

Chillers

The ultimate in
reliability and flexibility



Air cooled Inverter screw free cooling with BLU efficiency. Standard sound.

- HFO R-1234ze(E) Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
- New generation of air-cooled inverter series with extension of capacity range: Nominal capacity up to 1,600 kW
- New single screw compressor geometry allowing performance optimization
- Refrigerant cooled inverter mounted on compressor all across the range
- Premium energy efficiency both at full and part load conditions
- Best capacity with smallest footprint
- Microchannel coils
- Unique fully integrated active harmonic filtration solution
- Glycol free application
- MicroTech 4 controller: sophisticated adaptive software logic for stable operating conditions

		EWFH TZ-D BS		235	255	300	350	400	400	420
Cooling Capacity (1)		kW		313.9	346	406.4	483.9	531.2	538.7	557.2
Power input (1)		kW		96.1	116.2	154.3	142.4	172.9	144.6	190
EER (1)				3.27	2.98	2.63	3.4	3.07	3.73	2.93
SEER (1)(2)				5.059	4.998	4.723	5.229	5.089	4.974	5.053
ηs,c (3)		%		199	197	186	206	201	196	199
SEPR (1)(2)				5.774	5.486	5.116	5.742	5.475	6.007	5.278
IPLV (5)				5.386	5.251	4.93	5.67	5.47	5.334	5.364
Full Free Cooling Temperature (12)		°C		5.8	4.29	1.46	5.42	3.96	787	3.08
Flow rate (1)		l/s		10.8	11.9	13.9	16.6	18.2	18.5	19.1
Evaporator Pressure Drop free cooling OFF (1)(6)		kPa		11.3	13.5	14.8	33.7	40.3	28.5	44
Unit pressure drop free cooling ON (1)(6)		kPa		74.4	85.8	112	99.1	117	78.7	127
Sound Power (1)(7)		dB(a)		98	100	101	97	98	97	98
Lw with + OP76b		dB(a)		93		95	92	93	94	93
Number of circuits / Compressors				1				2		1
Water volume – open loop Free Cooling		Lt		40		48	42.7		152	42.7
Minimum Water flow rate (10)		l/s		7.6	7.6	8.5	5.94	5.94	8.7	5.94
Dimensions		Length	mm	2,560			3,640		4,720	3,640
		Width	mm				2,238			
		Height	mm				2,553			
Weight (8)		Unit (8)	kg	2,626	2,626	2,656	3,581		3,874	3,581
		Operating weight (8)	kg	2,882	2,887	2,938	3,927.7	3,932.7	4,510	3,932.7
Water Connection Size		Ø mm		88.9					139.7	
Unit		Running Current (1)(8)(11)	A	157	187	244	233	278	238	304
		Max Running Current (7)(8)(11)	A	204	227	268	291	334	334	355
		Current for Wiring Sizing (8)(11)	A	224	249	275	320	367	368	391
		Max Inrush Current (8)(9)(11)	A	0						

		EWFH TZ-D BS		425	455	485	505	545	545	
Cooling Capacity (1)		kW		566.5	594.2	663.9	651.8	717.4	747.2	
Power input (1)		kW		158.4	218.7	196.8	242.4	250.2	238.9	
EER (1)				3.58	2.72	3.39	2.69	2.87	3.13	
SEER (1)(2)				4.912	4.925	4.875	4.875	5.148	4.819	
ηs,c (3)		%		198	194	192	192	203	190	
SEPR (1)(2)				5.912	5.019	5.767	4.875	5.047	5.545	
IPLV (5)				5.262	4.994	5.224	5.082	5.233	5.172	
Full Free Cooling Temperature (12)		°C		7.21	1.94	4.99	0.25	3.75	3	
Flow rate (1)		l/s		19.4	20.4	22.8	22.4	24.6	25.6	
Evaporator Pressure Drop free cooling OFF (1)(6)		kPa		31	49.5	35.1	32.9	39.8	35.7	
Unit pressure drop free cooling ON (1)(6)		kPa		85.5	148	98.2	143	118	118	
Sound Power (1)(7)		dB(a)		100		101	102	108	108	
Lw with + OP76b		dB(a)		95	93	96	94	95	96	
Number of circuits / Compressors				2	1	2	1		2	
Water volume – open loop Free Cooling		Lt		152	42.7	255	58.1	58.1	232	
Minimum Water flow rate (10)		l/s		8.7	5.94	8.6	10.2	10.2	10.7	
Dimensions		Length	mm	4,720	3,640	4,720	3,640	4,720		
		Width	mm				2,238			
		Height	mm				2,553			
Weight (8)		Unit (8)	kg	3,874	3,581	4,064	3,966	4,475	4,093	
		Operating weight (8)	kg	4,515	3,937.7	4,915	4,364.1	4,943.1	4,909	
Water Connection Size		Ø mm		139.7		168.3	139.7		168.3	
Unit		Running Current (1)(8)(11)	A	258	346	320	381	393	384	
		Max Running Current (7)(8)(11)	A	358	396	406	435	463	452	
		Current for Wiring Sizing (8)(11)	A	394	436	447	457	468	497	
		Max Inrush Current (8)(9)(11)	A	0						

(1) Standard Rating at Ambient 35°C Inlet temperature 26°C, leaving temperature 18°C; Fluid Ethylene glycol 25%, Fouling factor = 0; (2) Seasonal Energy Efficiency Ratio as defined in EN14825, part load condition in cooling for Air to Water units, fan coil application, variable outlet, variable flow; (3) The seasonal space cooling energy efficiency ηs,c is calculated as defined in Regulation (EU) 2016/2281 the seasonal energy efficiency ratio SEER divided by the conversion coefficient CC (2.5), corrected by contributions accounting for temperature control (0.03); (4) Seasonal Energy Performance Ratio as defined in EN14825, part load condition in cooling for Air to Water units, high temperature application; (5) Based on AHRI conditions; (6) Fluid: Ethylene Glycol 25%, not including filter pressure drop. The installation of the filter is mandatory; (7) Sound power level measured in accordance with ISO9614, referred to unit operating at Standard Rating Conditions for Air to water chillers according to EN14511-2 Outdoor Heat exchanger inlet dry bulb temperature 35°C; Indoor heat exchanger inlet water temperature 12°C, outlet water temperature 7°C; (8) This are intended as guideline only and referred for unit without options. Refer to dedicated wiring diagram and unit nameplate for specific values; (9) Determined as follow: LRA of largest compressor + FLA of remaining compressors + FLA of the fans. Value intended as guideline. Refer to unit nameplate for specific value; (10) Minimum flow rate in variable flow application in correspondence of minimum chiller capacity, supply temperature 7°C, fluid: water; (11) Value referred to 400V/50Hz power supply. ±10% tolerance on Voltage, Voltage unbalance between phases must be within ± 3%; (12) Inlet 26°C, Leaving 18°C, Fluid: 25% Ethylene Glycol, Fouling factor = 0.



MicroTech 4



EWFH TZ-D BS			590	635	745	785	845	900	985	
Cooling Capacity (1)			kW	787.5	861.2	998.9	1051	1,136.3	1,213.7	1,324.7
Power input (1)			kW	248.7	289.1	287.6	320.6	361.1	377.9	443.3
EER (1)				3.17	2.98	3.47	3.28	3.15	3.21	2.99
SEER (1)(2)				4.948	4.899	5.268	5.165	5.139	5.268	5.129
ηs,c (3)			%	195	198	208	204	203	208	202
SEPR (1)(2)				5.432	5.436	5.834	5.618	5.506	5.536	5.21
IPLV (5)				5.275	5.242	5.594	5.496	5.443	5.506	5.399
Full Free Cooling Temperature (12)			°C	5.78	4.4	4.94	4.09	2.74	4.32	2.78
Flow rate (1)			l/s	27	29.5	34.3	36	39	41.6	45.4
Evaporator Pressure Drop free cooling OFF (1)(6)			kPa	47.5	44.8	47.4	51.6	58	64.9	59.5
Unit pressure drop free cooling ON (1)(6)			kPa	10	116		127	137	130	142
Sound Power (1)(7)			Lw	104	105	100		101		108
Lw with + OP76b			dB(a)	97	98	95		96		97
Number of circuits / Compressors				2						
Water volume – open loop Free Cooling			Lt	255	232	280		492	492	583
Minimum Water flow rate (10)			l/s	8.6	10.7	12.9		123	123	14.6
Dimensions	Length	mm	5,800			6,880		7,960		
	Width	mm				2,238				
	Height	mm				2,553				
Weight (8)	Unit (8)	kg	4,573	4,603	5,549		5,793	6,303	6,392	
	Operating weight (8)	kg	5,505	5,494	6,616	6,626	7,299	7,884	8,165	
Water Connection Size			Ø mm	168.3						
Unit	Running Current (1)(8)(11)	A	399	472	469	519	579	604	701	
	Max Running Current (7)(8)(11)	A	494	895	581	624	667	719	801	
	Current for Wiring Sizing (8)(11)	A	535	901	639	686	733	791	880	
	Max Inrush Current (8)(9)(11)	A	0							

EWFH TZ-D BS			C11	H11	C13	H13	H14	C15	H15	
Cooling Capacity (1)			kW	1,479.5	1,571.8	1,724.5	1,815.6	1,944.9	1,996.8	2,083.0
Power input (1)			kW	487.5	542.9	527.7	603.8	659.1	724.8	758.8
EER (1)				3.040	2.890	3.270	3.010	2.950	2.760	2.740
SEER (1)(2)				5.106	4.996	5.425	5.348	5.365	5.278	5.295
ηs,c (3)			%	201	197	214	211	212	208	209
SEPR (1)(2)				5.17	5.051	6.572	6.304	6.249	6.097	6.134
IPLV (5)				5.392	5.238	5.966	5.902	5.812	5.741	5.748
Full Free Cooling Temperature (12)			°C	3.18	2.15	2.56	1.67	2.28	1.8	2.79
Flow rate (1)			l/s	50.7	53.9	59.1	62.3	66.7	68.5	71.4
Evaporator Pressure Drop free cooling OFF (1)(6)			kPa	45.2	49.4	38.7	41.9	46.8	48.3	52.9
Unit pressure drop free cooling ON (1)(6)			kPa	128	142	130	141	139	146	140
Sound Power (1)(7)			Lw	105	107	104	105	105	107	
Lw with + OP76b			dB(a)	98				99		
Number of circuits / Compressors				2						
Water volume – open loop Free Cooling			Lt	1043		1,011				
Minimum Water flow rate (10)			l/s	18.1		22.6				
Dimensions	Length	mm	9,040			10,120		11,200		12,280
	Width	mm				2,238				
	Height	mm				2,553				
Weight (8)	Unit (8)	kg	7,587		8,542		9,051		9,561	
	Operating weight (8)	kg	10,366	10,376	11,347		11,946	11,956	12,536	
Water Connection Size			Ø mm	273						
Unit	Running Current (1)(8)(11)	A	767	849	835	948	1,030	1,135	1,185	
	Max Running Current (7)(8)(11)	A	889	927	1,015	1,106	1,218	1,330	1,400	
	Current for Wiring Sizing (8)(11)	A	935	935	1,116	1,210	1,340	1,463	1,540	
	Max Inrush Current (8)(9)(11)	A	0							

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EWFH TZ-D SS		240	265	295	370	400	415	450
Cooling Capacity (1)	kW	322.7	352.6	403.9	493.5	539.1	555.6	599.4
Power input (1)	kW	87.7	102.1	121.9	133.5	141.8	164.8	177.8
EER (1)		3.68	3.45	3.32	3.7	3.8	3.37	3.37
SEER (1)(2)		5.37	5.267	5.211	5.412	5.195	5.299	5.284
η _{s,c} (3)	%	212	208	205	213	205	209	208
SEPR (1)(2)		6.171	5.977	5.813	6.055	4.695	5.451	5.621
IPLV (5)		5.695	5.62	5.412	5.962	5.56	5.678	5.767
Full Free Cooling Temperature (12)	°C	10.35	9.44	7.85	8.91	10.36	7.47	6.47
Flow rate (1)	l/s	11.1	12.1	13.9	16.9	18.5	19.1	20.6
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	11.9	14.1	14.6	35.1	28.7	43.4	28.1
Unit pressure drop free cooling ON (1)(6)	kPa	46.3	53.8	64.1	78.3	64.1	95.8	86.4
Sound Power (1)(7)	Lw	98	100	102	97		98	
	Lw with + OP76b	94	94	95	93	95		94
Number of circuits / Compressors			1			2		1
Water volume – open loop Free Cooling	Lt	40	40	48	42.7	152	42.7	58.1
Minimum Water flow rate (10)	l/s	7.6	7.6	8.5	5.94	8.7	5.94	10.2
Dimensions	Length	mm	3,640		4,720	5,800		4,720
	Width	mm			2,238			
	Height	mm			2,553			
Weight (8)	Unit (8)	kg	3,136	3,136	3,166	4,090	4,384	4,154
	Operating weight (8)	kg	3,462	3,462	3,513	4,502.7	5,085	4,507.7
Water Connection Size	Ø mm		88.9				139.7	
Unit	Running Current (1)(8)(11)	A	145	166	196	219	234	266
	Max Running Current (7)(8)(11)	A	214	237	259	302	345	344
	Current for Wiring Sizing (8)(11)	A	235	261	285	332	379	379
	Max Inrush Current (8)(9)(11)	A				0		

EWFH TZ-D SS		470	490	535	540	595	630
Cooling Capacity (1)	kW	629.2	650.1	681.2	717.6	803.4	850.3
Power input (1)	kW	175.5	206	194.5	227.4	231.9	252.2
EER (1)		3.59	3.16	3.5	3.16	3.46	3.37
SEER (1)(2)		5.058	5.208	5.097	5.441	5.15	5.072
η _{s,c} (3)	%	199	205	201	215	203	200
SEPR (1)(2)		5.92	5.389	5.871	5.303	3.933	5.644
IPLV (5)		5.39	5.594	5.423	5.459	5.509	5.431
Full Free Cooling Temperature (12)	°C	8.69	5.31	7.71	7.04	7.92	7.2
Flow rate (1)	l/s	21.6	22.3	23.4	24.6	27.6	29.2
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	37.4	32.8	36.4	39.3	39.6	43.5
Unit pressure drop free cooling ON (1)(6)	kPa	82.8	98.6	88.6	93.9	88.7	97.1
Sound Power (1)(7)	Lw		101		102	104	105
	Lw with + OP76b	96	94	97	95		98
Number of circuits / Compressors		2	1	2	1		2
Water volume – open loop Free Cooling	Lt	152	58.1	255	58.1	232	232
Minimum Water flow rate (10)	l/s	8.7	10.2	8.6	10.2	10.7	10.7
Dimensions	Length	mm	5,800	4,720		5,800	6,880
	Width	mm				2,238	
	Height	mm				2,553	
Weight (8)	Unit (8)	kg	4,384	4,154	4,573	4,985	5,113
	Operating weight (8)	kg	5,095	4,612.1	5,495	5,518.1	6,064
Water Connection Size	Ø mm		139.7		168.3	139.7	168.3
Unit	Running Current (1)(8)(11)	A	290	327	318	359	374
	Max Running Current (7)(8)(11)	A	405	406	428	455	495
	Current for Wiring Sizing (8)(11)	A	445	447	471	480	544
	Max Inrush Current (8)(9)(11)	A				0	

(1) Standard Rating at Ambient 35°C Inlet temperature 26°C, leaving temperature 18°C; Fluid Ethylene glycol 25%, Fouling factor = 0; (2) Seasonal Energy Efficiency Ratio as defined in EN14825, part load condition in cooling for Air to Water units, fan coil application, variable outlet, variable flow; (3) The seasonal space cooling energy efficiency η_{s,c} is calculated as defined in Regulation (EU) 2016/2281 the seasonal energy efficiency ratio SEER divided by the conversion coefficient CC (2.5), corrected by contributions accounting for temperature control (0.03); (4) Seasonal Energy Performance Ratio as defined in EN14825, part load condition in cooling for Air to Water units, high temperature application; (5) Based on AHRI conditions; (6) Fluid: Ethylene Glycol 25%, not including filter pressure drop. The installation of the filter is mandatory; (7) Sound power level measured in accordance with ISO9614, referred to unit operating at Standard Rating Conditions for Air to water chillers according to EN14511:2 Outdoor Heat exchanger inlet dry bulb temperature 35°C; Indoor heat exchanger inlet water temperature 12°C, outlet water temperature 7°C; (8) This are intended as guideline only and referred for unit without options. Refer to dedicated wiring diagram and unit nameplate for specific values; (9) Determined as follow: LRA of largest compressor + FLA of remaining compressors + FLA of the fans. Value intended as guideline. Refer to unit nameplate for specific value; (10) Minimum flow rate in variable flow application in correspondence of minimum chiller capacity, supply temperature 7°C, fluid: water; (11) Value referred to 400V/50Hz power supply. ±10% tolerance on Voltage, Voltage unbalance between phases must be within ± 3%; (12) Inlet 26°C, Leaving 18°C, Fluid: 25% Ethylene Glycol, Fouling factor = 0.



MicroTech 4



EWFH TZ-D SS		690	740	795	855	910	980	C10
Cooling Capacity (1)	kW	941.1	995.8	1,069	1,144.7	1,219.8	1,331.5	1,404.6
Power input (1)	kW	261.8	284.4	310.2	341.5	360.9	401.6	417.8
EER (1)		3.6	3.5	3.45	3.35	3.38	3.32	3.360
SEER (1)(2)		5.348	5.253	5.277	5.348	5.38	5.381	5.392
ηs,c (3)	%	211	207	208	211	212	212	213
SEPR (1)(2)		5.917	5.831	5.813	5.67	5.643	5.437	3.898
IPLV (5)		5.69	5.6	5.662	5.622	5.657	5.622	5.638
Full Free Cooling Temperature (12)	°C	5.8	4.99	6.19	5.23	6.18	6.63	7.32
Flow rate (1)	l/s	32.3	34.2	36.7	39.3	41.8	45.7	48.2
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	43	47.3	53.6	56.8	62.7	77.7	64.4
Unit pressure drop free cooling ON (1)(6)	kPa	106	115	114	124	122	130	118
Sound Power (1)(7)	Lw	99	100	101		102	108	104
	Lw with + OP76b	95		96		97		98
Number of circuits / Compressors		2						
Water volume – open loop Free Cooling		Lt	280	280	280	492	492	583
Minimum Water flow rate (10)		l/s	12.9	12.9	12.9	123	123	14.6
Dimensions	Length	mm	6,880	6,880	7,960	7,960	9,040	11,200
	Width	mm	2,238	2,238	2,238	2,238	2,238	2,238
	Height	mm	2,553	2,553	2,553	2,553	2,553	2,553
Weight (8)	Unit (8)	kg	5,549	5,549	6,059	6,303	6,812	7,322
	Operating weight (8)	kg	6,611	6,616	7,201	7,879	8,459	9,044
Water Connection Size		Ø mm	168.3			219.1		
Unit	Running Current (1)(8)(11)	A	431	465	503	550	579	639
	Max Running Current (7)(8)(11)	A	538	581	634	677	729	802
	Current for Wiring Sizing (8)(11)	A	592	639	698	745	802	882
	Max Inrush Current (8)(9)(11)	A	0					

EWFH TZ-D SS		C11	C12	H12	H13	C14	C15	H15
Cooling Capacity (1)	kW	1,500.1	1,650.7	1,760.0	1,860.7	1,974.1	2,038.4	2,148.5
Power input (1)	kW	448.7	524.5	508.1	582.6	634.8	649.6	772.0
EER (1)		3.340	3.150	3.460	3.190	3.110	3.140	2.780
SEER (1)(2)		5.353	5.19	5.529	5.447	5.523	5.559	5.47
ηs,c (3)	%	211	205	218	215	218	219	216
SEPR (1)(2)		5.5	5.066	6.752	6.444	6.392	6.385	6.239
IPLV (5)		5.592	5.422	6.121	5.964	6.063	6.076	5.970
Full Free Cooling Temperature (12)	°C	6.39	5.05	4.05	3.09	3.75	4.6	3.86
Flow rate (1)	l/s	51.4	56.6	60.4	63.8	67.7	69.9	73.7
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	45.4	53.4	39.8	43.5	47.7	50.2	53.5
Unit pressure drop free cooling ON (1)(6)	kPa	104	119	117	129	128	121	138
Sound Power (1)(7)	Lw	105	107	104	105	105	107	108
	Lw with + OP76b	98	99	98	98	99	100	
Number of circuits / Compressors		2						
Water volume – open loop Free Cooling		1043				1011		
Minimum Water flow rate (10)		18.1	18.1	22.6	22.6	22.6	22.6	22.6
Dimensions	Length	11200				12280	13360	
	Width					2238		
	Height					2553		
Weight (8)	Unit (8)	8,606		9,051		9,561	10,070	
	Operating weight (8)	11,515	11530	11,926	11,936	12,521	13,106	13,116
Water Connection Size		Ø mm 273						
Unit	Running Current (1)(8)(11)	A 709	821	806	916	994	1,023	1,205
	Max Running Current (7)(8)(11)	A 891	948	1,025	1,117	1,228	1,351	1,410
	Current for Wiring Sizing (8)(11)	958		1,128	1,222	1,351	1,486	1,552
	Max Inrush Current (8)(9)(11)	A 0						

(1) Standard Rating at Ambient 35°C Inlet temperature 26°C, leaving temperature 18°C; Fluid Ethylene glycol 25%, Fouling factor = 0; (2) Seasonal Energy Efficiency Ratio as defined in EN14825, part load condition in cooling for Air to Water units, fan coil application, variable outlet, variable flow; (3) The seasonal space cooling energy efficiency η_{s,c} is calculated as defined in Regulation (EU) 2016/2281 the seasonal energy efficiency ratio SEER divided by the conversion coefficient CC (2.5), corrected by contributions accounting for temperature control (0.03); (4) Seasonal Energy Performance Ratio as defined in EN14825, part load condition in cooling for Air to Water units, high temperature application; (5) Based on AHRI conditions; (6) Fluid: Ethylene Glycol 25%, not including filter pressure drop. The installation of the filter is mandatory; (7) Sound power level measured in accordance with ISO9614, referred to unit operating at Standard Rating Conditions for Air to water chillers according to EN14511:2 Outdoor Heat exchanger inlet dry bulb temperature 35°C; Indoor heat exchanger inlet water temperature 12°C, outlet water temperature 7°C; (8) This are intended as guideline only and referred for unit without options. Refer to dedicated wiring diagram and unit nameplate for specific values; (9) Determined as follow: LRA of largest compressor + FLA of remaining compressors + FLA of the fans. Value intended as guideline. Refer to unit nameplate for specific value; (10) Minimum flow rate in variable flow application in correspondence of minimum chiller capacity, supply temperature 7°C, fluid: water; (11) Value referred to 400V/50Hz power supply. ±10% tolerance on Voltage, Voltage unbalance between phases must be within ± 3%; (12) Inlet 26°C, Leaving 18°C, Fluid: 25% Ethylene Glycol, Fouling factor = 0.

Air cooled Inverter screw free cooling with GOLD efficiency. Standard sound.

- HFO R-1234ze(E) Refrigerant with Ozone Depletion Potential equal to zero and extremely low Global Warming Potential
- New generation of air-cooled inverter series with extension of capacity range: Nominal capacity up to 1,600 kW
- New single screw compressor geometry allowing performance optimization
- Refrigerant cooled inverter mounted on compressor all across the range
- Premium energy efficiency both at full and part load conditions
- Best capacity with smallest footprint
- Microchannel coils
- Unique fully integrated active harmonic filtration solution
- Glycol free application
- MicroTech 4 controller: sophisticated adaptive software logic for stable operating conditions

EWFH TZ-D XS		220	230	275	300	350	400
Cooling Capacity (1)	kW	294.3	316.3	373.8	409.1	472.7	537.6
Power input (1)	kW	83	94.9	98.3	1168	18.6	150.7
EER (1)		3.55	3.33	3.8	3.5	3.99	3.57
SEER (1)(2)		5.493	5.444	5.544	5.609	6.003	5.967
η _{s,c} (3)	%	217	215	219	221	237	23
SEPR (1)(2)		6.902	6.732	6.519	6.537	7.31	6.658
IPLV (5)		6.046	6.019	6.119	6.101	6.701	6.28
Full Free Cooling Temperature (12)	°C	6.66	5.66	8.78	7.69	9.4	7.84
Flow rate (1)	l/s	10.1	10.9	128	14	16.2	184
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	10.1	11.4	128	15	32.3	41
Unit pressure drop free cooling ON (12)(6)	kPa	674	75.2	56.3	65.4	72.8	90.5
Sound Power (1)(7)	Lw	97	97	100	101	97	100
	Lw with + OP76b	90	91		93		91
Number of circuits / Compressors					1		
Water volume – open loop Free Cooling	Lt	40			48		42.7
Minimum Water flow rate (10)	l/s	76			8.5		5.94
Dimensions	Length	mm	2,560		3,640		4,720
	Width	mm			2,238		
	Height	mm			2,553		
Weight (8)	Unit (8)	kg	2,797	2,797	3,337	3,337	4,146
	Operating weight (8)	kg	3,054	3,054	3,679	3,684	4,552.7
Water Connection Size	Ø mm			88.9			139.7
Unit	Running Current (1)(8)(11)	A	135	153	161	188	245
	Max Running Current (7)(8)(11)	A	172	188	214	236	310
	Current for Wiring Sizing (8)(11)	A	190	201	235	259	296
	Max Inrush Current (8)(9)(11)	A			0		

EWFH TZ-D XS		470	465	515	540	545	600
Cooling Capacity (1)	kW	627.1	639.3	680.6	712.1	745.7	817.3
Power input (1)	kW	172.2	157.4	195.9	182.4	183.2	220.5
EER (1)		3.64	4.06	3.47	3.9	4.07	3.71
SEER (1)(2)		6.11	5.8	5.704	5.444	5.912	5.831
η _{s,c} (3)	%	241	229	225	215	233	230
SEPR (1)(2)		6.762	6.624	6.428	7.322	5.413	6.739
IPLV (5)		6.571	6.277	6.45	6.125	6.389	6.3
Full Free Cooling Temperature (12)	°C	8.73	10.48	7.73	7.15	8.82	7.71
Flow rate (1)	l/s	21.5	21.9	23.3	24.4	25.6	28
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	30.5	38.4	35.8	23.4	35.3	31.1
Unit pressure drop free cooling ON (12)(6)	kPa	74.9	73.1	86	77.2	78.7	81.2
Sound Power (1)(7)	Lw	105	101	102	99	101	106
	Lw with + OP76b	92	95	93	92	95	96
Number of circuits / Compressors		1	2		1		2
Water volume – open loop Free Cooling	Lt	58.1	152	58.1	76.3	232	289
Minimum Water flow rate (10)	l/s	10.2	8.7	10.2	13.4	10.7	13
Dimensions	Length	mm	5,800		5,800		6,880
	Width	mm			2,238		
	Height	mm			2,553		
Weight (8)	Unit (8)	kg	4,720	5,065	4,720	5,474	5,336
	Operating weight (8)	kg	5,243.1	5,841	5,248.1	6,043.3	6,230
Water Connection Size	Ø mm			139.7			168.3
Unit	Running Current (1)(8)(11)	A	277	257	312	296	357
	Max Running Current (7)(8)(11)	A	357	364	394	414	448
	Current for Wiring Sizing (8)(11)	A	393	401	434	456	492
	Max Inrush Current (8)(9)(11)	A			0		

(1) Standard Rating at Ambient 35°C Inlet temperature 26°C, leaving temperature 18°C; Fluid Ethylene glycol 25%, Fouling factor = 0; (2) Seasonal Energy Efficiency Ratio as defined in EN14825, part load condition in cooling for Air to Water units, fan coil application, variable outlet, variable flow; (3) The seasonal space cooling energy efficiency η_{s,c} is calculated as defined in Regulation (EU) 2016/2281 the seasonal energy efficiency ratio SEER divided by the conversion coefficient CC (2.5), corrected by contributions accounting for temperature control (0.03); (4) Seasonal Energy Performance Ratio as defined in EN14825, part load condition in cooling for Air to Water units, high temperature application; (5) Based on AHRI conditions; (6) Fluid: Ethylene Glycol 25%, not including filter pressure drop. The installation of the filter is mandatory; (7) Sound power level measured in accordance with ISO9614, referred to unit operating at Standard Rating Conditions for Air to water chillers according to EN14511:2 Outdoor Heat exchanger inlet dry bulb temperature 35°C; Indoor heat exchanger inlet water temperature 12°C, outlet water temperature 7°C; (8) This are intended as guideline only and referred for unit without options. Refer to dedicated wiring diagram and unit nameplate for specific values; (9) Determined as follow: LRA of largest compressor + FLA of remaining compressors + FLA of the fans. Value intended as guideline. Refer to unit nameplate for specific value; (10) Minimum flow rate in variable flow application in correspondence of minimum chiller capacity, supply temperature 7°C, fluid: water; (11) Value referred to 400V/50Hz power supply. ±10% tolerance on Voltage, Voltage unbalance between phases must be within ± 3%; (12) Inlet 26°C, Leaving 18°C, Fluid: 25% Ethylene Glycol, Fouling factor = 0.



MicroTech 4



EWFH TZ-D XS		620	645	700	750	790	840
Cooling Capacity (1)	kW	819.3	877	941.7	1,013.6	1,071.7	1,139.2
Power input (1)	kW	241.7	230.7	256.6	267.4	271.3	303.5
EER (1)		3.39	3.8	3.67	3.79	3.95	3.75
SEER (1)(2)		5.379	5.957	5.918	6.147	6.205	6.127
ηs,c (3)	%	212	235	234	243	245	242
SEPR (1)(2)		6.839	705	6.967	7.142	7.038	6.926
IPLV (5)		5.832	6.479	6.362	6.639	6.69	6.489
Full Free Cooling Temperature (12)	°C	5.15	6.79	5.79	6.91	7.89	7.12
Flow rate (1)	l/s	28.1	30.1	32.3	34.8	36.8	39.1
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	30.1	34.8	39.1	47	51.1	56.4
Unit pressure drop free cooling ON (1)(6)	kPa	96.8	90.8	102	108	101	111
Sound Power (1)(7)	Lw	101	98	100	101	102	103
	Lw with + OP76b			93		94	
Number of circuits / Compressors		1			2		
Water volume – open loop Free Cooling	Lt	76.3	289			492	
Minimum Water flow rate (10)	l/s	13.4	13			123	
Dimensions	Length	mm	5,800			7,960	9,040
	Width	mm		6,880			
	Height	mm			2,238		
					2,553		
Weight (8)	Unit (8)	kg	5,474	5,593	6,358	6,868	
	Operating weight (8)	kg	6,053.3	6,668	6,673	7,920	8,500
Water Connection Size	Ø mm	139.7	168.3			219.1	8,505
Unit	Running Current (1)(8)(11)	A	385	384	423	439	445
	Max Running Current (7)(8)(11)	A	491	472	517	527	579
	Current for Wiring Sizing (8)(11)	A	541	520	569	580	637
	Max Inrush Current (8)(9)(11)	A			0		680

EWFH TZ-D XS		900	975	H10	H11	H12	H13
Cooling Capacity (1)	kW	1,210.2	1,312.2	1,468.8	1,564.7	1,682.3	1,812.0
Power input (1)	kW	342	375.8	416.1	422.1	463.2	521.6
EER (1)		3.54	3.49	3.530	3.710	3.630	3.470
SEER (1)(2)		6.008	6.025	5.997	5.645	5.693	5.758
ηs,c (3)	%	237	238	237	223	225	227
SEPR (1)(2)		6.695	6.108	6.202	7.177	6.961	6.864
IPLV (5)		6.472	6.443	6.436	6.376	6.481	6.426
Full Free Cooling Temperature (12)	°C	6.3	6.81	6.71	5.83	6.16	6.32
Flow rate (1)	l/s	41.5	45	50.4	53.7	57.7	62.1
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	513	58.4	30.4	48.9	54.2	41.5
Unit pressure drop free cooling ON (1)(6)	kPa	10	15	86.5	10	15	101
Sound Power (1)(7)	Lw	105	107	105	108	104	105
	Lw with + OP76b	94	95		96		97
Number of circuits / Compressors					2		
Water volume – open loop Free Cooling	Lt	583				1,011	
Minimum Water flow rate (10)	l/s	14.6				22.6	
Dimensions	Length	mm	9,040	10,120	11,200	12,280	13,360
	Width	mm			2,238		
	Height	mm			2,553		
Weight (8)	Unit (8)	kg	6,957	7,466	8,383	9,051	9,561
	Operating weight (8)	kg	8,785	9,370	11,223	11,906	12,491
Water Connection Size	Ø mm	219.1	219.1	273	273	273	273
Unit	Running Current (1)(8)(11)	A	550	601	661	678	739
	Max Running Current (7)(8)(11)	A	655	702	787	902	992
	Current for Wiring Sizing (8)(11)	A	721	772	866	992	1,091
	Max Inrush Current (8)(9)(11)	A			0		1,198

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EWFH TZ-D PS		225	265	295	340	395	420
Cooling Capacity (1)	kW	308.3	364.2	398.9	460.2	543.6	573.6
Power input (1)	kW	73.4	83.7	98.4	100.8	129.4	138
EER (1)		4.2	4.35	4.05	4.57	4.2	4.31
SEER (1)(2)		6.008	6.095	6.081	6.58	6.397	6.579
η _{s,c} (3)	%	237	241	240	260	253	260
SEPR (1)(2)		7.312	7.556	7.271	7.983	7.59	5.795
IPLV (5)		6.738	6.736	6.579	7.506	7.214	7.271
Full Free Cooling Temperature (12)	°C	10.78	11.86	11.12	11.82	11.4	12.09
Flow rate (1)	l/s	10.6	125	13.7	15.8	18.6	19.7
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	112	122	14.5	17.5	23.5	26
Unit pressure drop free cooling ON (1)(6)	kPa	42.8	38.3	44.9	44.2	58.7	77
Sound Power (1)(7)	Lw	97	98	108	96	99	100
	Lw with + OP76b	91	93	94		92	93
Number of circuits / Compressors					1		
Water volume – open loop Free Cooling	Lt	40	48			58.1	
Minimum Water flow rate (10)	l/s	7.6	8.5			10.2	
Dimensions							
	Length	mm	3,640			5,800	6,880
	Width	mm		4,720			
	Height	mm			2,238		
					2,553		
Weight (8)							
	Unit (8)	kg	3,307	3,846	3,846	4,720	4,720
	Operating weight (8)	kg	3,628	4,254	4,259	5,233.1	5,233.1
						5,813.1	
Water Connection Size	Ø mm		88.9			139.7	
Unit							
	Running Current (1)(8)(11)	A	121	136	161	170	213
	Max Running Current (7)(8)(11)	A	188	214	235	258	301
	Current for Wiring Sizing (8)(11)	A	201	235	258	283	331
	Max Inrush Current (8)(9)(11)	A				0	

EWFH TZ-D PS		490	500	540	545	615
Cooling Capacity (1)	kW	653	684.2	730.5	717.1	834.7
Power input (1)	kW	160.4	158.9	165	163.7	195.6
EER (1)		4.07	4.3	4.43	4.38	4.27
SEER (1)(2)		6.481	6.199	6.24	5.753	6.646
η _{s,c} (3)	%	256	245	247	227	263
SEPR (1)(2)		7.297	6.966	7.58	8.001	7.332
IPLV (5)		7.135	6.819	6.956	6.73	7.347
Full Free Cooling Temperature (12)	°C	10.27	9.81	10.71	9.3	9.31
Flow rate (1)	l/s	22.4	23.5	25.1	24.6	28.6
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	20.1	23.3	25.9	23.8	35
Unit pressure drop free cooling ON (1)(6)	kPa	55.1	61.1	59.1	64.6	76.2
Sound Power (1)(7)	Lw	105		101	99	97
	Lw with + OP76b	93	95	96		93
Number of circuits / Compressors		1		2	1	2
Water volume – open loop Free Cooling	Lt	76.3	289	289	76.3	492
Minimum Water flow rate (10)	l/s	13.4	13	13	13.4	123
Dimensions						
	Length	mm	6,880		7,960	7,960
	Width	mm			2,238	
	Height	mm			2,553	
Weight (8)						
	Unit (8)	kg	5,315	5,336	5,846	5,984
	Operating weight (8)	kg	5,939.3	6,391	6,971	6,618.3
						7,900
Water Connection Size	Ø mm		139.7	168.3	139.7	219.1
Unit						
	Running Current (1)(8)(11)	A	259	259	268	269
	Max Running Current (7)(8)(11)	A	367	375	406	425
	Current for Wiring Sizing (8)(11)	A	404	412	444	467
	Max Inrush Current (8)(9)(11)	A				0

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MicroTech 4



EWFH TZ-D PS		645	700	770	845	900
Cooling Capacity (1)	kW	875.7	945.2	1,038	1,153.1	1,224.2
Power input (1)	kW	206.6	231.1	250.4	271.4	309.9
EER (1)		4.24	4.09	4.15	4.25	3.95
SEER (1)(2)		6.55	5.945	6.46	6.506	6.388
ηs,c (3)	%	259	235	255	257	253
SEPR (1)(2)		7884	7611	7394	7499	7129
IPLV (5)		7.226	7.016	7.052	7.143	6.966
Full Free Cooling Temperature (12)	°C	8.76	7.82	8.3	8.47	7.72
Flow rate (1)	l/s	30	32.4	35.6	39.5	42
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	374	42.1	39.8	60.3	66.1
Unit pressure drop free cooling ON (1)(6)	kPa	82.1	92.3	86.8	170	17
Sound Power (1)(7)	Lw	98	99	101	102	104
	Lw with + OP76b		93	94		95
Number of circuits / Compressors				2		
Water volume – open loop Free Cooling	Lt		492	583		546
Minimum Water flow rate (10)	l/s		123	14.6		14.5
Dimensions	Length		7960		9,040	10,120
	Width				2,238	
	Height				2,553	
Weight (8)	Unit (8)	kg	6,358	6,358	6,957	7,519
	Operating weight (8)	kg	7905	7910	8,765	9,329
Water Connection Size	Ø mm		219.1	219.1	219.1	219.1
Unit	Running Current (1)(8)(11)	A	348	385	414	445
	Max Running Current (7)(8)(11)	A	458	505	558	609
	Current for Wiring Sizing (8)(11)	A	503	556	614	670
	Max Inrush Current (8)(9)(11)	A			0	

EWFH TZ-D PS		960	C10	H10	H11	C12
Cooling Capacity (1)	kW	1,446.8	1,352.1	1,439.3	1,532.9	1,610.7
Power input (1)	kW	394.2	352.3	378.7	367.3	385.1
EER (1)		3.67	3.840	3.800	4.170	4.180
SEER (1)(2)		5.929	6.3	5.568	6.031	6.095
ηs,c (3)	%	234	249	220	238	241
SEPR (1)(2)		6.569	6.93	6.912	7.423	7.821
IPLV (5)		6.615	6.787	6.825	6.965	7.041
Full Free Cooling Temperature (12)	°C	6.89	7.8	8.23	7.43	7.88
Flow rate (1)	l/s	49.6	46.4	49.4	52.6	55.2
Evaporator Pressure Drop free cooling OFF (1)(6)	kPa	43	38.9	29.5	32.4	35.0
Unit pressure drop free cooling ON (1)(6)	kPa	98.4	88.8	76.2	84.5	84.1
Sound Power (1)(7)	Lw	107	107	106	102	108
	Lw with + OP76b		95		96	
Number of circuits / Compressors				2		
Water volume – open loop Free Cooling	Lt		1,043		1,011	
Minimum Water flow rate (10)	l/s		18.1		22.6	
Dimensions	Length	mm	11,200		12,280	13,360
	Width	mm		2,238		
	Height	mm		2,553		
Weight (8)	Unit (8)	kg	8,341	8,341	8,892	9,561
	Operating weight (8)	kg	11,225	11,235	11,797	12,476
Water Connection Size	Ø mm			273		
Unit	Running Current (1)(8)(11)	A	696	639	605	596
	Max Running Current (7)(8)(11)	A	694	731	779	875
	Current for Wiring Sizing (8)(11)	A	764	804	857	962
	Max Inrush Current (8)(9)(11)	A			0	



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