

Easystream

PACKAGED SCROLL CHILLERS

- ▶ COMPACT DESIGN FOR OUTDOOR AND INDOOR INSTALLATIONS
- ▶ AIR-COOLED AND WATER-COOLED DESIGNS
- ▶ LOWEST POSSIBLE NOISE POLLUTION



40-480kW

26 AIR-COOLED MODELS, 26 WATER-COOLED MODELS, 3 FRAME SIZES



Multipurpose cooling solution

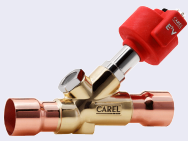
EASYSTREAM RANGE INCLUDES AIR-COOLED AND WATER-COOLED CHILLERS INTENDED FOR BOTH PLANT ROOM AND OUTDOOR INSTALLATIONS. THESE CHILLERS DEVELOPED TO FULLY COMPLY WITH TODAY'S STRICT NOISE POLLUTION REGULATIONS. MULTIPLE SCROLL COMPRESSOR TECHNOLOGY COVERS THE COOLING CAPACITIES FROM 40 TO 480KW.



The benefits at a glance:

- ▶ AIR-COOLED & WATER-COOLED DESIGNS
- ▶ HIGH COOLING DENSITY
- ▶ INTELLIGENT HEAD PRESSURE CONTROL
- ▶ INDOOR/OUTDOOR INSTALLATION
- ▶ LOW NOISE POLLUTION
- ▶ HEAT RECOVERY OPTIONS

30% energy savings through the use of EEV



Accurate control of superheat with the Easystream chiller operating at part load can be achieved with electronic expansion valves (EEV). Fitting EEV allows reducing energy consumption of up to 30% by controlling of refrigerant flow at reduced head pressures.

The EEV used in Easystream chillers are new generation valves designed with special care to the minimum details, so as to ensure a wide control capacity and at the same time guarantee the highest reliability.

COOLING DENSITY

220 kW/m²

Evaporators and condensers



Brazed plate heat exchangers

As the evaporator approach temperature difference becomes small, the performance of the system improves, and therefore the operating cost is reduced. To keep the minimal approach temperature, we adopted the most efficient plate evaporators available today and lifted the compressor COP to save as much energy as possible.

Brazing the stainless steel plates together eliminate the need for gaskets and thick frame plates, which makes the heat exchanger compact. The special plate design guarantees a consistent braze joint at the plate overlap and makes for stronger and more leak-proof heat exchanger. The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service lifetime.

Scroll compressors



Proven performance and reliability

The combination of an energy efficient motor and an optimized scroll wrap for refrigeration applications delivers high efficiency in Easystream's fixed-speed compressors.

Reliability is built into this compressor range, from the compliant scroll design and the engineered bearings to the simplified design. The thermal fault protection also contributes to excellent reliability.

The customers of Easystream systems with fixed-speed compressors can benefit from proven reliability, low sound levels, low vibration and low operating and maintenance costs.

Package, options and accessories

Description	DX	CW	Description	DX	CW
General					
Weatherproof package	☐	☐	2-way motorized condensing control valve (loose)	☐	
Remote air-cooled condenser	☐		3-way motorized condensing control valve (loose)	☐	
Remote dry cooler	☐		Noise reduction package (-4dBA)	☐	☐
Refrigerant side					
Electronic expansion valve(s)	☐	☐	Partial heat recovery (single-circuit units)	☐	☐
Water side					
Evaporator side inline pump	☐	☐	Water tank (stand-alone enclosure)	☐	☐
Condenser side inline pump	☐		Water tank with single/dual inline pump	☐	☐
Power and controls					
Compressor power factor capacitor	☐	☐	BMS/SNMP connectivity	☒	☒
Soft-start system	☐	☐	Sequence management system	☐	☐
Phase sequence control	☐	☐	EEV power backup	☐	☐
			Remote monitoring software	☐	☐
			Energy monitoring	☐	☐
			Ambient temperature probe	☐	☐

■ Standard feature

□ Optional feature

Frame sizes and model identification

Easystream			DX	200	P / 2
Cooling	DX	Air-cooled			
	CW	Water-cooled			
Nominal capacity		kW			
Heat exchangers	P	Plate type			
Refrigerant circuits		No. of refrigerant circuits			

Frame size		F1	F2	F3
Length	mm	1095	1495	2375
Width	mm	725	925	925
Height	mm	1695	1750	1750

Circulation pumps

Easystream chillers can be packaged with single or dual inline pumps which come with highly efficient motors. With the unique high-precision machinery, the tolerances used in the manufacture of the impeller and pump casing are minimized to optimize the flow geometries of these two crucial components. The result: minimal backflow and increased energy efficiency.



Technical Specs

Water-cooled models

Easystream CW		CW60	CW75	CW90	CW125	CW150	CW175	CW200	CW225	CW275	CW350	CW60	CW75	CW90
		P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/2	P/2	P/2
Cooling capacity ¹	kW	61.5	75.9	89.9	115.0	145.0	189.0	214.0	237.0	284.0	365.0	58.3	74.0	87.8
Frame size		F1	F1	F1	F1	F2	F2	F2	F2	F3	F3	F1	F1	F1
EER	kW/kW	4.62	4.34	4.32	4.39	4.39	4.46	4.39	4.24	4.54	4.45	4.16	4.16	4.28
Net weight	kg	380	380	390	400	680	710	780	810	1270	1380	380	390	400
Compressors		Scroll												
Quantity		2	2	2	2	2	2	2	2	3	3	2	2	2
Power input	kW	13.3	17.5	20.7	26.2	33.0	42.4	48.8	55.9	62.5	82.0	14.0	17.8	20.5
Absorbed current	A	26.2	33.1	42.0	48.2	60.8	75.8	86.2	97.5	112.0	144.0	27.2	33.8	42.2
Evaporator		Brazen plate												
Water flow	m ³ /h	10.6	13.0	15.4	19.8	24.8	32.4	36.7	40.8	48.8	62.8	10.0	12.7	15.1
Pressure drop	kPa	31	35	26	38	36	33	35	38	44	52	52	45	62
Max water flow	m ³ /h	13.5	16.5	19.3	24.9	31.2	40.8	46.2	51.2	61.4	79.2	15.9	16.0	19.0
Water volume	l	3.4	4.0	4.0	5.6	7.4	10.4	11.7	12.6	14.4	22.5	3.6	4.8	4.8
Condenser		Brazen plate												
Water flow	m ³ /h	12.9	16.2	19.1	24.5	30.7	40.0	45.5	50.7	60.0	77.6	12.5	15.9	18.8
Pressure drop	kPa	30	47	27	35	38	42	49	50	50	70	67	59	48
Max water flow	m ³ /h	16.4	20.6	24.0	31.0	38.9	50.7	57.6	64.2	76.0	98.2	15.9	20.5	23.8
Water volume	l	4.0	4.0	5.6	7.4	9.2	11.7	12.6	14.4	19.8	27.0	3.6	4.8	4.8
Refrigerant circuits		R410a												
Quantity		1	1	1	1	1	1	1	1	1	1	2	2	2
Charge	kg	5.0	5.0	5.6	7.8	10.0	10.8	12.5	13.2	17.2	21.5	5.0	5.0	5.6

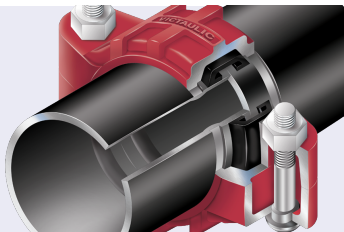
(1) Coolant: Water 100%; Coolant temperatures: 8/13°C; Condenser water temperature: 30/35°C

Easystream CW		CW100	CW140	CW180	CW220	CW260	CW150	CW200	CW250	CW300	CW350	CW400	CW450	CW500
		P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2
Cooling capacity ¹	kW	114.0	142.0	182.0	213.0	235.0	158.0	183.0	234.0	293.0	337.0	377.0	427.0	480.0
Frame size		F2	F2	F2	F2	F2	F3	F3	F3	F3	F3	F3	F3	F3
EER	kW/kW	4.32	4.29	4.23	4.33	4.20	4.65	4.44	4.44	4.43	4.44	4.45	4.37	4.32
Net weight	kg	680	710	780	810	850	1000	1010	1350	1470	1500	1520	1650	1800
Compressors		Scroll												
Quantity		2	2	2	2	2	4	4	4	4	4	4	4	4
Power input	kW	26.4	33.1	43.0	49.2	55.9	34.0	41.2	52.7	66.2	75.9	84.7	97.8	111.0
Absorbed current	A	48.8	61.4	77.1	87.1	97.9	65.1	83.9	96.7	122.0	137.0	152.0	173.0	194.0
Evaporator		Brazen plate												
Water flow	m ³ /h	19.4	24.4	31.0	36.5	40.4	27.2	31.5	40.1	50.3	57.8	64.8	73.3	82.4
Pressure drop	kPa	61	59	73	44	53	29	38	43	47	43	53	41	55
Max water flow	m ³ /h	24.4	30.8	39.1	46.1	51.0	34.5	39.7	50.4	63.3	72.7	81.4	92.2	103.6
Water volume	l	6.4	8.3	9.8	13.3	13.3	16.1	16.1	19.2	23.4	28.6	28.6	32.8	39.0
Condenser		Brazen plate												
Water flow	m ³ /h	24.1	30.4	38.7	45.4	50.4	33.3	38.9	49.6	62.2	71.4	80.0	90.9	102.0
Pressure drop	kPa	50	47	63	65	74	39	39	46	58	54	51	35	57
Max water flow	m ³ /h	30.5	38.5	49.0	57.6	64.0	42.2	49.3	62.7	78.8	90.3	101.1	115.0	129.5
Water volume	l	8.3	9.8	13.3	15.1	15.1	16.1	19.2	23.4	28.6	32.8	39.0	44.2	54.6
Refrigerant circuits		R410a												
Quantity		2	2	2	2	2	2	2	2	2	2	2	2	2
Charge	kg	8.0	10.4	11.5	12.5	13.3	13.0	14.2	18.6	24.0	26.0	27.8	31.0	35.0

(1) Coolant: Water 100%; Coolant temperatures: 8/13°C; Condenser water temperature: 30/35°C

Grooved connections

We use grooved end connections because of their rigidity, flexibility, noise and vibration attenuation, and easy of installation and maintenance. The groove is made by cold forming or machining a groove into the end of a pipe. A gasket encompassed by the coupling housing is wrapped around the two grooved pipe ends, and the key sections of the coupling housing engage the grooves. The bolts and nuts are tightened with a socket wrench or impact wrench.



Technical Specs

Air-cooled models

Easystream DX		DX40	DX50	DX60	DX70	DX80	DX100	DX125	DX150	DX175	DX200	DX50	DX60	DX70
		P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/1	P/2	P/2	P/2
Cooling capacity ¹	kW	37.2	45.9	54.4	69.0	80.6	104.0	132.0	168.0	191.0	214.0	54.6	62.0	74.9
Frame size		F1	F1	F1	F1	F1	F2	F2	F2	F2	F2	F1	F1	F1
EER	kW/kW	3.18	3.10	3.16	3.25	3.17	3.10	3.30	3.16	3.19	3.18	3.19	2.65	2.82
Net weight	kg	330	370	380	390	395	660	720	770	800	830	380	390	395
Compressors		Scroll												
Quantity		2	2	2	2	2	2	2	2	2	2	2	2	2
Power input	kW	11.7	14.8	17.2	21.2	25.4	33.6	40.0	53.2	59.8	67.4	17.1	23.4	26.6
Absorbed current	A	22.0	27.3	31.7	38.5	48.7	58.1	69.4	90.8	102.0	114.0	31.6	41.9	50.5
Evaporator		Braze plate												
Water flow	m ³ /h	6.4	7.9	9.4	11.9	13.9	18.0	22.6	28.9	32.8	36.5	9.4	10.7	12.9
Pressure drop	kPa	19	28	24	29	21	30	29	26	27	30	24	32	46
Max water flow	m ³ /h	8.0	10.0	12.0	15.0	17.5	22.5	28.0	37.0	41.5	46.0	11.4	14.5	16.8
Water volume	l	2.7	2.7	3.4	4.0	4.0	5.6	7.4	10.4	11.7	12.6	3.6	4.8	4.8
Condenser(s)		LCC series												
Quantity		1	1	1	1	1	1	1	1	1	1	2	2	2
Refrigerant circuits		R410a												
Quantity		1	1	1	1	1	1	1	1	1	1	2	2	2
Charge	kg	5.0	7.0	9.8	9.8	9.8	11.5	23.0	23.0	24.0	24.0	9.8	9.8	9.8

(1) Coolant: Water 100%; Coolant temperatures: 8/13°C; Ambient temperature: 35°C

Easystream DX		DX100	DX120	DX140	DX160	DX180	DX150	DX175	DX200	DX250	DX300	DX350	DX400	DX450
		P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2	P/2
Cooling capacity ¹	kW	107.0	126.0	168.0	190.0	211.0	141.0	163.0	209.0	260.0	298.0	336.0	382.0	428.0
Frame size		F2	F2	F2	F2	F2	F3	F3	F3	F3	F3	F3	F3	F3
EER	kW/kW	3.29	3.09	3.13	3.15	3.11	3.31	3.18	3.21	3.18	3.13	3.14	3.18	3.17
Net weight	kg	660	720	770	800	830	980	980	1300	1430	1450	1450	1560	1680
Compressors		Scroll												
Quantity		2	2	2	2	2	4	4	4	4	4	4	4	4
Power input	kW	32.5	40.8	53.7	60.4	67.9	42.6	51.2	65.1	81.8	95.2	107.0	120.0	135.0
Absorbed current	A	56.6	70.6	91.5	102.0	114.0	77.3	97.7	113.0	141.0	163.0	182.0	204.0	228.0
Evaporator		Braze plate												
Water flow	m ³ /h	18.3	21.6	28.7	32.7	36.4	24.2	28.0	36.0	44.7	51.2	57.7	65.7	73.4
Pressure drop	kPa	31	47	26	27	30	23	30	35	38	34	42	33	44
Max water flow	m ³ /h	21.5	27.2	34.8	40.5	44.8	31.0	36.0	45.5	57.0	65.6	73.4	82.8	92.9
Water volume	l	6.4	8.3	9.8	11.7	13.3	16.1	16.1	19.2	23.4	28.6	28.6	32.8	39.0
Condenser(s)		LCC series												
Quantity		2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant circuits		R410a												
Quantity		2	2	2	2	2	2	2	2	2	2	2	2	2
Charge	kg	11.5	24.0	24.0	24.0	24.0	20.5	20.5	24.0	47.0	47.0	47.0	48.5	48.5

(1) Coolant: Water 100%; Coolant temperatures: 8/13°C; Ambient temperature: 35°C

MODELS

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AVAILABLE

The development of Kaltra products and services is continuous and the information in this document may not be up to date. Please check the current position with Kaltra.

