Air cooled screw chiller, high efficiency, reduced sound

EWAD-C-XR

R-134a

Screw compressor

- Stepless single-screw compressor
- Large operation range (ambient temperature down to -18°C and up to 50°C)
- 2-3 truly independent refrigerant circuits
- DX shell and tube evaporator - one pass refrigerant side to minimize pressure drops
- Partial and total heat recovery option available

EWAD-C-XR

EWAD-C-XR

MICROTECH III

Cooling only				EWAD-C-XR	740	810	870	970	C10	C11	C12	C13	H14	H15	C16	C17	C18	C19	C20	C21	C22
Cooling capacity	Nom.			kW	732	808	862	970	1,036	1,164	1,243	1,297	1,360	1,460	1,544	1,632	1,715	1,805	1,849	1,897	1,947
Power input	Cooling	Nom.		kW	238	257	285	313	348	369	409	420	460	498	518	548	574	604	629	662	696
Capacity control	Method				Stepless																
	Minimum capacity			%	12.5										7.0						
EER					3.07	3.15	3.03	3.10	2.98	3.16	3.04	3.09	2.96	2.93	2.98		2.99		2.94	2.87	2.80
ESEER					4.01	4.16	4.01	4.12	4.01	4.21	4.07	4.10		4.12	4.08	4.00	4.05	4.00	4.09	3.96	3.94
IPLV					4.56	4.62	4.51	4.63	4.59	4.65	4.61	4.63	4.74	4.83	4.67	4.65		4.63	4.69	4.54	4.53
Dimensions	Unit	Height		mm	2,540																
		Width		mm	2,285																
		Depth		mm	6,285	7,185		8,085		9,885					12,085	12,985	13,885	14,785			
Weight	Unit			kg	6,280	6,630	6,650	7,480	7,760	8,510	8,530	9,190			12,010	12,350	12,700	13,040			
	Operation weight			kg	6,520	6,870	6,890	7,880	8,160	8,900	8,920	10,180			12,870	13,200	13,580	13,910			
Water heat exchanger	Type				Single pass shell & tube																
	Water volume			l	251	243		403		386		979			850		871	850			
	Water flow rate	Cooling	Nom.	l/s	35.1	38.7	41.3	46.5	49.7	55.7	59.5	62.1	65.2	70.0	74.0	78.2	82.2	86.5	88.5	90.7	93.1
	Water pressure drop	Cooling	Nom.	kPa	77	54	61	58	65	43	49	64	73	79	59	65		71	37	39	41
Air heat exchanger	Type				High efficiency fin and tube type with integral subcooler																
Compressor	Type				Asymmetric single screw compressor																
	Quantity				2										3						
Fan	Type				Direct propeller																
	Quantity				12	14		16		20					24	26	28	30			
	Air flow rate	Nom.		l/s	49,208	57,410		65,611		82,014					98,417	106,618	114,819	123,021			
	Speed			rpm	700																
Sound power level	Cooling	Nom.		dBA	92			94			95				96				97		
Sound pressure level	Cooling	Nom.		dBA	72				73	72			73						74		
Operation range	Water side	Cooling	Min.~Max.	°CDB	-8~15																
	Air side	Cooling	Min.~Max.	°CDB	-18~50																
Refrigerant	Type / GWP				R-134a / 1,430																
	Circuits	Quantity			2										3						
Refrigerant charge	Per circuit			kg	75.0	81.0		91.0	100.0	115.0	117.5	125.0		124.0	103.3	109.0	113.3	120.0			125.0
	Per circuit			TCO_2Eq	107.3	115.8		130.1	143.0	164.5	168.0	178.8		177.3	147.8	155.9	162.1	171.6			178.8
Piping connections	Evaporator water inlet/outlet (OD)				168.3mm			219.1mm				273mm									
Unit	Maximum starting current			A	610	647		911	959	1,015			1,058	1,071	1,246	1,303	1,359		1,402	1,444	1,458
	Nominal running current (RLA)	Cooling		A	392	426	470	518	572	613	679	699	753	807	854	903	951	1,000	1,040	1,087	1,136
	Maximum running current			A	493	542	585	649	708	783	847		901	954	1,063	1,132	1,201	1,271	1,324	1,377	1,431
Power supply	Phase/Frequency/Voltage			Hz/V	3~/50/400																

(1) Cooling: entering evaporator water temp. 12°C; leaving evaporator water temp. 7°C; ambient air temp. 35°C; full load operation.
Equipment contains fluorinated greenhouse gases. Actual refrigerant charge depends on the final unit construction, details can be found on the unit labels.

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ECPEN15-428_4 03/15