Information requirements for	comfort	chillers								
Model(s):	CSAD UiAWP 100 PS									
Outdoor side heat exchanger of chiller:		Air to water								
Indoor side heat exchanger chiller:		Water								
Type:		Compressor driven vapour compression								
Driver of compressor:		Electric motor								
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit			
Rated cooling capacity	P _{rated,c}	28.2	kW	Seasonal space cooling energy efficiency	η _{s,c}	154	%			
Declared cooling capacity for part l temperature T _j	or	Declared energy efficiency ratio for part load at given outdoor temperature T _j								
T _j = + 35 ℃	P _{dc}	28.2	kW	T _j = + 35 ℃	EERd	2.58				
T _j = + 30 ℃	P _{dc}	22.3	kW	T _j = + 30 ℃	EER_{d}	3.74				
Tj = + 25 ℃	P _{dc}	14.67	kW	T _j = + 25 ℃	EERd	5.23				
T _i = + 20 ℃	P _{dc}	8.51	kW	T _i = + 20 ℃	EERd	7.14				
Degradation co-efficient for chillers (*)	C _{dc}	0.9								
	Pov	ver cons	umption in mod	des other than 'active mode'						
Off mode	P _{OFF}	0.075	kW	Crankcase heater mode	Рск	0.075	kW			
Thermostat-off mode	P _{TO}	0.425	kW	Standby mode	P _{SB}	0.075	kW			
			Other	items						
Capacity control		variab	e	For air-to-water comfort chillers: air flow rate, outdoor measured	_	12500	m³/h			
Sound power level, indoors / outdoors	L _{WA}	-/78	dB	For water / brine-to-water chillers: Rated brine or water flow			3			
Emissions of nitrogen oxides (if applicable)	NO _x (**)		mg/kWh input GCV	rate, outdoor side heat exchanger	-		m³/h			
GWP of the refrigerant	-	2088	kg CO _{2 eq} (100 years)							
Standard rating conditions used:		Low ten	nperature applie	cation		·······				
Contact details			EUROFRED S.A. Cl. Marqués de Sentmenat, 97 - 08029 Barcelona - Spain Tel. 934 19 97 97 Fax 934 19 86 86							
(*) If C _{dc} is not determined by me (**) From 26 September 2018.	asurement			dation coefficient of chillers shall be 0						
 (*) If C_{dc} is not determined by me (**) From 26 September 2018. 	asurement	then the	e default degrad	dation coefficient of chillers shall be 0	,9.					

Model(s):			CSAD UIAWP 200 PS							
Outdoor side heat exchanger of chiller:		Air to water								
Indoor side heat exchanger chiller:		Water								
Туре:		Compressor driven vapour compression								
Driver of compressor:				Electric motor						
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit			
Rated cooling capacity	P _{rated,c}	55.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	168	%			
Declared cooling capacity for part lo temperature T _i	oad at give	en outdo	or	Declared energy efficiency ratio fo temperature T	r part load	d at given	outdoor			
$T_i = + 35 \degree$	P _{dc}	55.0	kW	$T_i = +35 $ °C	EERd	2.44				
rj = + 30 ℃	P _{dc}	43.35	kW	T _j = + 30 °C	EER_{d}	3.62				
T _j = + 25 ℃	P _{dc}	27.78	kW	T _j = + 25 ℃	EER_{d}	5.25				
T _j = + 20 ℃	P _{dc}	14.81	kW	T _j = + 20 ℃	EER_{d}	6.51				
Degradation co-efficient for chillers (*)	C _{dc}	0.9								
	Pov	ver consi	umption in mod	es other than 'active mode'						
Off mode	P _{OFF}	0.075	kW	Crankcase heater mode	P _{CK}	0.075	kW			
Thermostat-off mode	P _{TO}	0.6	kW	Standby mode	P_{SB}	0.075	kW			
			Other	items						
Capacity control		variabl	e	For air-to-water comfort chillers: air flow rate, outdoor measured	_	24000	m³/h			
Sound power level, indoors / outdoors	L _{WA}	-/87	dB	For water / brine-to-water chillers: Rated brine or water flow			m ³ /h			
Emissions of nitrogen oxides (if applicable)	NO _x (**)		mg/kWh input GCV	rate, outdoor side heat exchanger	-		111 /11			
GWP of the refrigerant	-	2088	kg CO _{2 eq} (100 years)							
Standard rating conditions used: Low temperature appleter EUROFRED S.A.				cation						
Contact details		Cl. Marq	ués de Sentmen	at, 97 - 08029 Barcelona - Spain Tel. 93		' Fax 934	19 86 86			
(*) If C _{dc} is not determined by mea (**) From 26 September 2018.	asurement	then the	e default degrac	dation coefficient of chillers shall be 0,	9.					

	s for near	r hauub sh	Jace nea	aters and heat pump combination heat			
Model(s):				CSAD UIAWP 100	PS		
Air-to-water heat pump:				YES			
Water-to-water heat pump:				NO			
Brine-to-water heat pump:				NO			
Low-temperature heat pump:				YES			
Equipped with a supplementary	heater:			NO			
Heat pump combination heater:				NO			
Declared climate condition:				AVERAGE			
Parameters are declared for low	-temperatur	e applicatior	า.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	20.8	KW	Seasonal space heating energy efficiency	ηs	128	%
Declared capacity for heating fo	r part load a	t outdoor		Declared coefficient of performance or primary e	nergy ratio f	or part loa	d at
temperature Tj				outdoor temperature Tj			
Tj = -7°C	Pdh	18.47	KW	Tj = -7 °C	COPd	2.56	-
Tj = 2 [°] C	Pdh	10.26	KW	Tj = 2°C	COPd	3.64	-
Tj = 7 °C	Pdh	6.69	KW	Tj = 7 °C	COPd	4.73	-
Tj = 12°C	Pdh	6.63	КW	Tj = 12°C	COPd	6.04	-
Tj=bivalent temperature	Pdh	18.47	KW	Tj=bivalent temperature	COPd	2.56	-
Tj = operating limit	Pdh	21.18	КW	Tj = operating limit	COPd	2.25	-
For air-to-water heat pumps:				For air-to-water heat pumps: Tj = -15 C			
Tj = -15 [°] C	Pdh -		KW		COPd	-	-
Bivalent temperature	Tbiv	-7	C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	Ċ
Cycling interval capacity forheating	Pcy ch	-	кw	Cycling interval efficiency	COPcy c	-	-
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	-	°C
Power consumption in modes of	her than ac	tive mode		Supplementary heater			
Off mode	Pof f	0.075	kW				
Standby mode	Psb	0.075	kW	Rated heat output (**)	Psup	-	-
Thermostat-off mode	Pto	0.5	kW	Type of energy input		-	
Crankcase heater mode	Pck	0.075	kW	3F			
Other items							
Capacity control variable				For air-to-water heat pumps: Rated air flow rate, outdoors	-	12500	m³/h
Sound power level, outdoors	LWA	78	dB	For water- or brine-to-water heat pumps: Rated			
Annual energy consumption	QHE	13189	kWh	brine or water flow rate, outdoor heatexchanger	-	-	m³/h
For heat pump combination hea	ter:		,				
Declared load profile		-		Water heating energy fficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qf uel	-	kWł
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ
Contact details	EUROFRED S.A.						
			anat 07	08029 Barcelona - Spain Tel. 934 19 97 97 Fax 9	724 10 06 04		

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh,

and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,99.

Madal(s):											
Model(s):				CSAD UIAWP 200 PS	i						
Air-to-water heat pump:				YES							
Water-to-water heat pump:	NO										
Brine-to-water heat pump:				NO							
Low-temperature heat pump:				YES							
Equipped with a supplementary heater:				NO							
Heat pump combination heater:				NO							
Declared climate condition:				AVERAGE							
Parameters are declared for low-tempera	ature applicat	ion.	1								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	31	KW	Seasonal space heating energy efficiency	ηs	135	%				
Declared capacity for heating for part loa	d at outdoor	temperature	Tj	Declared coefficient of performance of	r primary energy	/ ratio for part	load at				
			outdoor temperature Tj								
Tj = -7℃	Pdh	26.1	KW	Tj = -7°C	COPd	2.59	-				
Tj = 2℃	Pdh	16.7	KW	Tj = 2℃	COPd	3.56	-				
Tj = 7°C	Pdh	11.8	KW	Tj = 7℃	COPd	3.87					
Tj = 12℃	Pdh	11.2	KW	Tj = 12℃	COPd	5.70	-				
Tj=bivalent temperature	Pdh	31.0	KW	Ti=bivalent temperature	COPd	2.32	-				
Tj = operating limit	Pdh	31.0	ĸw	Tj = operating limit	COPd	2.32					
For air-to-water heat pumps: Tj = -15° C	Pdh	-	ĸw	For air-to-water heat pumps: Tj =	COPd	-	-				
				-15℃ For air-to-water heat pumps:							
Bivalent temperature	Tbiv	-10	°C	Operation limit temperature	TOL	-10	°C				
Cycling interval capacity forheating	Pcy ch	-	KW	Cycling interval efficiency	COPcy c	-	-				
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	35	°C				
Power consumption in modes other than	active mode		ļ	Supplementary heater							
Off mode	Pof f	0.075	kW	Rated heat output (**)							
Standby mode	Psb	0.075	kW		Psup	-	-				
Thermostat-off mode	Pto	0.600	kW	Type of energy input							
Crankcase heater mode	Pck	0.075	kW	, , , , , , , , , , , , , , , , , , ,		-					
Other items											
Capacity control		variable		For air-to-water heat pumps: Rated							
	Valiable			air flow rate, outdoors	-	24000	m³/h				
Sound power level, outdoors	LWA	86	dB	For water- or brine-to-water heat							
	LWA	00		pumps: Rated brine or water flow	-	_	m³/h				
Annual energy consumption	QHE	18998	kWh	rate, outdoor heatexchanger			/1				
For heat pump combination heater:											
Declared load profile		-	Water heating energy	nub		0/					
				efficiency	ηwh	-	%				
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qf uel	-	kWh				
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ				
Contact details	EUROFRE	D S.A.	•								
	1			3029 Barcelona - Spain Tel. 934 19 97 9							