,60
Declared energy efficiency ratio	EER _{DC,B}		4,22
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	574,43
Rated power input	D _C	[kW]	107,80
Declared energy efficiency ratio	EER _{DC,C}		5,33
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	530,24
Rated power input	D _D	[kW]	94,90
Declared energy efficiency ratio	EER _{DC,D}		5,59
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /SL-CA /0802			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,40
Annual electricity consumption	Q	[kWh]	1081144
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	763,90
Rated power input	D _A	[kW]	263,40
Rated energy efficiency ratio	EER _{DC,A}		2,90
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	712,97
Rated power input	D _B	[kW]	170,70
Declared energy efficiency ratio	EER _{DC,B}		4,18
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	662,05
Rated power input	D _C	[kW]	124,60
Declared energy efficiency ratio	EER _{DC,C}		5,31
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	611,12
Rated power input	D _D	[kW]	106,90
Declared energy efficiency ratio	EER _{DC,D}		5,72
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /SL-CA /0902			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,02
Annual electricity consumption	Q	[kWh]	1298184
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	878,66
Rated power input	D _A	[kW]	308,30
Rated energy efficiency ratio	EER _{DC,A}		2,85
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	820,12
Rated power input	D _B	[kW]	194,00
Declared energy efficiency ratio	EER _{DC,B}		4,23
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	761,54
Rated power input	D _C	[kW]	148,20
Declared energy efficiency ratio	EER _{DC,C}		5,14
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	702,96
Rated power input	D _D	[kW]	132,50
Declared energy efficiency ratio	EER _{DC,D}		5,31
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /SL-CA /1002			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,00
Annual electricity consumption	Q	[kWh]	1408051
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	949,10
Rated power input	D _A	[kW]	331,90
Rated energy efficiency ratio	EER _{DC,A}		2,86
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	885,83
Rated power input	D _B	[kW]	213,00
Declared energy efficiency ratio	EER _{DC,B}		4,16
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	822,55
Rated power input	D _C	[kW]	160,70
Declared energy efficiency ratio	EER _{DC,C}		5,12
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	759,28
Rated power input	D _D	[kW]	143,00
Declared energy efficiency ratio	EER _{DC,D}		5,31
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /XL-CA /0652			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,22
Annual electricity consumption	Q	[kWh]	810370
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	570,10
Rated power input	D _A	[kW]	194,60
Rated energy efficiency ratio	EER _{DC,A}		2,93
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	532,09
Rated power input	D _B	[kW]	126,60
Declared energy efficiency ratio	EER _{DC,B}		4,20
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	494,09
Rated power input	D _C	[kW]	92,50
Declared energy efficiency ratio	EER _{DC,C}		5,34
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	456,08
Rated power input	D _D	[kW]	81,10
Declared energy efficiency ratio	EER _{DC,D}		5,62
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /XL-CA /0702			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,28
Annual electricity consumption	Q	[kWh]	885796
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	630,70
Rated power input	D _A	[kW]	214,50
Rated energy efficiency ratio	EER _{DC,A}		2,94
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	588,65
Rated power input	D _B	[kW]	139,60
Declared energy efficiency ratio	EER _{DC,B}		4,22
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	546,61
Rated power input	D _C	[kW]	101,50
Declared energy efficiency ratio	EER _{DC,C}		5,39
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	504,56
Rated power input	D _D	[kW]	88,20
Declared energy efficiency ratio	EER _{DC,D}		5,72
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /XL-CA /0802			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,63
Annual electricity consumption	Q	[kWh]	962036
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	730,29
Rated power input	D _A	[kW]	251,00
Rated energy efficiency ratio	EER _{DC,A}		2,91
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	681,61
Rated power input	D _B	[kW]	160,90
Declared energy efficiency ratio	EER _{DC,B}		4,24
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	632,93
Rated power input	D _C	[kW]	110,10
Declared energy efficiency ratio	EER _{DC,C}		5,75
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	584,24
Rated power input	D _D	[kW]	93,30
Declared energy efficiency ratio	EER _{DC,D}		6,26
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

Contact details: Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A., via Caduti di Cefalonia 1 - 36061 Bassano del Grappa (VI) - Italy

i-FR-Q2-G05-Z /XL-CA /0902			
Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,00
Annual electricity consumption	Q	[kWh]	1274489
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	845,39
Rated power input	D _A	[kW]	296,60
Rated energy efficiency ratio	EER _{DC,A}		2,85
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	789,04
Rated power input	D _B	[kW]	188,60
Declared energy efficiency ratio	EER _{DC,B}		4,18
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	732,68
Rated power input	D _C	[kW]	145,70
Declared energy efficiency ratio	EER _{DC,C}		5,03
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	676,32
Rated power input	D _D	[kW]	130,30
Declared energy efficiency ratio	EER _{DC,D}		5,19
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

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Type of condensing	Air cooled / Water cooled		Air cooled
Refrigerant fluid(s)	Information to identify the refrigerant fluid(s) intended to be used with the condensing unit		-
Type	compressor driven vapour compression or sorption process		Compressor driven vapour compression
Operating temperature	t	[°C]	-
Seasonal energy performance ratio	SEPR		5,01
Annual electricity consumption	Q	[kWh]	1371827
Parameters at full load and reference ambient temperature at rating point A			
Rated refrigeration capacity	P _A	[kW]	909,80
Rated power input	D _A	[kW]	318,10
Rated energy efficiency ratio	EER _{DC,A}		2,86
Parameters at rating point B			
Rated refrigeration capacity	P _B	[kW]	849,15
Rated power input	D _B	[kW]	206,40
Declared energy efficiency ratio	EER _{DC,B}		4,11
Parameters at rating point C			
Rated refrigeration capacity	P _C	[kW]	788,49
Rated power input	D _C	[kW]	156,80
Declared energy efficiency ratio	EER _{DC,C}		5,03
Parameters at rating point D			
Rated refrigeration capacity	P _D	[kW]	727,84
Rated power input	D _D	[kW]	139,40
Declared energy efficiency ratio	EER _{DC,D}		5,22
Other items			
Capacity control	fixed/staged/variable		Variable
Degradation coefficient for chillers	C _{DC}		0,9
GWP of the refrigerant		[Kg CO ₂ eq]	631

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for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.



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